

DEDICATION

*To my parents, the reason for everything I have
accomplished in life,*

To my lovely sisters,

To my niece and nephew,

To my family members,

To my dear friends,

To all my colleagues,

This work is for you.

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ABSTRACT:

The present study aims to examine the concept of health communication in Morocco, and to highlight the communication obstacles encountered by both physicians and patients in oncology settings (at the level of the oncology hospital of the CHU Hassan II of Fez). Concerning the methodology, this research adopted triangulation to enhance the accuracy and validity of the findings; the quantitative method used surveys (for 45 oncology doctors) for data collection, while the qualitative one adopted the focus group method (audio recording for 100 consultations) combined with passive observation of the researcher. Indeed, both research methods generated relevant findings that were discussed in detail, which allowed drawing a general conclusion with relevant recommendations to improve communication with cancer patients; these recommendations do not concern patients only, but also their family members, the oncologists, as well as the health policymakers in Morocco.

Key words: cancer communication, health communication, health literacy, physician-patient communication.

مقتضب :

تهدف هذه الدراسة إلى فحص مفهوم التواصل الصحي في المغرب، و كذا تسليط الضوء على حواجز التواصل التي يواجهها الاطباء مع المرضى على مستوى مرافق الانكولوجيا. فيما يخص المنهجية، تبنى هذا البحث 'التثليث' لتعزيز دقة و صحة النتائج؛ اعتمدت الطريقة الكمية على استطلاعات الرأي (لفائدة 45 طبيا في علم الأورام) لجمع البيانات، بينما اعتمدت الطريقة النوعية على 'فرق التركيز' (التسجيل الصوتي ل 100 استشارة طبية) مقترنة بالملاحظة غير المشاركة للباحث. و قد تمكنت طرق البحث من استخلاص نتائج مهمة و التي تمت مناقشتها بالتفصيل، و التي استخرج منها استنتاج عام و كذا توصيات هامة لتحسين عملية التواصل مع مرضى السرطان؛ هاته التوصيات لا تخص المرضى فقط، بل حتى أقاربهم، أطباء السرطان، و كذا المسؤولين عن السياسة الصحية في المغرب.

الكلمات الدالة: ، تواصل صحي، تواصل طبيب-مريض، تواصل في مصالح الأنكولوجيا،

محو الأمية الصحية.

RESUME :

La présente étude a pour objet d'examiner le concept de la communication santé au Maroc, et de mettre en évidence les obstacles de communications rencontrés par les médecins et les malades au niveau des structures d'oncologie. Concernant la méthodologie, cette recherche a adopté la triangulation pour renforcer l'exactitude et la validité des résultats ; la méthode quantitative a utilisé des sondages (pour 45 médecins d'oncologie) pour la collecte des données, alors que la méthode qualitative a adopté 'les groupes de discussion' (à base d'enregistrement-audio de 100 consultations) en association avec l'observation passive (ou non-participante) du chercheur. En effet, les deux méthodes de recherche ont donné lieu à des constatations pertinentes, et ceci a permis d'en tirer une conclusion générale avec des recommandations importantes afin d'améliorer la communication avec les patients cancéreux ; ces recommandations ne concernent pas les patients seulement, mais aussi leurs membres de famille, les oncologues, ainsi que les responsables des politiques de santé au Maroc.

Mots-clés: alphabétisation en santé, communication en oncologie, communication médecin-malade, communication santé.

LIST OF ACRONYMS AND ABBREVIATIONS :

H.M	Health Ministry
H.C	Health communication
C.C	Cancer communication
D.P.C	Doctor-patient communication
H.L	Health literacy
V.C	Verbal communication
N.V.C	Non-verbal communication
D.A	Discourse analysis
C.A	Conversation analysis
S.E.L	Socio-economic level
R.Q	Research question
R.H	Research hypothesis
WHO	World Health Organization
Q / A	Question / Answer
N.V.L	Non-verbal language
ICA	International communication association
SCA	Speech communication association
H.I	Health information
H.C.P	Healthcare professional
H.M	Health ministry
NIHR	National institute for health research
C.T Scan	Computerized Tomography Scan
P.S.A	Prostate Specific Antigen

A.N.C.L.A	Agence Nationale de Lutte Contre l'Analphabétisme
CHU	Centre hospitalier universitaire
MRI	Magnetic Resonance Imaging
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immune Deficiency Syndrome
NGO	Non-Governmental Organization
# / ° / N°	Number :

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Chapter I. General introduction:

I.1 Background of the study:

According to the World Health Organization (WHO), in its 1948 constitution, health encompasses not only the physical health of individuals but also their mental and social well-being. Besides, communication is mandatory within society to bring people together and share thoughts, opinions, and information; it is a natural and unavoidable process that is vital to humans' existence.

In the health context, communication makes use of communication strategies to inform individuals and communities about health issues, to enhance their health knowledge, and to make them adopt a healthy lifestyle, and all of which require a communication that is 'persuasive' and suitable for people from different cultural and socio-economic backgrounds. In fact, there is a growing interest in health communication research, but those initiatives are mainly theoretical and very few of them could be applied to real-life healthcare encounters.

A good doctor-patient communication is essential in healthcare, and this type of interpersonal communication is a bit challenging for both participants, especially the patients; indeed, the medical context has its own jargon, which might influence – over time and daily practice – the communication of the healthcare professionals; the latter should then take into consideration the patients' level of understanding to achieve a better transmission of the message, and ultimately to ensure the reception of feedback, which would demonstrate the success of communication. Sometimes the doctor-patient communication can indeed be the same as any interpersonal communication outside the medical context, and this is the case when the patient is in a stable physical and psychological state, regardless of the socio-economic level. However, this type of communication becomes critical and complex when the patient is a kind of 'fragile' or even 'difficult', as it is the case of cancer patients; these patients are special: they have a dangerous disease, an illness that might put an end to their

lives sometimes, and that is considered – for the majority – in society to be incurable; these patients need affection, hope, and reassuring words to improve their overall well-being, including satisfaction with care, better psychological state, active involvement in decision-making, and good compliance with treatment regimens.

Within the Moroccan context, research on cancer witnessed a remarkable milestone: the inauguration of the Cancer Research Institute by Princess Lalla Salma on March 7th, 2016, at the level of the Hassan II University Hospital (Centre Hospitalo-Universitaire - CHU Hassan II) of Fez; this premiere in Morocco, and Africa in general, motivated researchers in the field of oncology to launch different projects concerning the early detection, treatment, palliative care, and other aspects of cancer management; in fact, research in this field focuses more on the therapeutic aspects of cancer (disease-centered approach) more than the cancer patient him/herself (patient-centered), which justifies the need for a shift from the biological to a bio-psychosocial model that takes into consideration the impact of the illness on the psychological and social aspects of patients.

I.2 Definition of important terms:

*(*Please note that – to avoid repetition - the definitions given in this section are intended to be as brief as possible, simply because the detailed ones would be provided later on in the Literature Review chapter).*

I.2.1 Communication:

Keyton (2011) defined communication as the process of transmitting information and common understanding from one person to another; this information can be transmitted via words, tone of voice, body language...etc. In short, it is a two-way process (Sender ↔ Receiver), aiming at sharing feelings, ideas, and opinions with others. However, there are times when communication is only unidirectional (Sender → Receiver/audience), for instance

in mass media campaigns, emails, and some sort of speeches when the notion of ‘immediate feedback’ is lacking, which might affect the effectiveness of communication.

I.2.2 Healthcare:

According to the English Oxford dictionary, healthcare is defined as the conservation of health, mainly due to medical services; to put it another way, healthcare consists of all the different measures of prevention, promotion, and maintenance of health, that are provided by qualified healthcare professionals.

I.2.3 Healthcare communication (or Health communication):

Health communication covers the study and use of communication approaches to influence individual and community health behaviors (Thomas, 2006). Generally, this type of communication focuses on educating individuals and communities on health issues and making them embrace healthy behaviors in their daily lives.

I.2.4 Cancer:

In her article in *Encyclopedia of life sciences*, Alison (2001) noted that cancer is a disease when some of the body’s cells begin to –abnormally-divide and grow without stopping and spread into surrounding tissues. Also, it is important to note that there is a difference between ‘cancer’ and ‘tumor’; cancer witnesses an uncontrollable division of cells and spread into the nearby tissues, whilst a tumor – is not necessarily cancer and – occurs when the cells’ growth takes place on a solid tissue (e.g. an organ, bone, or muscle).

I.2.5 Oncology:

Oncology is the field of medicine that is devoted to cancer, and the doctors practicing this discipline are called ‘oncologists’; it is not a modern specialty since the word ‘oncology’ itself is rooted in ancient Greek: ‘*onkos*’ means ‘mass’ or ‘bulk’, and clearly the suffix ‘logy’ means ‘science’ (*Dictionary: Vocabulary.com*, n.d.)

Clinical oncology consists of three primary disciplines:

- a- Medical oncology (the treatment of cancer with medicine, including chemotherapy),
- b- Surgical oncology: (the surgical aspects of cancer including biopsy, staging, and surgical resection of tumors),
- c- Radiation oncology (the treatment of cancer with therapeutic radiation).

I.2.6 Medical Ethics' code:

The Code of Medical Ethics, or the Medical Ethics Charter, is a code of conduct adopted worldwide, based on a body of ethical statements, in which physicians recognize responsibilities towards the patients first and foremost, and also towards their colleagues and society as well.

Conforming to the last (57th) assembly of the World Medical Association (in 2006), one can distinguish between several responsibilities of physicians, including:

I.2.6.1 Duties of physicians in general:

A physician should:

- Always exercise his/her independent professional judgment and maintain the highest standards of professional conduct;
- Respect a competent patient's right to accept or refuse treatment;
- Not allow his/her judgment to be influenced by personal profit or unfair discrimination;
- Be dedicated to providing competent medical service in full professional and moral independence, with compassion and respect for human dignity;

- Deal honestly with patients and colleagues, and report to the appropriate authorities those physicians who practice unethically or incompetently or who engage in fraud or deception;
- Not receive any financial benefits or other incentives solely for referring patients or prescribing specific products;
- Respect the rights and preferences of patients, colleagues, and other health professionals;
- Recognize his/her important role in educating the public but should use due caution in divulging discoveries or new techniques or treatment through non-professional channels;
- Certify only that which he/she has personally verified;
- Strive to use health care resources in the best way to benefit patients and their community;
- Seek appropriate care and attention if he/she suffers from a mental or physical illness;
- Respect the local and national codes of ethics.

1.2.6.2 Duties of physicians to patients:

A physician should:

- Always bear in mind the obligation to respect human life;
- Act in the patient's best interest when providing medical care;

- Owe his/her patients complete loyalty and all the scientific resources available to him/her. Whenever an examination or treatment is beyond the physician's capacity, he/she should consult with or refer to another physician who has the necessary ability;
- Respect a patient's right to confidentiality. It is ethical to disclose confidential information when the patient consents to it or when there is a real and imminent threat of harm to the patient or to others and this threat can be only removed by a breach of confidentiality;
- Give emergency care as a humanitarian duty unless he/she is assured that others are willing and able to give such care;
- In situations when he/she is acting for a third party, ensure that the patient has full knowledge of that situation;
- Not enter into a sexual relationship with his/her current patient or into any other abusive or exploitative relationship.

1.2.6.3 Duties of physicians to colleagues:

A physician should:

- Behave towards colleagues as he/she would have them behave towards him/her;
- NOT undermine the patient-physician relationship of colleagues in order to attract patients;
- When medically necessary, communicate with colleagues who are involved in the care of the same patient. This communication should respect patient confidentiality and be confined to the necessary information.

I.3 Problem statement:

Starting from the definition of ‘health’, there are different elements that influence the individuals’ health, and if one focuses on the social aspect, being the conditions in which people are born, living, working ... etc., one can deduce the important role of social determinants and health behaviors. In healthcare, effective communication is almost as important as medical treatments; effective doctor-patient communication builds a trust relationship, encourages sharing information, and helps patients and their families to talk about their concerns.

In Morocco, there is a lack of research concerning the doctor-patient communication (and oncologist-patient communication in particular); this special type of communication has seldom been subject to experimental studies. Some communication skills courses recently started being taught in undergraduate and graduate medical education programs (in the USA, Canada, Germany, and others), and luckily such courses have just started being implemented in Moroccan medical schools a few years ago, for instance: the Faculty of Medicine and Pharmacy of Fez incorporated such classes starting the academic year 2015/2016 (see Appendix section). Up to now, oncology residents in Morocco do not receive communication skills coaching as part of the continuing training; yet, these courses aim at improving the healthcare providers’ communication abilities, increasing their confidence level, encouraging them to show more empathy, and helping them deal with situations where communication can have the power to calm the concerns of patients (and their families). Besides, the poverty and illiteracy rates in Morocco influence the patients’ communication with the healthcare providers, and when it comes to cancer, the impact of both determinants could be harmful and poor health outcomes may result, the reason why cancer patients might have special communication needs to be satisfied, with the aim of calming their anxiety, improving their

satisfaction with care, making them more compliant with their disease management, and ensuring an overall well-being.

Also, cancer is often associated with discomfort, expensive treatment, and its serious side effects, the reason why communication in oncology is the most critical communication type in healthcare: it requires good communication skills and a piece of broad medical knowledge to transmit the accurate health information, as well as empathy.

I.4 Rationale and significance of the study:

Several countries have developed programs and strategies dealing with communication with cancer patients; when it comes to Morocco, we still have not seen pertinent studies in this field. In fact, the oncology hospital of the CHU Hassan II of Fez is one of the most sophisticated ones in Morocco. Under the supervision of the Lalla Salma Foundation for cancer prevention and treatment, this department receives patients from all around the region of Fez-Boulemane, as well as others from the east region. As reported in the summary statistics of the 2012 report by the Global Cancer Incidence, Mortality and Prevalence - GLOBOCAN (the project of the International Agency for Research on Cancer (IARC)), there were an estimated 35.000 new cases – for both sexes - in Morocco, divided as follows: 6650 for breast cancer, 2332 for prostate cancer, 2258 for cervix uteri cancer, 3928 for lung cancer, and 2484 for colorectal cancer. Morocco is a developing country, with an illiteracy level of about 28 to 30% (According to the latest statistics of 2012 by the A.N.L.C.A (Agence Nationale de Lutte Contre l’Analphabétisme)). Besides, some – if not the majority of - Moroccans still have different stereotypes about this disease, and consider cancer as that killing disease that people should not talk about in public, to which they refer using – a word-for-word Arabic translation – the expression: ‘The bad disease’ (in Moroccan Darija: *mrđ qbyh*). Further, there is an important percentage of the patients who do not know about their diagnosis, because of their family members who want to keep it secret (claiming that it would

negatively affect the psyche of the patient), and maybe, they are just afraid of others to know that there is a family member who is ‘dying’ because of cancer, which is considered as the most furious and incurable disease ever. Hence, a good cancer communication should mainly increase the patients’ satisfaction and cancer knowledge, and it should also decrease their stress and calm their fears.

Starting from the idea that communication is at the heart of healthcare, and that patient-centered communication is critical to effective cancer management, this study aims at exploring the concept of health communication in Morocco and especially studying the doctor-patient communication in oncology, to detect communication barriers and to propose appropriate solutions to achieve communication effectiveness.

Therefore, this exploratory and descriptive study is intended to come up with practical findings, from which conclusions and recommendations will be drawn to improve the quality of communication with cancer patients and to contribute to the existing literature on the topic, by providing empirical results that could be a platform for further researchers in the topic in Morocco. Surely, the findings of this study would redound to several benefits for both oncologists and cancer patients (and their families); for the oncologists, it would show (or remind) them how to deal with real-life situations requiring specific communication skills, such as announcing serious news, informing and educating the patients, adapting communication to patients’ level of understanding ... etc. Concerning the patients, they will be more aware of their health statuses, and will also contribute with a large percentage in their own cancer management. Hence, this work would be a good added-value to the literature, and it will empower the quality of cancer management in oncology settings. Plus, we chose the Oncology Hospital of the CHU Hassan II as a case study because it is the only specialized oncology center in the region of Fez-Boulemane, and due to its proximity to Cancer Research Institute of Fez, Morocco.

I.5 Aims of the study:

In general, the research is intended to examine the concept of health communication in Morocco and to highlight the communication obstacles encountered between physicians and cancer patients during oncology consultations. In short, the aims of this study are:

- Providing brief and general knowledge of cancer;
- Exploring the concepts of :
 - ✓ Human communication ;
 - ✓ Healthcare communication ;
 - ✓ Cancer communication ;
 - ✓ Physician-patient communication.
- Investigating the status of health communication, and cancer communication in particular, in Morocco;
- Identifying the different communication barriers between oncologists and their patients (at the level of the oncology hospital of the CHU Hassan II of Fez, Morocco) ;
- Gathering the physicians' suggestions to achieve effective communication with cancer patients.
- Formulating a set of recommendations to improve doctor-patient communication in oncology care settings.

I.6 Research questions and hypotheses:

I.6.1 Research questions:

The research questions that were elaborated for this study are:

- 1) Did the oncologists receive any training in terms of healthcare communication (HCC)? Or more precisely: cancer communication (C.C)?
- 2) What are the effects of both the socio-economic status (SES) and the health literacy (H.L) level of the patients on the communication process?
- 3) How do patients receive the diagnosis of cancer for the first time?
- 4) Do consultations witness a bi-directional doctor-patient communication? Or does it stick to the ordinary interview format?
- 5) Do they discuss medical matters only? Or the patients' personal concerns could be dealt with as well?
- 6) How does the presence of patients' companions affect the communication process?

I.6.2 Research hypotheses:

The hypotheses formulated for this research are:

- 1) - The lack of communication skills, by both patients and doctors, influence significantly the communication process;
- 2) - The socio-economic level of patients has a great impact on the perception of their disease (cancer);
- 3) - The doctor-patient communication is mainly disease-centered and not patient-centered.

I.7 Methodology of research:

To enhance the accuracy and validity of the findings, this research will adopt triangulation (using both quantitative and qualitative methods) for data collection to gain more insight into the phenomena under study.

The quantitative method will make use of surveys, being a regularly used research design in social sciences, and the physicians will be given standardized questionnaires to complete. After, the collected data will be analyzed using the SPSS software.

Concerning the qualitative method, it will adopt focus group technique (based on audio-taping), to explore how the participants in speech (doctors, patients, and their family members/companions) communicate with each other during the consultations, and how language is used in such encounters; indeed, the audio recording generates relevant results because it is less intimidating for patients and ensures their privacy (as compared to video-recording), and because it does not witness the intervention of the researcher in the communication process. In this sense, passive observation will be implemented in the qualitative method as well, and the researcher himself will be a passive observer during the recordings, and he will aim to recognize – and to take extensive notes of - the non-verbal aspects of speech that could not possibly be detected through the audio taping. Later in this thesis, the methodology used in this research will be well detailed in **Chapter III**, to describe the data collection tools, and to show the purpose of choice of each method.

At last, it is to note that, before starting the fieldwork, the study was permitted first by Direction of the CHU Hassan II, and the permission will be inserted in the appendix section; also, the patients will be asked to sign a written consent (in Arabic) during the audio recording process, which will be added to the appendix as well.

I.8 Layout of the thesis:

Right after the literature review, the methodology chapter will shed light on the research methods adopted by this dissertation, with explanations of the reasons for the choice of each method. Then, the chapter 'Results' will come up with a description and analysis of the quantitative results (survey), as well as the qualitative findings (focus group and passive observation), and it will also provide clear answers for research questions and corroborations/refutations of research hypotheses that were designed for the study. Afterward, the discussion and conclusion chapter will critically examine the different results and introduce new knowledge about the topic of 'Health communication' and more specifically 'Communication with cancer patients' by showing the meaning and relevance of the findings obtained; also, this chapter will be a reminder of everything the thesis will have covered, be it: research aims, methodology, as well as a summary of the results and the limitations of the study; additionally, the conclusion will also give recommendations to achieve effective doctor-patient communication, based on the findings generated by the study.

Chapter II. Literature review

II.1 Human communication

II.1.1 Definition of communication:

Living in society requires establishing relationships with other human beings to ensure our role as ‘individuals’, and these relationships require ‘communication’; humans communicate every day, and this spontaneous fact has deeper meanings and various definitions.

In fact, the word ‘communication’ has been derived from the Latin word ‘communis’ that means ‘common’, and then, the verb ‘to communicate’ is ‘to make common’ or ‘to make known’ (Staff, 2014). In general, communication is a meaningful exchange of ideas, feelings, and opinions, and it is also a process of conveying information to create a shared understanding, and Keyton defined it as the process of conveying information and from a person to another (2011). Likewise, Louis A Allen (1958) described the term as the systematic and continuous process a person makes to create understanding in the mind of another one (as cited in Chaturvedi, 2004, p. 19)

II.1.2 The communication process:

As stated in the Oxford dictionary, the word ‘process’ refers to a series of actions taken to achieve a particular end. Human beings are not passive, nor objects that interpret meanings and react as they are supposed to; it is surely influenced by the human behaviour, as Clappitt claims: “We actively construct meanings within a unique vortex that includes the words used, the context of the utterances, and the people involved” (2012, p.34).

Several communication models exist in the literature, and the pertinent ones are described summarily as follows:

II.1.2.1 Aristotle's model:

Aristotle's communication model is the most common and widely accepted, with the exception that it gives the total control to the speaker being the driver of the entire communication (Petersons & Khalimzoda, 2016). However, the communication process is one-way only, and there is an absence of the concept of feedback.

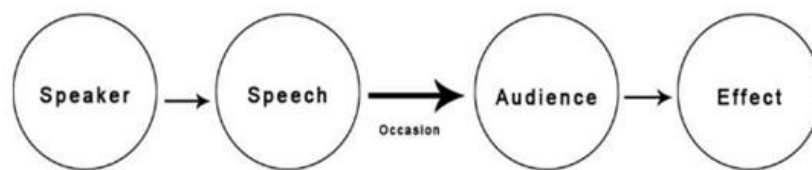


Figure N°1: Aristotle's communication model (Source: Bajracharya, 2018)

II.1.2.2 Cheney's model:

Broadly speaking, communication is a give-and-take process, made of three major elements: the sender, the message, and the receiver. Then, if we want to add some small details to each element, we might agree with Cheney's simple-yet important - figure:

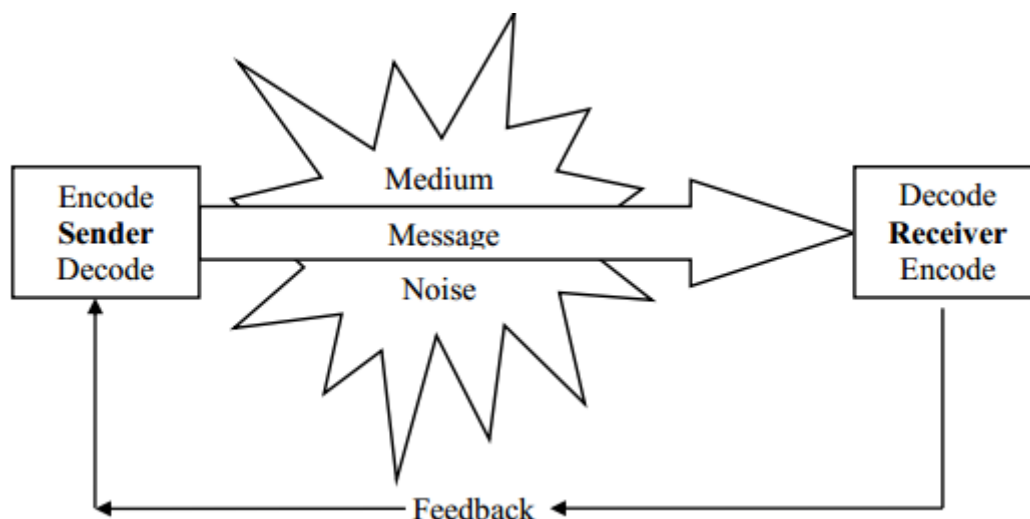


Figure N°2: Cheney's communication model (Source: Cheney, 2011).

The figure above can simply be interpreted as follows: the message is constructed (and encoded) by the sender (converted to verbal and/or non-verbal format), then it goes through the channel used for delivery, to reach the receiver, who is supposed to receive (and decode) accurately the message, and in this case, communication is called ‘effective’, especially if the feedback is sent back to the initial sender.

II.1.2.3 Shannon’s model:

This model is considered to be a successful one, due to its ability to reduce the components of the process. Does it not only shows the cause of effectiveness of communication, but also shows where the process might fail.

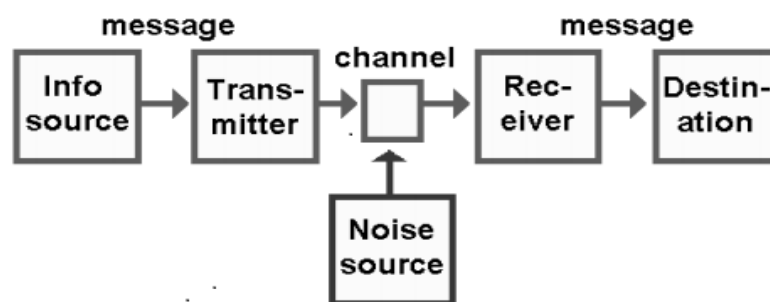


Figure N°3: Shannon’s communication model.

Also called Shannon and Weaver model of communication, it was provided by both authors in their article ‘A mathematical theory of communication’ (1948), in which they dealt with different concepts of the process (information source, transmitter, noise... etc.); this model was first dedicated to technical communication, and it was applied and generalized later in the field of communication.

II.1.2.4 Definitions of key terms:

- **Message:** it is “a piece of information that is sent or given to someone” (*Dictionary by Merriam-Webster: America’s most-trusted online dictionary, n.d.*); more specifically in communication studies, DeVito argues that it is “a signal or combination of signals that

serves as a stimulus for a receiver” (DeVito, 1986); this message could be made of words (in writing or speech) and/or signs and symbols. On the one hand, a sign is a natural, universally understood phenomenon, and it has a language of its own, for instance: in stoplights, red means ‘stop’ and green means ‘go’, or a plate with a crossed cigarette means ‘no smoking’; then, signs are closely connected to the idea they promote. On the other hand, symbols have been created by human convention to refer to something specific; in other words, they are physical objects that stand for something else; for example, a red cross refers to a hospital or a healthcare unit, the sun is a sign of joy and optimism, the clouds are a sign of sadness, the letter ‘O’ refers to oxygen in chemistry, ...etc.

- **Channel:** according to the Business Dictionary, a channel is “a medium through which a message is transmitted to its intended audience, such as print media or broadcast media” (*Online Business Dictionary—BusinessDictionary.com*, n.d.); it is the vehicle, system, or method that is used for communicating. Thus, a briefer definition of channel might be: it is how communication flows.
- **Noise:** DeVito defined it as: “anything that distorts the message intended by the source, anything that interferes with the receiver’s receiving the message as the source intended the message to be received” (1986, p.209). Noises guarantee that the receiver will either misinterpret the information or not understand it at all. Moreover, there are three types of noises: physical, psychological, and semantic. In this sense, DeVito argued that the physical noise interferes with the physical transmission of the message (cars screeching, air conditioners humming, or phone ringing); the psychological noise includes biases and prejudices, of both the sender and the receiver, that lead to distortions in information’ receiving and processing; then, in the semantic noise, the interference is due to the receiver

failing to grasp the meaning intended by the sender (due to: specific jargons and technical or complex terms).

- **Feedback:** Bartol and Martin (1991) noted that Feedback is the receiver's reaction to the received message; that is, feedback is the amount of the receiver's response that reaches the sender, after the interpretation of the message; it is a very important element, especially in the two-way communication, since it enables the sender to evaluate the effectiveness of the message.

II.1.3 Barriers to effective communication:

Shaw's work tackles the issue of effectiveness in communication, arguing that "the greatest problem with communication is the illusion that it has been accomplished" (Shaw, 2010 qtd. as cited in Lunenburg, 2010, p.3); this quote implies that communication is effective only if the message is conveyed properly to the receiver the way the sender wanted it to be perceived at first, and a good feedback by the receiver might show how effective communication was.

For Eisenberg et al. (2009), there are four types of barriers to effective communication, he noted: process barriers, physical barriers, semantic barriers, and psycho-social barriers.

II.1.3.1 Process barriers:

There is a process barrier when the source of the noise is at the level of one of the components of the communication cycle (the sender, the encoding, the medium, the decoding, the receiver, or the feedback). In other words, there is a process barrier when the communication breaks down at the level of one (or more) element of the communication cycle.

II.1.3.2 Physical barriers:

It is any ‘physical’ distraction that can interfere with the effectiveness of the communication process, for instance: a wall between the sender and the receiver, the distance between the people involved, or even noise in the phone line, can all be considered as physical barriers. These barriers can also be called ‘environmental’, and might include time-shortage, poor lighting, uncomfortable sitting ... etc.

II.1.3.3 Semantic barriers:

Language is made up of words, and the choice of these words, as well as the meanings attributed to them, can create several communication barriers, which are called ‘semantic’; as a matter of fact, some words can mean something for a certain category of people and mean - in the same time - something else for another category. Plus, in some institutions, schools or others, the use of specialized (sometimes technical) jargon - that is only well understood by the members of the same field of interest – can cause major misunderstandings between the participants; for instance: in the healthcare context, a ‘patient’ is someone who necessitates medical attention, while in the daily jargon, the word ‘patient’ refers to someone who accepts delays without being annoyed.

II.1.3.4 Psycho-social barriers:

People’s past, experiences, and personalities can cause psycho-social communication barriers; in this sense, Lunenburg (2010) cited three main concepts associated with psychological and social barriers:

- *Fields of experience:*

This type includes people’s backgrounds, biases, beliefs, expectations, and perceptions; thus, senders encode and receivers decode based on their own experience and knowledge.

- *Filtering:*

Participants in speech have a certain manipulation of the communication message, it means that people see and hear what they want to see and hear, not everything else; they are selective, and this filtering process is often guided by their own needs and interests.

- *Psychological distance:*

Sometimes the psychological distance between the sender and the receiver influences the communication effectiveness; this distance is also called ‘status difference’, and it often occurs in upward communication when subordinates fail to communicate with their supervisors due to the awareness of their low status in that given organization.

Besides the ones stated above, other barriers to communication can be briefly noted as follows:

II.1.3.5 Physiological barriers:

Individuals’ own characteristics like poor listening skills, inattention, physical/psychological state, and poor retention of information overload, can all affect their communication effectiveness.

II.1.3.6 Cross-cultural barriers:

They arise when the interlocutors have different norms, beliefs, values, and thinking in general, and they can take the form of the distance between the sender and receiver, eye-contact, and the way of standing while talking to each other.

II.1.4 Communication types:

The illustration below by Yang (2013) shows that there are two major types of communication: the verbal and non-verbal communication; the verbal one is mainly based on language, which is an important part as shown in the figure (as it includes: volume & tone,

syntax, context...etc.), while the non-verbal relies essentially on body language and written words. Then, each communication type will be described in detail in the following paragraphs.

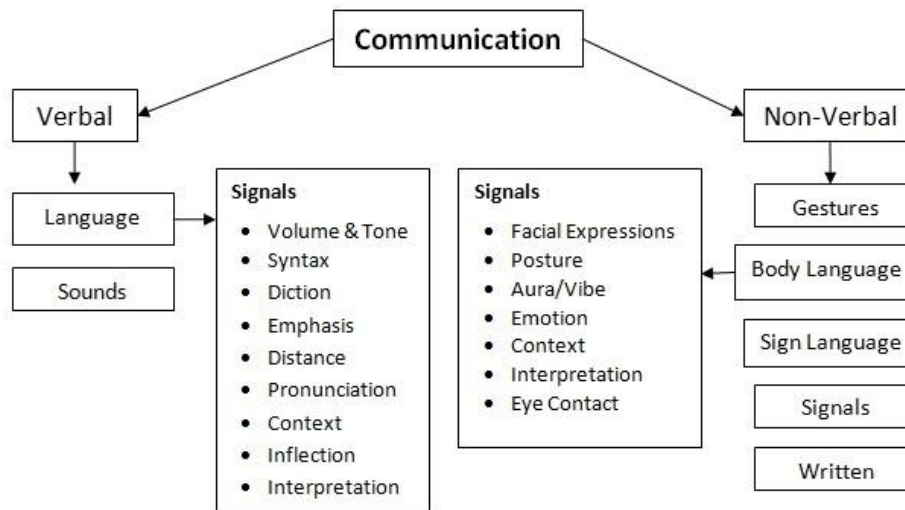


Figure N*4: Communication types. (Yang, 2013).

Although it is well known that there are two major types of communication (verbal and non-verbal communication), here will be cited some basics about them for the sake of reminder.

II.1.4.1 Verbal communication:

As the adjective ‘verbal’ means, this type of communication deals with language, with words; it can be divided into three sub-types: oral, written, and visual communication.

II.1.4.1.1 Oral communication (speaking/listening):

In this mode, there is a face-to-face communication between a person/group of people and another one, and there is also a sharing of ideas and feedback immediately between the two parties (except in some cases of mass communication); speeches, presentations,

interviews, and discussions are all forms of oral communication, and it is considered to be effective (due to direct interaction).

II.1.4.1.1.1 Advantages of oral communication:

- High level of understanding and transparency (since it is interpersonal);
- Flexibility: allows changing topics and ideas on the spot;
- Spontaneous feedback;
- Can be used to transmit private/confidential matters;
- Allows conveying with the desired tone/pitch (more effective);
- Time-saving.

II.1.4.1.1.2 Disadvantages of oral communication:

- Hard to maintain/not organized as written communication (informal);
- Misunderstandings can happen;
- It requires great attentiveness and receptivity;
- In some cases (long speeches/presentations): it might be time-consuming.

II.1.4.1.2 Written communication (writing/reading):

A perfect example of this mode is 'a letter', sent by mail from a person A to another one B; the first is encoding the message to be transmitted into a written language, and the language can be adapted to a receiver (B) (if s/he uses a language other than the sender's), or it can even take another form than writing (e.g.: Braille system for blind people); once received, this letter will be decoded by the receiver (person B). We can say that it is effective as face-to-face communication; however, the feedback would not be an immediate one. Still, it allows both the sender to effectively shape the message, and the receiver to take as much time as s/she wants to understand the message (decoding process).

II.1.4.1.3 Visual communication (visualizing/observing):

In this mode, the message is encoded in terms of signs and symbols, and the receiver decodes these signals; this type is specific to mass communication where the participants (senders) are definitely fewer than the audience (receivers), and where they are both separated during the communication process.

II.1.4.2 Non-verbal communication:

According to Mehrabian (1972), non-verbal communication (N.V.C) “involves a large number of symbols (gestures, expressions...) that are difficult to conceptualize” (Mehrabian, 1972). Several authors dealt with this type of communication, since it is more complicated and ambiguous than the first one (verbal). For instance, in Tara D and O’Hara’s work (2006), insights about the forms of N.V.C were given as follows:

- Facial expression and gaze;
- Postures and gestures;
- Voice;
- Personal space and distance;
- Personal appearance.

In a more detailed way, more aspects of N.V.C are kinesics, haptics, proxemics, chronemics, appearance, iconics, and para-linguistics.

1- Kinesics:

The word kinesics is derived from Latin ‘kinesis’, which means ‘movement’, and it refers to the study of the body parts (hand, arm, face...); (Hans & Hans, 2015) go on and describe:

a- Gestures:

There are three types of gestures:

- Adaptors: they are behaviours and movements that indicate the internal states, like arousal or anxiety (shaking legs, clicking pens...etc.)
- Emblems: they are gestures that have an agreed-on meaning (for example the thump up as a sign of 'ok' or 'good')
- Illustrators: they are the most common types of gestures that are used to reinforce the verbal messages, for instance: using hands to determine the shape of something.

b- Head movements and postures:

- In terms of N.V.L, the head movement can be considered as universal or even innate to humans; since birth, babies shake their heads left and right when they refuse breastfeeding, and that means a rejection: 'No'. Besides, a head moving back and forth means – universally – an agreement: 'Yes' (knowing that a long time ago, this head nob was used for greeting).
- The way people sit or stand can convey information about their attitudes and feelings; for instance, a relaxed position tells that the person is at ease, a slumped one is a sign of boredom, a constantly moving person might be stressed or uncomfortable...etc.

c- Eye contact:

It is recognized that the eyes can tell a lot, especially about the emotions, as an English proverb stated by Shakespeare a long time ago: “the eyes are the window to your soul” (*William Shakespeare Quote*, n.d.); in fact, talking face-to-face to someone with eye contact is much better than talking to someone who wears sunglasses or who is making no eye contact

at all. In this sense, there is a category of kinesics called ‘Oculesics’ that, according to Egolf (2012), refers to the effects of the eyes on communication, and it comes from the Latin word ‘Oculus’, meaning: eye; the eyes are the center of focus while communicating, and making eye-contact is always a sign of interest.

Hans and Hans (2015) distinguished between four functions of eye contact:

- Regulating interaction: showing that we are ready to speak, or to cue the others to speak;
- Monitoring action: shifting from speaker to listener;
- Conveying information: sending information to others;
- Establishing inter-personal connections: showing that we care, we pay attention and are interested in what the other is saying.

d- Facial expressions:

The face is very expressive, and most of the facial expressions are recognizable all over the world, and they are used nowadays in the digital era as ‘emoticons’, with a different meaning each; we can cite: confusion (represented by scrunching the forehead and nose, with one raised eyebrow sometimes), surprise (widened eyes and a gaping mouth), sadness (frown and upward slanting of eyebrows), and happiness (expressed by a smile – with the teeth shown or not – and a crescent-shaped eyes) being the most universal expression that is interpreted with the same meaning.

2- Haptics:

The word ‘Haptics’ (in Greek means: I touch), refers to the communication by touch; in fact, touch is a kind of human connection to comfort others, to create a close relationship

with them, and to gain their trust. In the context of healthcare, a simple laying of hands in a vulnerable moment a patient is having can create trust and have a good impact on his/her psychological status. Scientifically speaking, touch can also reduce stress, improve the well-being, and promote healing through the production of a hormone called ‘oxytocin’ (Uvnas-Moberg & Petersson, 2005). Furthermore, one can find several types of touch, such as the functional-professional, social-polite, friendship-warmth...etc. (Hans & Hans, 2015).

3- Proxemics:

Proxemics is the branch that studies the influence of distance and space on the communication process, and this is relevant to the comfort level being affected by distance and space, since the distance between people reflects their attitudes. In daily conversations, when some people have good friends, they call them ‘close friends’, and then when they lose connection with them and the relationship is not good anymore, they become ‘distant’ (from them), and this proves that people unconsciously refer to distance in their language.

The following figure shows four types of personal space (‘Proxemics: Personal space’, 2013)

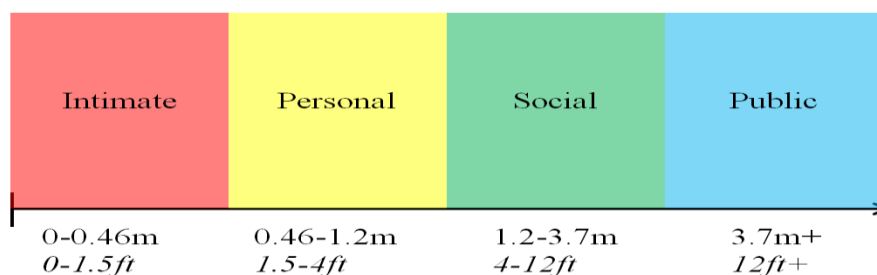


Figure N° 5: Types of personal space in communication

In this sense (Hall, 1966) - a cultural anthropologist - came up with the conclusion that there is a space called ‘bubble’ around each person; he outlined the four types of personal spaces mentioned above in the figure and explained each:

- **Intimate space:** when only the closest people are allowed (whispering, touching...);
- **Personal space:** reserved for friends and relatives (talking with a normal voice);
- **Social space:** for unfamiliar people (talking with a normal voice or a bit louder);
- **Public space:** lectures and public presentations (using very loud voices or electronic devices).

4- Chronemics:

Egolf (2012) refers to chronemics as the effects of time on communication. In fact, people's communication is framed by the way they value time and how they react to it; also, chronemics deals with the amount of time spent while communicating.

5- Appearance (Dress signals);

6- Iconics:

Icons have been used for a long time; according to the Oxford English Dictionary, the word 'icon' has its roots from Late Latin and advanced Greek, and it generally denotes: likeness, image, portrait, and semblance. The book *Iconic communication* (Yazdani & Barker, 2000) showed that the culture became more visual and that the pictures really enhance the power of language. Also, pictures send direct messages and hence get the attention the most; for example, a round plate – in the driving code – with a black car and a red one next to each other, means 'No overtaking'.

7- Vocalics (paralanguage):

Generally speaking, 'Vocalics' refers to how people communicate using the voice, and how the words are put together in language. Egolf (2012) argued that "the same words can be said loudly or softly, rapidly or slowly, dysfluently or fluently, with an accent or without an

accent” (p.53), which shows that it is not about what people say, it is rather about how they say it, and this influences the effectiveness of communication, since “the vocalic part acts like an editorial with the potential of changing the meaning” (Egolf, 2012).

II.2 Health Communication

II.2.1 Definition of health:

In the 1948’s constitution of the WHO (World Health Organization), health is defined as:

A state of complete physical, social, and mental well-being and not merely the absence of disease or infirmity. Within the context of health promotion, health has been considered less as an abstract state and more as a means to an end which can be expressed in functional terms as a resource which permits people to lead an individually, socially, and economically productive life. Health is a resource for everyday life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities. (*Health Promotion Glossary*, 1998)

‘Health’ as a term itself automatically makes people think about good physical status only, and the definition above shows that health does not imply the absence of illnesses, and it also highlights the impact of both the social and the mental states on the whole well-being of individuals. Plus, the term ‘complete’ makes the definition very critical, since a complete state cannot always (or is impossible to) be achieved.

II.2.2 Definition of healthcare:

According to Oxford dictionary: “Healthcare is the organized provision of medical care to individuals or a community”, while the Oxford dictionary (US) defines it as “the maintenance and improvement of physical and mental health, especially through the provision of medical services”; on the one hand, the first definition dealt with providing medical care to people, requiring the use of medication and medical technologies; on the other hand, the second one noted the physical and mental aspect, and even though it did not refer to the social

one being discussed in the definition of the WHO, still this second definition remains the most accurate among the two.

II.2.3 Healthcare communication:

Many professional institutions and scholars provided different definitions of 'healthcare communication' (H.C), and some of the pertinent ones are to be mentioned below.

According to Rogers (1996), H.C can be defined as "any type of human communication whose content is concerned with health" (p.15), which is a combination of both 'health' and 'communication', and accordingly, Thomas mentioned in his book *Health Communication* that health communication is "The study and use of communication strategies to inform and influence individual and community decision that enhance health. It links the domains of communication and health" (Thomas, 2006, p.1).

Also, in the *Health Promotion Glossary*, it was stated that H.C is:

A key strategy to inform the public about health concerns and to maintain important health issues on the public agenda. The use of the mass and multimedia and other technological innovations to disseminate useful health information to the public, increases awareness of specific aspects of individual and collective health as well as importance of health in development. (*Health Promotion Glossary*, 1998)

Communication is a key component of all relationships, and it is acknowledged nowadays to be central to effective healthcare. In this regard, Kreps et al. stated that communication is persuasive in creating, gathering, and sharing health information (1998).

Moreover, the WHO added that this field encompasses several branches, such as health journalism, interpersonal communication, media advocacy, organizational communication, social communication, and social marketing; also, in the same glossary, it was noted that H.C takes advantage of the development of information technology to provide an easy and better access to health information.

Thomas (2006) showed that health communication can take place at different levels:

- Individual level: in order to change community health behaviours, individual changes (knowledge, attitude, awareness...etc.) should be done first through effective health communication;
- The social network: Since large groups of society can have an impact on their members, disseminating proper health information to these groups can improve the health behaviours of individuals.
- The community: some institutions, particularly worksites and healthcare settings, can support healthy lifestyles and then influence people's health behaviours;
- The organization: some organizations like schools, public administrations, and even schools, have great potential in providing health messages to their members seeking individual changes;
- The society: it can indirectly influence individual behaviours, through values, opinions, attitudes.

II.2.4 Role of health communication:

From the definitions above, one can conclude that the major role of health communication in using communication strategies to improve the health status of individuals and communities; besides, the book *Making health Communication programs work* (Arkin, 2009) shed light on the benefits of H.C, stating that it can:

- Increase the audience's knowledge and awareness of a health issue, problem, or solution;
- Influence perceptions and attitudes that may change social norms;

- Demonstrate or illustrate healthy skills;
- Reinforce attitudes and knowledge;
- Show the benefit of behaviour change;
- Advocate a position on a health issue or policy;
- Increase demand on support for health services;
- Refute myths and misconceptions;
- Strengthen organizational relationships.

II.2.5 History of health communication in the U.S.

During the early days of America, H.C was poorly developed, but it had some aspects like announcements of quarantine and others related to contagious illnesses. H.C was informal within the traditional medicine; there were some practitioners of ‘folk medicine’, who used to communicate recipes and techniques of phytotherapy (the use of natural plants for therapeutic purposes). Plus, in the early 20th century, there were not enough doctors and very few people had the occasion to consult them; these physicians had modest medical knowledge, yet, good communication skills, which was an advantage to make their practice more effective (Thomas, 2006).

According to Kreps et al. (1998), the starting points were the evolution of other social sciences like psychology and sociology, which were actively studying the healthcare system, and these social sciences scholars began to examine communication variables in healthcare. Also, the field of psychology produced a large body of literature that was very influential in the development of H.C; the humanistic psychology movement of the ‘50s and ‘60s, emphasizing on individuals’ inherent drive towards self-actualization and led by scholars such

as Carl Rogers, Jurgen Ruesch, and Gregory Bateson, stressed on the importance of therapeutic communication in promoting psychological health; this was considered as a huge boost for other communication scholars to continue working on this topic, for instance, in 1963, the Journal of Communication denoted an entire issue to deal with topic of 'communication and mental health'.

The book: *The pragmatics of human communication* (Watzlawick et al., 2014), based on human psychology literature, brought together both humanistic psychology and human communication, and it was a prominent work for human communication and healthcare communication. As a matter of fact, this book was a ground-breaking statement about the functions of interpersonal communication and in which the authors suggested that the study of human communication can be subdivided into three areas (syntactic, semantic, and pragmatic). Besides, The psychological literature about persuasion and social influence also set the floor for H.C, which influenced the 'health promotion' approach; then the persuasion literature, combined with the social innovations' literature, as well as the social scientific approaches about mass media influence, and even the literature about social marketing, all encouraged scholars in the field of communication to examine the role of 'persuasive communication' (for attitude change purpose) to promote and maintain public health; an example of early health campaigns was the one by the Stanford Heart Disease Prevention Program in 1972, and it was organized by the cardiologist Dr. Jack Farquhar and others; this multimedia campaign was designed to increase people's knowledge of the risk factors for the cardiovascular disease, and to change risk-producing behaviours such as smoking and bad alimentary diets; this demonstrated how communication does really influence people's behaviours and contributes effectively to health promotion (Kreps et al., 1998).

Also, Kreps et al. (1998) argued that the medical sociology literature was also very influential; medical sociologists have been interested in the doctor-patient relationship, as

well as in the social structure of healthcare delivery systems. In one of his studies, Zola examined the ways culture influences patients' way of expressing their health problems, stressing on the need of healthcare professionals to understand the backgrounds of their patients to achieve better communication (Zola, 1966). In this sense, Kleinman, in his book *Patients and healers in the context of culture*, supported this theory, claiming that a more human and effective medical practice should not be based only on technology and biomedical advances, but must also take into consideration the cultural and social backgrounds of patients (Kleinman, 1980).

II.2.5.1 Factors contributing to the development of health communication:

*1

In his book, Thomas (2006) gave some insight into the factors that affected the field of health communication, described as follows:

a) The new medical model:

The development of scientific medicine was requested for a better management of illnesses, but a new approach appeared to improve the health status for communities as well as individuals: the demeaning of the importance of communication in healthcare. Indeed, there was a focus on the disease rather than the patient; still, other physicians were aiming at developing their bedside manners despite the fact that it was considered an unnecessary skill for doctors. In fact, during the golden age of medicine in the US – in the '60s and '70s – physicians remained distant and were separating themselves from their patients' emotions, although it was inevitable to communicate with them and their families. Hence, communication was full of scientific jargon to show their level of medical knowledge and to

1 - Please, note that this part will be dealt with in detail in the section: 'Contemporary approaches in health communication'

indirectly separate themselves from others (belonging to a higher social class). Then, patients felt less involved in their management and did not ask many questions about their health status, which led to a decline in the physician-patient communication.

b) The rise of consumerism:

By the end of the '70s, patients began feeling ignorant about their cases and not able to contribute to their own health management. Thus, reactions about improving the physician-patient relationship emerged, and it was called 'patient-education movement', while others linked it to the concept of 'consumerism' that affected other social institutions besides healthcare.

c) Discrimination in healthcare:

Some aspects of discrimination were evident in terms of job, education, and even healthcare, where medical professionals attributed the term 'well-educated patients' to those who could be close to their level of knowledge and 'speak their language'.

d) Growing emphasis on prevention:

By the last quarter of the 20th century, prevention could significantly play an important role in the improvement of people's health, and a new generation got proactive and started incorporating health communication in health issues' management.

e) Acceptance of marketing by healthcare:

Marketing emerged in healthcare because of the need of consumers to know about the different health products and services, and of the higher competition level in the healthcare market; thus, communication had to be designed to suit the market and promote the products.

II.2.5.2 Major milestones in the history of health communication:

a) The contribution of literature in the field of medicine:

Several works set the floor for the development of the field of healthcare communication, for instance: Korsh & Negrette's article (1972) entitled 'Doctor-patient communication', published in the *Scientific American* journal, in which the authors demonstrated – based on recorded interviews – that the quality of the D-P interaction highly influences the quality of care, and also noted that the use of medical terminology during follow-up consultations is a major communication issue while interacting with patients.

b) Institutionalization of the field of health communication:

Literature about health communication was produced by some communication scholars in the '80s, notably: Kreps and Thornton's book *Health communication: Theory and practice* (1984), in which they showed how human communication – even though taken for granted in the medical practice - plays an important role in the healthcare delivery, and these works were followed by a huge movement of books and journal articles about H.C.

After, literature for H.C and health promotion began to increase, and there was a need for the legitimization of the field; then, communication scholars interested in H.C created together in 1972 The Therapeutic Communication Interest Group of the I.C.A (International Communication Association), which was one of the most influential groups in the area of H.C. Moreover, the I.C.A meetings were good opportunities for H.C scholars to meet and present their researches and even provide new perspectives on the field; 1975 was the year of a great milestone when the Therapeutic Communication Division changed its name into 'Health Communication Division', and this title represented a large group of communication scholars (including the ones of mass communication, persuasion, and interpersonal

communication); hence, this had encouraged research, and in 1977, the I.C.A started publishing annual series in their own section of the Communication Yearbook; their first volumes showed the growing development in H.C, and the received feedback helped the authors to adjust the issues as requested by the audience.

In 1985, the number of scholars interested in H.C increased, and they joined The Speech Communication Association (S.C.A), the largest professional institution in the field, and hence the members of the I.C.A became those of S.C.A commission.

Since 1992, groups of both ICA and SCA began sharing their publications on the Health Communication Newsletter, which was renamed as ‘Health Communication Issues’; these members encouraged research in this area and even proposed scholarships for both advisors and students.

c) Health communication journals:

The year 1989 witnessed the publication of the first scientific journal, entitled *Health Communication*; the first volume contained five pertinent articles about the topic, and the main one was written by Barbara Korsch and it tackled the issue of ‘Doctor-Patient Communication’; this first publication was a milestone in the academic evolution of H.C, and over time, the journal highlighted updated researches in this area. A second H.C journal appeared in 1996: *The Journal of Health Communication*, which took an international orientation; these two journals collaborated to produce some pertinent materials about the topic.

d) Curricular integration of health communication:

Along the development of the professional organization, as well as the growth of literature, came out the integration of the H.C in the undergraduate and graduate education programs; some early courses were housed in the department of speech communication in

some universities (like Minnesota and Pennsylvania Universities) as well as several medical schools who specifically focused on the interviewing skills of physicians (i.e.: University of Illinois). These courses were the basis of H.C classes in colleges in the USA, and on the international level as well. In addition, some H.C web-sites started supporting the curriculum development of the area, and other newly made ones – by graduate students – appeared to share knowledge, and also to promote for the programs they were given in the colleges they have graduated from; this contributed to the building of academic communities, public relations, and health information delivery to the general public.

II.2.6 Health communication sources:

According to Thomas (2006), one can distinguish between three types of sources:

- a- Informal sources: much of health information is obtained through informal sources, like family, friends, or even social groups.
- b- Formal sources: they are “entities who communicate with their consumers as part of their job” (p.86), for instance: healthcare professionals, pharmacists, social workers, and psychologists, and all of them deal with patients in their daily practice and then offer them a certain amount of health information.
- c- Impersonal sources: with the development of technology, people started looking for information on the internet, TV, radio, and even print materials (newspapers and magazines). When it comes to the internet, it is a valuable source of health information, and people might check symptoms and any information they need before they even go to the doctor’s office.

It is important to note that no matter what the source is, the effectiveness of the health information depends on the perception of the messages by the audience.

II.2.7 Approaches in health communication:

Unfortunately, there is a lack of approaches in health communication in the literature, and to the best of our knowledge, the only ones were presented by Burton and Dimbleby (1995), who argued that there are three main approaches in H.C.

II.2.7.1 The process approach:

It is the most common of the three approaches; by its name, one can tell that this approach focuses on the process involved while people communicate with each other, such as encoding, decoding, and transmission of the intended messages; it deals with communication as a tool of behavioural change.

II.2.7.2 The semiotic approach:

It focuses on the signs used in communication and on the meanings generated by the use of these signs. In this sense, daily social interactions are considered to be exchanges of signs between people who select specific signs for specific situations.

II.2.7.3 Cultural studies approach:

Just like semiotics, the cultural studies approach is also concerned with signs, symbols, and meanings, but to a particular social group in society, as Burton and Dimbleby noted “this approach is concerned with the creation of a distinctive culture through communication” (1995 qtd.as cited in Berry, 2007, p.28). In this sense, communication within a particular group is primarily considered as an instrument of power, or a tool to preserve a group’s identity and solidarity.

II.2.8 Types of health communication:

II.2.8.1 Informative communication:

It is used to provide information about an idea to make it more familiar; for this purpose, mass media could be used, and it can even be supported by print materials and interpersonal communication to reinforce the messages of media, and to provide people with more information about a specific health topic.

II.2.8.2 Educative communication:

This approach is used when people are aware of a health issue, although, they want to acquire more clarification about it; here, interpersonal communication with individuals is probably the most convenient way, and it can be supported by print materials or multimedia tools as well.

II.2.8.3 Persuasive communication:

It consists of messages that promote a positive change in behaviours and attitudes, and it encourages the audience to adopt new attracting ideas by recognizing their needs.

II.2.8.4 Prompting communication:

In this approach, messages are designed in a way to be hardly ignored, to remind the audience of something that has been dealt with before, using some entertaining methods to carry the health message to people (such as songs, posters, and TV commercials that implicitly carry the health messages for the audience).

II.2.9 Contemporary approaches in health communication:

II.2.9.1 *The emergence of new techniques:*

Recently, communication has undergone several changes, and health communication was no exception. As mentioned in Thomas' book *Health communication*, some factors initiated the emergence of new techniques, aiming at moving from 'communicating with masses' to 'communicating with specific segments', or in other words, moving from 'a standard approach that fits everyone' to 'a specific approach for a specific individual/group'.

Thomas (2006) also highlighted several factors that have changed the character of health communication, such as consumerism, growing market orientation, health disparities, need for social marketing, information requirements, development in telecommunication, and development in marketing.

II.2.9.2 *Shift towards contemporary approaches:*

In the same book, Thomas distinguished between the shifts that led towards more contemporary approaches in health communication; he cited four different shifts:

- a) **Shift from Episode to Relationship:** it refers to a shift from dealing with patients for a limited period of time (from the first time they consult until they heal), to establishing long-term relationships with them.
- b) **Shift from knowledge transfer to behavioural change:** communication moved from transferring medical knowledge about health issues to motivating individuals to adopt good behaviours about these same issues.
- c) **Shift from Macro to Micro:** H.C took a mass marketing approach since the 'one-size-fits all' one did not seem to be effective, as the author stated: "Micro-

marketing is a form of ‘target marketing’ in which marketers tailor their marketing programs to the needs and wants of narrowly defined geographic, demographic, psychographic, or benefit segments” (Thomas, 2006).

- d) Shift from Individual Focus to Population Focus:** trying to reach mass audiences, being a target for health information and health behavioural change.

II.3 Health Literacy

II.3.1 Definition of health literacy:

Generally, the word ‘literacy’ stands for the ability to read, understand, and write; in a more detailed way, it is “the ability to read, write, and speak a language in the service of understanding and solving problems with sufficient proficiency to function at work and in society, achieve goals and develop knowledge and individual potential” (National Literacy Act of 1991, 1991).

However, as far as the healthcare context is concerned, literacy means how an individual can understand and act on some health information. In the *Health Promotion Glossary*, it was noted that health literacy refers to the skills that control people’s ability to use health information to maintain a healthy lifestyle; they further explained that literacy and health literacy are closely connected, stating that:

Health literacy implies the achievement of a level of knowledge, personal skills and confidence to take action to improve personal and community health by changing personal lifestyles and living conditions. Thus, health literacy means more than being able to read pamphlets and make appointments. By improving people’s access to health information, and their capacity to use it effectively, health literacy is critical to empowerment. Health literacy is itself dependent upon more general levels of literacy. Poor literacy can affect people’s health directly by limiting their personal, social and cultural development, as well as hindering the development of health literacy. (*Health Promotion Glossary*, 1998)

The definitions above show that health literacy focuses on the individuals’ skills to better understand the healthcare system and then improve their health behaviours, and even though

the concept is closely related to literacy, they are not the same; in fact, literate people, with their faculty of speech, writing, and comprehension skills, can better process the different information they get exposed to, including the one related to health. In 2004, the US Institute of Medicine adopted the framework for health literacy (represented below in *Figure N° 6*), which shows the vital contribution of literacy to health literacy, and the two of them are likely to influence the health outcomes in society.

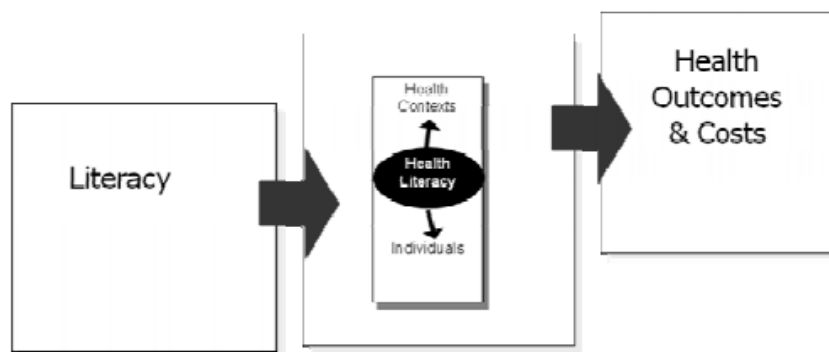


Figure N°6: The health literacy framework

(Institute of Medicine (US) Committee on Health Literacy, 2004)

II.3.2 History of Health Literacy:

Among the pioneers of the health literacy field, Cecilia and Len Doak are well-known experts, and they have – among many works - two pertinent featuring publications: 1- Pfizer Principles for Clear Health Communication (2004), and 2- Teaching Patients with Low Health Literacy Skills (1995); these works highlighted several milestones, which could be briefly represented in Pfizer’s *Principles for clear health communication* (2004), as follows:

- **During the ‘70s:** very few references were available about health literacy, and afterward, a little interest in the area started arising and took the form of conferences and workshops;

- **In the '80s:** some institutions got interested in H.L, for instance, the US Cancer Institute created a multidisciplinary group of scholars, and the latter started publishing their works in medical journals, and this increased the interest of other audiences in the topic;
- **Starting the '90s:** some significant publications appeared, notably the Healthy People 2010 Guidelines, a report that represents the U.S health goals by covering a variety of health behaviours and determinants of individual as well as community health.

II.3.3 Factors influencing the health knowledge:

In a report by The Institute of Health Promotion Research (University of British Columbia), (Kwan et al., 2006) established a model that sums up almost all that affects the health information context. Based on this model, they identified internal and external factors that influence this context, which in turn, influences the acquirement of health knowledge and the health decision-making; according to the authors, the internal (personal) factors involve the individuals' own characteristics, like personality, psychological and physical state, and life experiences, while the external factors include society, culture, education, the healthcare system...etc. These factors have an impact on the health information context in terms of accessing information (through media or healthcare professionals) or communicating them, and thus, health literacy would definitely affect individuals' health behaviours.

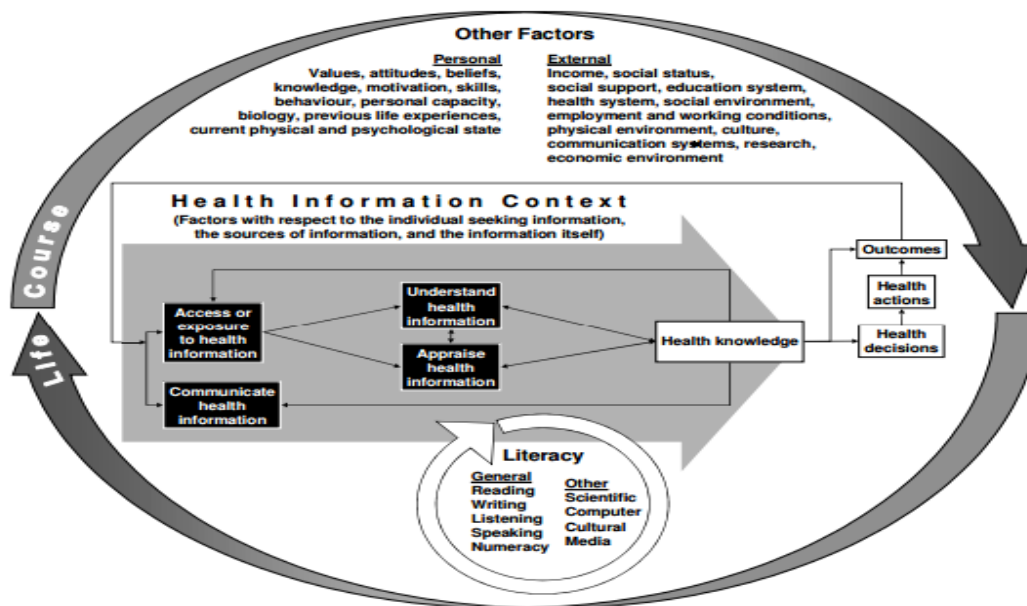


Figure N°7: Factors and contexts that influence health knowledge, decisions and actions.

(Kanj & Mitic, 2009).

The figure above summarizes the different factors influencing health knowledge, and demonstrates that when individuals get exposed to health information, they then process these data to become health knowledge (ideas about health), which contributes to suitable health decisions-making, and – in the long term – these individuals become health information sources themselves. Plus, processing health information by the audience is influenced by multiple (internal and external) factors as referred to in the previous paragraph.

II.3.4 Health literacy levels:

When it comes to H.L levels, Nutbeam (2000) proposed three levels:

1. **Basic/functional literacy:** it is based on basic reading and writing abilities that make individuals deal effectively with their daily lives situations;
2. **Communicative/interactive literacy:** it refers to the association of both cognitive and social skills necessary to get involved in everyday activities, and to understand the different types of communication especially the health communication messages;

3. *Critical literacy:* it consists of more advanced cognitive abilities of individuals to critically analyse information and use it effectively to improve their well-being.

The different levels above show that individuals' autonomy depends on the literacy level they have, since the more they get closed to the third level (critical literacy), the more they become able to criticize and analyse the different health knowledge they get exposed to, which leads to better overall well-being.

II.3.5 Sources of health information:

Access to information depends on the channels of communication used for that purpose (people get health information via the internet, print sources, healthcare providers ... etc.). Mostly, the main information sources are:

II.3.5.1 Healthcare professionals:

Before, people used to get information directly from healthcare providers, which is more effective due to the possibility of interaction with the professionals. However, with low literacy – and more specifically low health literacy – these interactions might not be effective, especially due to differences between the two parties in terms of age, socioeconomic level, gender... etc. For instance, Barrett and Sheen (2006) argued that some patients try even to hide their misinterpretations of what they get told because they get embarrassed to ask for clarifications in front of the health professionals. Additionally, it is to mention that time (Sabherwal et al., 2015) and workload (Sun & Rau, 2017) are always an issue when it comes to communicating health information during consultations; patients might feel uncomfortable and then communication might break down, and this prevents them from asking clarifications about the things they could not properly understand.

II.3.5.2 Print materials:

Print materials are an effective tool to deliver health information, either proposed by the H.C.P's or purchased by the patients themselves, and they seem very helpful for those who are not able to get in touch with the care providers in person; these materials include brochures or scientific articles and books (for more educated people). Also, due to their content, the impact these sources might have on people is highly dependent on their (health) literacy level.

II.3.5.3 The Internet:

Nowadays, the internet is the easiest, quickest, and most available source of any information one would ask for, and H.I makes no exception. Still, this source is generally – but not exclusively – used by urban citizens, with an intermediate level of education and web navigation skills, and who are reasonably young. Also here, access to an internet connection as well as literacy might prevent individuals from reaching the H.I they are seeking on the web. Also, the credibility issue of web information is a challenge as well since the internet content is not often regulated. Moreover, the presentation of H.I on the net can sometimes be complex with the use of technical vocabulary that is mainly addressing a specific group of society, and not the general public.

II.3.5.4 Mass media:

Mass media is a very powerful and behaviour changing tool by healthcare systems, due to its accessibility to all categories of individuals, and due to the simplicity of the messages communicated to the general audience via TV programs and commercials, radio stations, press... etc. Hence, mass media, in collaboration with the healthcare departments, can implicitly influence the health behaviours of people and improve the health decisions-making.

II.3.6 The benefits of health literacy:

Health literacy has several effects on society, especially the individuals' health status, and its benefits can be summarized in this way:

1. Adopting preventive care: The famous Desiderius Erasmus taught us that “*prevention is better than cure*” (n.d.), and when people seek the right health information and assimilate them correctly, they would put them into practice in their daily lives. As a result, they will adopt preventive health behaviours to avoid or – at least – to reduce the chances of getting ill.
2. Adherence to medical recommendations/prescriptions: people with a good amount of health knowledge know what is ‘best for their health’. For example, once they consult physicians for any health concern, they would be able to correctly put into practice the doctors’ prescriptions and recommendations, which would make the treatment more efficient; also, interactions with the physicians would be much easier and more fruitful.
3. Reduction of care costs and the length of hospital stay (for hospitalized patients): Health literate individuals are likely to be more cooperating with the care providers, which makes the healing process faster, the length of hospital stay shorter, and the costs of care lower.

II.4 Physician-patient communication

It is highly recommended to focus on the nature of the physician-patient relationship before tackling the issue of physician-patient communication, although the relationship determines the type of communication, and vice-versa.

II.4.1 Physician-patient relationship:

II.4.1.1 Nature of the physician-patient relationship:

Patients, during their ‘journey of illness’ (no matter what its length is), get in touch with several healthcare providers, including physicians, and the relationship between the two parties (doctors and patients) is established from the first time they meet until the patients heal, or in other words, until they finish their illness’ journey.

In fact, as within any human relationship, the physician-patient one should be based on effective communication, mutual understanding, respect, and mainly involving the patients in their own health management and decision-making process; besides, this relationship should be mainly fiduciary, which means based on trust: the patient trusts the physician with his/her healthcare, and the care provider fulfills his/her duties (Lipkin et al., 2012).

Literature provided us with several models of the physician-patient relationship, for instance, in an article entitled ‘Four models of physician-patient relationship’, Emanuel and Emanuel (1992) highlighted four models, namely: the paternalistic, the informative, the interpretive, and the deliberative model.

II.4.1.1.1 The paternalistic model:

It is a classic model, where the doctor takes the responsibility of the patients’ medical care, without feeling any need for their permission (MCKINSTRY, 1992)

II.4.1.1.2 The informative model:

Sometimes also called ‘consumer model’, where the aim of the interaction between physicians and patients is for the doctor, to present all the relevant information about the health status, including the diagnosis and the prognosis, and for the patient, to choose the modality s/he wants to opt for (Emanuel & Emanuel, 1992).

II.4.1.1.3 The interpretive model:

In this one, the objective of the interaction is to clarify the needs and beliefs of the patient, and to consider them to make him/her chose the right medical option (Emanuel & Emanuel, 1992).

II.4.1.1.4 The deliberative model:

Here, the goal is to “help the patient determine and choose the best health-related values that can be realized in the clinical situation” (Emanuel & Emanuel, 1992, p.2222); in this case, the physician should know well the patient, just like a friend, so that s/he determines what the patient should do (since s/he knows what is best for the latter).

II.4.1.2 Compassionate physician-patient relationship:

Stephen (2011) dealt with the concept of compassion, being one of the essential components in healthcare, and it refers to understanding the patients and imagining what they are going through, and also to show them sympathy. In the article, Stephen started with some lines of one of Edward Estlin Cumming’s poems “We do not believe in ourselves until someone reveals that something deep, inside us, is valuable, worth listening to, worthy of our trust, sacred to our touch” (Bancroft, 2015). As far as healthcare is concerned, these lines can refer to compassion within the physician-patient relationship, since it makes the patient feel relieved, valuable, and understood.

Medical knowledge is indeed essential in medicine, but the human aspect is of great importance as well, and sometimes can be even more effective when it comes to emotionally fragile patients (cancer patients for instance) since the psyche would immediately influence the physical status, and thus speed up the healing process; in this sense, Peabody stated in his article that the secret of the care of the patient, is in caring for the patient (1927). Besides, compassionate care is also based on listening, which is an important element of human

communication in general, and healthcare in particular, since a physician with active listening skills can acquire more and more about the medical record on which s/he gets based to determine the diagnosis and the therapeutic modalities for the patient. Plus, as mentioned earlier, this type of care makes the patient more satisfied, psychologically stable, more involved in his/her management, and also makes the physician-patient relationship more humanistic and less paternalistic.

II.4.2 Physician-patient communication:

II.4.2.1 Definition:

Among the various definitions of this concept, Lee et al. stated that “the physician-patient communication encompasses the verbal and non-verbal interactions that form the basis of the doctor-patient relationship” (2002, p.464).

Also, it is worth mentioning again that effective physician-patient communication is mandatory for a good therapeutic and even personal relationship between the two; Hall et al. (1981) argued that the interpersonal aspects of the doctor-patient relationship are one of the foundations of medicine, and this concept leads towards the patient-centered approach.

II.4.2.2 Obstacles to physician-patient communication:

Just like within any human communication, the physician-patient communication might undergo some obstacles; such obstacles were mentioned earlier in this part, and the report of the Australian Health and Medical Research (2004) divided the communication barriers thusly:

- Physical environment: it may fail to provide privacy and discourage communication, like a consultation room with a door half-closed, or the presence of other patients in the same consultation room;

➤ Physician-related obstacles:

- Lack of training in terms of communication capabilities;
- Lack of empathy;
- Unrecognizing the patient's autonomy;
- Time-pressure and workload;
- Distraction by personal factors.

➤ Patient-related obstacles:

- Affected by the physical condition (for example when the patient is too ill to talk or to hear what is being said, or when s/he is deaf or with a loss of voice (aphonia)), or even by the medication (when the patient's body is too much affected by the side effects of the treatment);
- Affected by the psychological status (anxiety, denial about the situations...);
- Not able to define/describe the symptoms;
- Intimidated by the healthcare settings;
- Uncomfortable with the difference in language;
- Confused by the medical jargon;
- Unwilling to ask questions.

➤ Cultural and social diversity:

The different patients who consult doctors are from different cultural, ethnic, and socio-economic backgrounds, and these factors influence their language, beliefs, ideas, manners, all of which might cause communication gaps.

The figure below summarizes the different barriers in health communication:

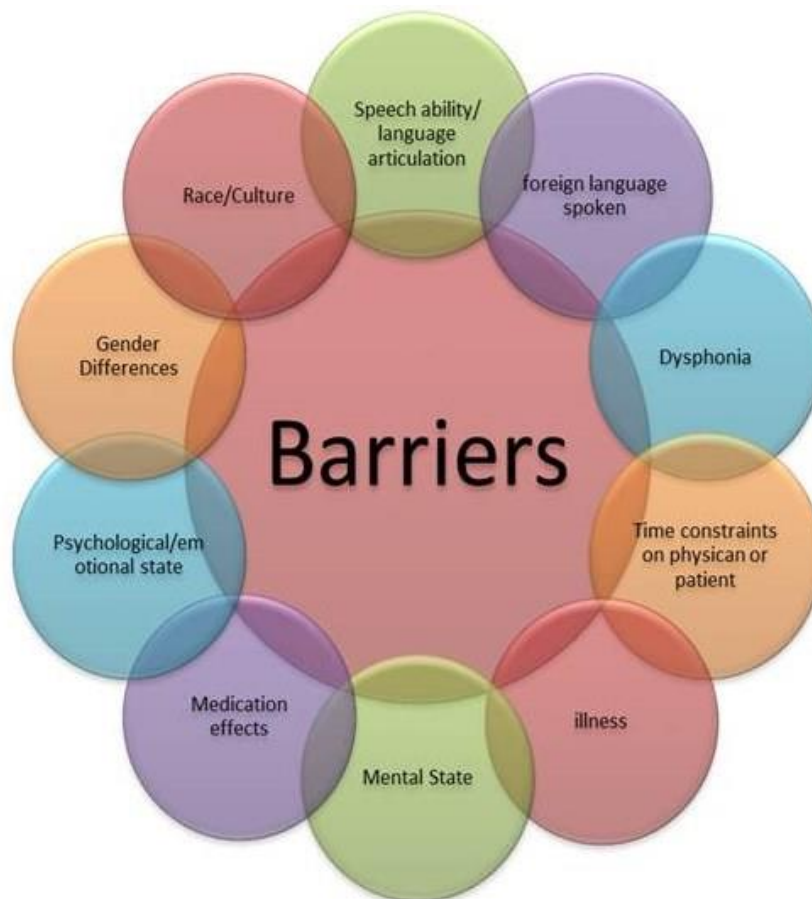


Figure N°8: Summary of the barriers to communication in healthcare

(Source: ‘Communication in healthcare: Barriers to communication in Healthcare’, n.d.)

II.4.2.3 Benefits of good physician-patient communication:

It is believed that a successful medical encounter requires effective communication; in the article ‘Doctor-patient communication: A review’, Ha and Longnecker (2010) mentioned some of the benefits of effective communication, including:

- Regulating patients' emotions;
- Facilitating comprehension of medical jargon;
- Allowing better identification of patients' needs, perceptions, and expectations;
- Satisfying the patients in terms of care.

Many studies, such as Cameron's (1996), stressed on the fact that both patients' good compliance, and establishing good relationships with their physicians, are closely related to the latter's behaviours (instrumental as well as socio-emotional). Plus, in a report by the National Health and Medical Research Council (by the Australian government), entitled *Communicating with Patients: Advice for Medical Practitioners* (2004), other benefits of effective communication were presented, notably: building trust between the two parties (doctors and patients), helping the patients to disclose more information, and involving them more fully in their health decision-making; in this sense, Back et al. (2009) listed more advantages of effective communication, being improving patients' adjustment to the disease, lessening pain and physical symptoms, and resulting in higher satisfaction with care; all these various benefits highly demonstrate that effective communication is the key to effective care, satisfaction with disease management, and essentially better health outcomes.

Additionally, from the different advantages of good physician-patient communication, one might understand that it is beneficial only for patients, rather, it is also very useful for physicians and healthcare professionals dealing with the patients as well (Back et al., 2009), since it helps to enjoy and thrive in the work, decreases the stress and burnout levels, and also decreases the malpractice claims.

II.4.2.4 Impacts of poor communication:

After we have seen a lot of benefits of effective communication, one should point out the impacts of a poor one as well; the report of the Australian Health and Medical Research Council (2004) stated that a poor physician-patient communication can:

- Decrease the trust in medical care;
- Prevent the patient from revealing important information;
- Cause patient's distress;
- Lead the patient to refuse medical care;
- Lead to misunderstandings and misinterpretations of medical advice.

Likewise, Back et al. (2009) have talked about poor communication in their work, arguing that it could cause the use of ineffectual treatments, higher rates of conflicts with the care providers, and less adherence to the disease management. Therefore, one can conclude that poor physician-patient communication has negative impacts on both the relationship between the two parties as well as the patient him/herself, which would definitely decrease the quality of care.

II.4.2.5 Improving physician-patient communication:

II.4.2.5.1 Basic communication skills:

Since effective communication leads to effective care for the patients and a better 'partnership' between physicians and patients, several institutions developed strategies to improve the communication techniques, while others cited the basic skills physicians should adopt during direct patient encounters. Similarly, an information statement by the AAOS

(*Patient-Physician Communication*, 2000), highlighted some new competencies to be used, which included:

- Sitting down during patient encounters;
- Understanding the patient as an individual, not as a disease;
- Showing (and expressing) empathy;
- Active listening and building partnership;
- Eliciting concerns and calming fears;
- Answering questions (if asked);
- Informing patients about their medical conditions and the treatment options;
- Involving the patients in the decision-making process;
- Showing sensitivity to patients' cultural and ethnic diversity.

II.4.2.5.2 Strategies to improve communication skills:

In fact, Fong Ha (2010) stressed that patients often consider their doctors as a source of psychological support, and empathy - as mentioned before - is one of the most powerful tools to provide support and reduce patients' anxiety. Hence, the strategies they have highlighted in the article are presented as follows:

II.4.2.5.2.1 Communication training:

People were not born with innate communication skills, and physicians make no exception; still, they can learn the basics of good physician-patient communication, and then try to put them into use; these assets can be taught either through handbooks and different specialized websites, or ideally by training sessions, which seems to be significantly

improving the communication level. However, these assets are improved mainly through daily practice within real-life situations.

II.4.2.5.2.2 Collaborative communication:

As identified earlier in this chapter, interpersonal communication should be bi-directional, involving both the receiver and the speaker; for this purpose, the physician-patient communication should be collaborative for better therapeutic decisions, and also for successful information exchange. The study of Ong et al. showed that the patients who are more informed about their medical condition are the most satisfied ones, because they consider the informative doctor as being more human and interested in their care (2000).

II.4.2.5.2.3 Conflict management:

Conflict is a routine in everyday life; in the medical encounter, doctors deal with patients from different ethnic and social backgrounds. Hence, if a conflict occurs, it should be first acknowledged, then managed by active listening, agreeing with the patient, acknowledging his/her feelings, acting as a team, and even apologizing if it might make the patient feel better (*CMPA - Dealing with conflict in the doctor-patient relationship*, 2013)

II.5 Storytelling

In society, stories are innate to human beings, and sharing them either empowers or disempowers the receivers, and during any medical consultation, stories get told, either by doctors or patients, and they are of great importance in healthcare; Harter (2010) indicated that shifting between medicine and patients' stories within medical communication is a valuable tool to achieve good health outcomes, along with better social and psychological states for the patients.

The Oxford Dictionary defines storytelling as “The activity of telling or writing stories”, and it allows individuals to share their experiences and the receivers to imagine the

situation through the eyes of others (the senders); although it might seem like an easy task, it is not the case, as pointed out by Day:

Storytelling is humankind's oldest form of teaching and motivating change. Personal storytelling, case studies, role-playing... all help to tell a story. All of these examples contain a common thread of learning from experience, reflecting both emotionally and intellectually, and applying what was learned to one's own life. (2009, p.2)

Besides, storytelling is an art that is not related only to patients; this activity is also performed by healthcare professionals, and each type has its own particularities.

II.5.1 Patients' storytelling:

Patients always tell about their experiences in the world of illness or even their social life. However, the way they tell the story about the disease, especially during the first consultations, influences how they are perceived in the healthcare setting, as stated in the book *How Doctors Think*: "What we say to a physician, and how we say it, sculpts his thinking. That includes not only answers, but our questions" (Groopman, 2008, p.76).

Stories (or narratives) start either with the doctors asking a question (an open-ended or a closed-ended one), or by the patient feeling something heavy on his/her chest (physical or emotional) that s/he needs to express, either to make the physician aware of it (being part of the disease management), or just to feel psychologically relieved. In addition, Frank (2012) proposed three types of narratives found in health research:

- a- Restitution narratives: they focus on the return of health;
- b- Chaos "anti-narratives": in which misfortunes escalate and the plot leads to no solution;
- c- Quest narratives: in which the narrator embraces the journey metaphor and wishes to transmit to others what they have learned.

For physicians, listening to their patients' stories is very important since it provides more or less valuable information about the medical record, the hidden symptoms that the medical tests might not reveal, the side effects of some treatments, and also about various – personal and social – factors that influence the patients' well-being.

According to Corbett (2008), patients' stories become more interesting when they are narrated, respecting the order of the medical records, providing details about symptoms and many abnormalities, and telling the story in a sequential order. Hence, patients can provide pertinent medical information to their carers, which would help the disease management, improve the satisfaction with care, and allow the physicians to gain time and lessen the workload in their practice.

II.5.2 Physicians' storytelling:

When physicians tell stories to their patients, they motivate them and help going through the disease with strength, since humans generally need reassuring words for better physical as well as psychological well-being. As stated in New York Times, storytelling might have an important impact on patients who distrust the healthcare system, or who have trouble assimilating health information, so they find personal narratives easier to understand (W.CHEN, 2011).

Additionally, storytelling influences people's beliefs based on the theory of 'Reasoned-action', which aims at explaining the relationship between people's attitudes and behaviours within social interaction. Hence, by giving examples of ex-patients' experiences – being role model stories – to newly diagnosed ones, physicians could help involve them in their own health management, change health behaviours, and improve the health literacy level of these patients. Stories of other patients could also be told by non-medical staff, such as psychologists and health educators, and they seem to be very efficient due to the simplicity of

language, and to the concept of ‘relatedness’ as claimed by Dr. Houston: “the magic of stories lies in the relatedness they foster” (as cited in W.CHEN, 2011, para.11).

There are various ways to present stories to patients, either by using videos of other people narrating their experiences, brochures, or even audio recordings of the narratives; the choice of the adapted method depends on the time/space as well as the intellectual level of the targeted patients, and it should be designed, in best-case scenarios, by ‘communication designers’, who are:

Individuals with an artistic background who have the ability to break down complex concepts, business strategies, and multi-pages reports into a simple collection of descriptive drawings and words that get at the heart of what is unique or pertinent about an idea. (Leander, 2015, para.2)

Plus, there are some suggestions to incorporate storytelling classes in medical schools, although the latter cannot produce great communication designers, at least, it can provide the necessary skills to transmit health messages using patients’ narratives to influence health behaviours of patients in particular, and society in general.

II.6 Cancer communication

Health policies all around the world emphasize the need for good communication between health professionals and patients, and when it comes to cancer patients, this need gets more urgent.

In fact, the word cancer denotes – for the majority – something incurable, a very exhausting journey in the world of illness, and a close death; although there are many other dangerous diseases than cancer, the latter remains the most shocking and harmful for most people.

II.6.1 Generalities about cancer:

Cancer is a very serious disease, and according to the WHO, it is considered to be “one of the leading causes of mortality and morbidity worldwide, with approximately 11 million new cases in 2012” (*WHO / Cancer: Facts sheet*, n.d.). Plus, the same report classified this disease as the 2nd cause of death globally, which was responsible for 8.8 million deaths in 2015; nearly 1 out of 6 deaths is due to cancer.

There is a huge amount of definitions of cancer, and Alison stated in the introduction of her article that:

Cancer is a potentially fatal disease caused mainly by environmental factors that mutate genes encoding critical cell-regulatory proteins. The resultant aberrant cell behaviour leads to expansive masses of abnormal cells that destroy surrounding normal tissue and can spread to vital organs resulting in disseminated disease, commonly a harbinger of imminent patient death. (Alison, 2001, p.1)

In other words, it is a disease during which abnormal cells divide without any control and can invade nearby tissues.

The causes of cancer remain ambiguous; in general, cancer occurs when normal cells transform into tumour cells, and this transformation is the outcome of the interaction between a person’s genetic factors and external agents (carcinogens); the latter have been clarified by the WHO as follows:

- Physical carcinogens: like ultraviolet and ionizing radiation;
- Chemical carcinogens: like components of tobacco smoke, food contaminants (for instance: aflatoxin), or water contaminants (Arsenic for example);
- Biological carcinogens: the case of infections caused by some viruses and bacteria.

Moreover, the facts sheet of the WHO noted that ‘aging’ is another important factor; the risk of developing cancer increases with age, simply because the cell renewal process

becomes less effective when a person gets older. In addition to the four major risk factors worldwide (tobacco use, alcohol consumption, unhealthy diet, and physical inactivity), there are other chronic infections like hepatitis B and C, HIV, *Helicobacter pylori*, papilloma virus, which represent risk factors for cancer as well.

However, it is considered to be a stigmatized disease in less developed countries, being something dangerous and even shameful, associated to some stereotypes; in this sense, the American Society of Clinical Oncology (*ASCO Answers Patient Education Materials*, 2012) stated that there is a lot of cancer information that is available, but some of it might be misleading; in its article ‘Myths and facts about cancer’ (2014), some myths were identified and clarified, which could be summed up as follows:

- ✓ Cancer is contagious: cancer is not contagious at all, however, some viruses set the floor to its development, notably the sexually transmitted viruses like the human papilloma virus (HPV) that increases the risk of getting cervical or head and neck cancers, the same for the hepatitis B and C and the risk of liver cancer;
- ✓ Cancer is hereditary: some studies have shown that family histories of cancer increase the risk of having the disease, but this is not a 100% accurate prediction of one’s future health status.
- ✓ Cancer thrives on sugar: some people with cancer think that if they eat sugar, it will feed the cancer and makes it grow more. The cells (normal ones and cancer’s) depend on sugar, but this does not speed up the tumour’s growth;
- ✓ Cancer treatment is worse than the disease itself: whether it is chemotherapy, radiation therapy, or another treatment of cancer, it is often linked with some serious side effects like nausea, weight and hair loss, which can be managed to some extent within the palliative care, but they remain normal and temporary

(depending on the physical status of patients) and considered as part of the body's response to the treatment;

- ✓ It is better to remain unaware you have cancer: people should never ignore abnormal signs in their bodies, like a lump in the breast or persistent bleedings; this would be the motive to consult the doctor, which would make the management a lot easier and effective in case those signs are the symptoms of a type of cancer. Thus, although knowing about the disease would cause some distress, but it would be temporary as long as cancer gets managed at an early stage;
- ✓ Positive thinking will cure cancer: it is true that a good mindset will greatly help the patient to cooperate and get involved in the treatment, and will also improve the quality of life, but still, the medical treatment is mandatory.

Plus, the diagnosis, whether it is announced directly to patients or their relatives, is often accompanied with fear, distress, and a huge feeling of uncertainty; thus, physicians, among other healthcare players, have a serious responsibility in announcing the diagnosis as well as dealing with patients and relatives' emotions (responses of the diagnosis), which are considered to be the two major tasks in communication with cancer patients.

II.6.2 The particularity of cancer communication:

Smyth stated in his book *Communicating with cancer patients* that “the ‘art’ of cancer medicine is to develop the skills to enable you to explain what a diagnosis of cancer actually means, and the ‘science’ surrounding the management of an individual’s illness, in an intelligible and empathic way” (2013, p. Preface x); clearly, this definition combined the words: art, science, and empathy, which somehow demonstrates how special this type of communication is, and how important it is to combine the three cited elements to achieve effective management of the illness.

The patient-centered approach is the newest approach in healthcare when it comes to physician-patient communication, and the latter should be ‘care-oriented’ rather than ‘cure-oriented’ (Ong et al., 2000). In a Bulletin of effectiveness of health service interventions for decision makers, the patient-centered care was defined as “the use of active listening skills by professionals, encouraging patients to express their agendas, attempting to understand patients’ points of view and expectations, and working with patients in the management of their illness” (‘Effective Healthcare: Informing, Communicating and sharing decisions with people who have cancer’, 2000, p.2). Also, several works insisted on the need for effective communication between physicians and patients in cancer care to achieve better health outcomes, notably the one by Ong et al. (2000).

In the article ‘Effective communication skills are the key to good cancer care’, Fallowfield and Jenkins (1999) argued that communication should be considered as an underestimated medical skill that requires a lot of training. While dealing with oncology patients, communication gets more critical due to reasons like emotional sensibility, ambiguous prognoses, and unpredictable reactions of both patients and relatives...etc. Hence, in addition to cancer treatments, these patients – and their families- need affection, hope and reassuring words to achieve an optimal level of quality of life and better outcomes. A definition of the word ‘outcome’ was pointed out by Ong et al. as “an observable consequence of prior activity occurring after an encounter, or some portion of the encounter, is completed” (2000, p.1). Likewise, Beckman et al. (1989) distinguished between:

- Short-term outcomes: patient’ satisfaction, ability to contribute to the care;
- Intermediate outcomes: adherence to treatment, decrease of stress...etc.;
- Long-term outcomes: the overall quality of life, general health status, and recovery.

Moreover, during their ‘cancer journey’, patients seek social and informational support from their healthcare providers, and communicating with them is special: they get confused sometimes because of dealing with different healthcare providers, they consider themselves are ‘dying’ people who are trying to hang on to life, they might think that – according to stereotypes – that their illness is incurable, they try to acquire as much cancer information as possible to contribute to their care (but the problem of reliability of this information is always there), and they go through stress like no else does; concerning the latter aspect, Smyth (2013) provided a figure (below) that shows the levels of patients’ stress during the different stages of cancer management:

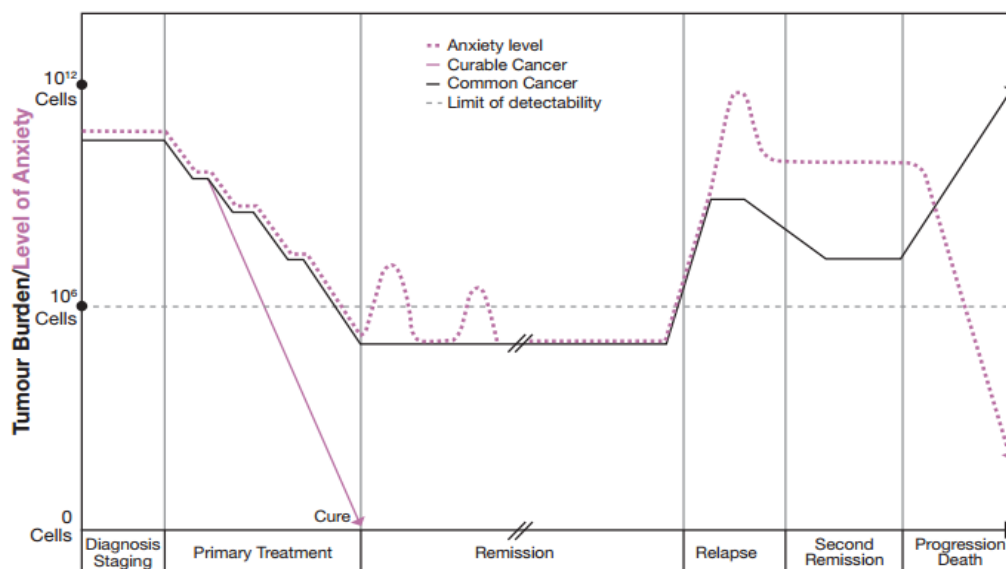


Figure N° 9: Stress level of cancer patients during cancer management (Smyth, 2013).

The figure above demonstrates that high levels of anxiety are expected at the diagnosis announcement, but it might decrease with the combination of good treatment and effective communication. In this respect, Hack et al. (2005) highlighted that there are two categories of goals in cancer care: optimal medical management of cancer, and optimal attention to the patients’ psycho-social response to the cancer experience. Thus, a combination of the medical

knowledge and awareness of patients' psychological symptoms would be of great impact; the same article dealt – in detail – with the effect of attention to the patients' psychological response, claiming that the degree of patients' satisfaction, as well as compliance with the cancer management, depend on the empathy and attentiveness they get from their oncologists; sometimes, the psychological or personal concerns are not discussed because each one of the two parties (patients and physicians) waits for the other to initiate the topics.

Also, in *Patient-Centered Communication in Cancer Care: Promoting Healing & Reducing Suffering*, the authors proposed other challenges of cancer patients, which affect communicating with them:

- Receiving bad news;
- Dealing with the emotional impact of a life-threatening disease;
- Understanding and memorizing complex medical information (due to low – health - literacy);
- Dealing with multidisciplinary healthcare teams;
- Understanding statistics related to healing chances and prognosis;
- Facing uncertainty and maintaining hope during the disease management process;
- Building trust and long-term relationships with the care providers;
- Participating in the decision-making;
- Adopting health-promoting behaviours.

II.6.3 Communication obstacles in cancer care:

Communication obstacles - or even breakdowns – occur frequently in people’s daily lives, and healthcare settings are no exception. In the article ‘Improving communication with cancer patients’, Maguire (1999) distinguished between two types of barriers to effective communication:

II.6.3.1 Patient-led barriers:

- Psychological status: patients sometimes find it difficult to express themselves, thinking that the psychological disorders “are an inevitable consequence of having cancer and being treated for it”, or because they are afraid of expressing their feelings, fearing that they might look unsatisfied with the care (Maguire, 1999, p. 1417).
- Lack of motivation: the communication of the care providers can make the patients’ perception of the healthcare environment, and then they will feel encouraged to express their concerns.

II.6.3.2 Professional-led barriers:

- Avoidance: when a physician asks an open-ended question, s/he gives the patient the green light to disclose matters, whilst a closed-ended question or a dichotomous one (yes/no) might not.
- Fear: sometimes physicians cannot handle patients’ emotional flood;
- Lack of communication skills: which is a major obstacle in the physician-patient communication in general, and cancer care in particular; in fact, communication training programs are mandatory, unfortunately, only a few oncologists get interested in those programs;

In this sense, Fallowfield & Jenkins (1999) also provided in their article some elements related to patients-led barriers, for instance, their degree of information about cancer, and as cited earlier in this dissertation, the internet is a major contributor to this, since the patients – especially the educated ones – are either misinformed or overly informed (they are called ‘internet patients’). Plus, the article also provided another major communication obstacle, related to system constraints; in fact, oncology settings receive a huge amount of patients, hence the offices or consultation rooms might not ensure privacy for good communication. Also, interruptions, either by people’s noises and phone ringing, or by other patients or other health professionals, are another major constraint to take into consideration.

In addition to the patient-related obstacles cited above, one should not ignore the concept of health literacy within cancer care; in their article, Davis et al. noted that:

Patients with inadequate health literacy struggle to comprehend information containing unfamiliar vocabulary or concepts. They often do not understand cancer control terms like screening, basic anatomic vernacular such as colon, and diagnostic and therapeutic terms and concepts such as tumor, lesion, and cure. (Davis et al., 2002, p.135)

The quote shows the impact of H.L on how cancer patients deal with oral and written information concerning their disease, something that highly influences their collaboration in care, as well as their perception of the illness.

II.6.4 Basics of effective physician-patient communication in cancer care:

As shown earlier, communication has a role in healing, reducing the patients’ suffering, and creating a climate of understanding and trust for the patients and their relatives. In fact, the amount of information provided to patients – during the physician-patient interaction – should be adequate, understood, easy to assimilate, and creating a behaviour change (Fallowfield & Jenkins, 1999).

In the article ‘Interacting with cancer patients: the significance of physicians’ communication behavior’, Arora (2003) listed some of the elements of physicians’ communication behaviours that are required while dealing with cancer patients:

- Creating an interpersonal relationship;
- Promoting information/questions exchange;
- Fostering patients’ involvement in the decision-making process: by providing sufficient explanations about treatment options and eliciting patients’ concerns.

Concerning the involvement of the patients in decision-making’, this model is being adopted as a way of promoting clinical effectiveness and more appropriate use of resources. Ong et al. (2000) noted that the efficient participation of patients in the medical visits improves their well-being and satisfaction with care in general; a partnership between professionals and patients, in which both contribute to decisions about treatment or care, is to be adopted, and this shows how important is to make the cancer patients participate in their own care, through communication, which would make them feel independent and effective, instead of acting passive and giving the whole control to their physicians (as in the paternalistic model). However, the degree of participation will differ and some patients might sometimes refuse to participate at all, a thing that should be respected as well. Indeed, physicians can sometimes ask their patients questions like: “how much do you want to get involved?” in order to make the perspectives clear for both; in this sense, in a report by the National Breast and Ovarian Cancer Centre of Australia (2007), three decision-making roles were mentioned:

- The active role: where the patient takes all the decisions of the treatment s/he wants to undergo;

- The collaborative role: which is the core of the shared decision-making model;
- The passive role: when patients want the physician to be in charge of the whole process of cancer management.

Additionally, the paper *Patient-Centered Communication in Cancer Care: Promoting Healing & Reducing Suffering* (2007) listed four essential elements for effective communication, described as follows:

1- Motivation:

For psychological reasons, cancer patients are the ones who need motivation the most; this will significantly encourage them to fight the disease and adhere to different stages of treatment. In general, motivation always pushes people to do better in every aspect of life, and in cancer management, motivated patients easily express their concerns, expectations, and even the topics that might seem intimidating (e.g.: sexual ones).

2- Knowledge:

Knowledge of physicians, in medical encounters, refers to the medical expertise about the different steps of disease management (diagnosis, treatment, prognosis, or follow-up). Yet, in cancer communication, the term refers to understanding the patients, their perspectives, preferences and values, which might help oncologists to consider those backgrounds to adopt the language to use according to the – health - literacy level of patients, to provide more or less details in accordance with their knowledge level, to personalize the treatment, and to deal with the emotional state. Indeed, the physician's knowledge can be acquired through experience and training (Epstein & Street, 2007), however, the patients can also contribute to making the physician-patient interaction a lot easier and effective; hence, the term knowledge can be related to patients as well in terms of health literacy.

3- Clinicians' skills:

a) Behavioural skills:

Epstein and Street (2007) indicated that there are some behavioural aspects related to 'motivational state and orientation', for instance: a doctor who makes eye contact with the patients, who is nonverbally attentive, and talks about the issues raised by the patients, is likely to motivate them and to show interest in their talk. Also, there are other behaviours such as not interrupting the patient while talking and simplifying the information using the patient's everyday language, which increases the quality of communication.

b) Conceptual skills:

In addition to behavioural skills, the report also stressed on the conceptual ones, like mindfulness and self-monitoring, which set the encounter and determine the patients' needs for a better physician-patient interaction.

4- Patients' skills:

As highlighted earlier, cancer patients (and patients in general) should contribute to their own care, and when it comes to communication, they should communicate in a simple way that clarifies their needs and expectations (Epstein & Street, 2007). For instance, some of the techniques patients should develop are the ones related to asking questions, expressing themselves, and choosing topics to talk about, and the box provided in the monograph describes these techniques, as follows:



Figure N°10: Skills to develop by cancer patients (Epstein & Street, 2007)

II.6.5 Discussing bad/serious news:

This chapter of the thesis stressed countless times on the role of effective communication in eliciting cancer patients' psycho-social concerns and improving their satisfaction; in cancer care, different news gets delivered to patients by physicians and other healthcare professionals, and this news can sometimes be very serious and even 'bad'; in this sense, one of the definitions is "bad news are situations where there is either a feeling of no hope, a threat to a person's mental or physical wellbeing, a risk of upsetting an established lifestyle, or where a message is given which conveys to the individual fewer choices in life" (*Breaking Bad News: Evidence from the literature and recommended steps*, 2007).

Therefore, ‘delivering bad news’, or less shockingly: ‘talking about serious news’ is an integral part of the communications tasks in oncology, and the way they get delivered to the patients influences their understanding, their psychological adjustment, as well as their long-term cancer management. The bad news (other than the diagnosis) that might be announced include: relapse, serious side effects of treatment, presence of metastases, advanced cancer, ineffective or lack of treatments, and the most painful one is: the end of life and the need for palliative care.

No matter what the serious news is, it should be discussed in a private consultation, whose main goals, according to the National Breast and Ovarian Cancer Centre of Australia (2007), should be:

- Gathering information (from the patient);
- Providing information (by the physician);
- Supporting the patient;
- Developing a strategy or treatment plan for the patient.

Indeed, the report *Breaking Bad News: Evidence from the literature and recommended steps* (2007) highlighted the importance of bad/serious news’ consultations and brought recommendations for this purpose:

1- Preparing for the consultation:

Such consultations should be prepared for, and the major elements to pay attention to are:

- Privacy: a closed and calm office is a must; it provides privacy for both patients and physicians and makes them avoid interruptions;

- Consultation timing: enough time should be dedicated, to make the patients assimilate the different information and to react freely to them ;
- Involvement of others in the consultation: sometimes it is better for the patients to attend the serious news consultation with a dear person for the sake of psychological support.

2- Assessing the patient's knowledge:

Before delivering any news, physicians should first assess the patient's degree of knowledge about the situation to select what information to add, what to avoid, and what to correct if there are any misunderstandings.

3- Assessing the patient's preferences for information:

It is always better to ask the patients about the amount of news they want to receive, and the same report came up with three models of information delivery: non-disclosure, individualized disclosure, and full disclosure.

4- Providing information to the patient:

The oncologist has to be updated with the treatment modalities related to his/her patient, and the information to be given have to be simplified and tailored to suit the patient's understanding, and to allow him/her to perceive information effectively; another tool that could be very helpful is: providing the patients with print or video materials to better understand the different basic cancer information they need to know.

5- Addressing emotional concerns:

It was acknowledged repeatedly that patients' emotions should be taken into consideration by the physicians, and this task makes itself easier once there is a good relationship between the two, which means there is a good communication as well.

II.7 Health and Cancer Communication in Morocco

Morocco is a 3rd world country, with an illiteracy level of almost 33%, and a healthcare system that keeps undergoing developments overtime ('Maroc: près d'un tiers de la population toujours analphabète', 2015). Still, the Moroccan Ministry of Health ensures permanent importance to communication in its various programs. Besides, the Moroccan constitution of July 2011 recognizes for the first time, in the **Article 27**, the right of access to information, as well as the right of citizens to healthcare and medical coverage (**Article 31**) (*Royaume du Maroc—Constitution de 2011*, n.d.). In a report by the Open Society foundation (*Open Society Foundations*, n.d.), they noted that the Moroccan law does not contain legislative or regulatory provisions that precisely define the right of the patient to be informed - before s/he undergoes any medical intervention – about the health status, the treatment, and the prevention action. However, this issue is implicitly approached within the terms related to patients' prior consent, which is the subject of two fundamental legal texts: the deontology code of 1953, and the hospitals' internal regulation of 2010. (*Un système de santé efficace pour tous grâce à une meilleure information publique*, n.d.)

In fact, the four major diseases in Morocco are cancer, high blood pressure, diabetes, and renal failure, and the patients with these diseases need a specific care, which includes effective and pertinent communication about their disease, the lifestyle, and the health education that unfortunately remains casual and without actual impact ('La Communication Santé au Maroc', 2016); this shows that the concern of some healthcare professionals – and even patients – is the cure of the illness, ignoring the huge impact of communication in the disease management process.

Moreover, in an article of L'«économiste» newspaper, Jaafar Heikel stated that:

La communication est probablement la maladie chronique dont le gouvernement souffre et qu'il faudra traiter avec priorité. Le droit du patient à savoir, le droit de choisir son système sanitaire et son médecin, le droit à la dignité, le droit à des soins de qualité et sans risque... n'est pas une faveur mais un droit fondamental, constitutionnel, et aussi moral. (Heikel, 2017)

Communication is probably the chronic disease from which the government suffers and that needs to be cured with priority. The patient's right to knowledge, to the choice of his healthcare system and his physician, to dignity, to quality and risk-free care ... is not a favor but rather a fundamental, constitutional, and moral right. (Heikel, 2017, para.5)

This quote strongly highlights the problem of communication in Moroccan healthcare settings, describing it as a 'chronic disease' that needs to be addressed with priority. Indeed, the government, and the health ministry in particular, implemented some laws seeking at empowering health communication. For instance, in the 'Guide sur la participation communautaire en santé' (The guide of community engagement for health) (*Guide sur la participation communautaire en santé*, 2013), they noted that every health project must be joined by a communication plan, including:

- The communication objectives;
- The target audience for each communication activity;
- The themes to be articulated;
- The channels and supports for the different messages;
- The people in charge, and
- The timeline.

Besides, in 'la loi 34-09 relative au système de santé et à l'offre de soins' (The law 34-09 concerning the health system and supply of healthcare services), **article 4**, it is mentioned that among the different aspects in the intersectoral policy, one would find a part dedicated to

‘Developing the measures of information, education, and communication in terms of health’ (La loi relative au système de santé et à l’offre de soins, 2011). Also, the report entitled *Evaluation des fonctions essentielles de santé publique au Maroc* (Evaluation of the essential functions of public health in Morocco), the health ministry and the WHO have both devoted a pertinent chapter (Chapter VII) to tackle the issue of communication, being a major component of public health (*Evaluation des fonctions essentielles de santé publique au Maroc*, 2016); this chapter is entitled ‘Communication and social mobilization for health’, and it deals with:

1- Operational definition:

This feature includes the following aspects:

- a) Communication related to the public health, aiming at improving the health information available for individuals and populations as well as their health status, by informing, influencing, and motivating the individuals, and the public concerning the important health problems and determinants.
- b) Health communication covers several domains, such as health journalism, entertainment, education, interpersonal communication, media campaigns, organizational communication, communication of crisis and about risks, social communication, and finally social marketing.
- c) This communicative function provides the public with a means to counteract the active promotion of dangerous products and lifestyles, such as tobacco, and represents a bi-directional activity of information exchange requiring listening, data collection, and understanding the way individuals perceive and express the health messages.

2- Scope of application and function:

a) A communication strategy that is integrated with the priority programs of public health:

- Vision, measurable objectives, control procedures, and evaluation methods;
- Public consultation;
- Formulating the messages depending on the target public;
- Use of media (from traditional media to mobile applications and online social media);
- Measures to counteract the unhealthy marketing campaigns;
- Organizing the communication and social mobilization;
- Responsibilities of different personnel and networking;
- Partnership with private media and marketing companies;
- Interaction with the civil society to promote questions about public health.

b) Evaluation of the efforts/activities of communication and social mobilization:

- Connections and synergy with the key stakeholders.

Within the different departments of the Moroccan Health Ministry, there is a specialized 'Division of Information and Communication' (DICOM) that includes three different sub-departments (Institutional communication, information and health education, and the one in charge of production of information and communication products), and it undertakes several missions, for instance:

- The conception of the strategy of health information and institutional communication for the Health ministry;
- The implementation of the plans and programs of institutional communication and health information concerning health promotion;
- The participation in the media coverage of the events hosted by the H.M;
- The contribution to the policy of the ministry's electronic communication.

Healthcare communication in Morocco is indeed being brought into the surface, which is noticeable through the different health policies that adopt communication within their main measures, however, the physician-patient communication, which is very particular and sensitive, is not being given enough priority; literature about doctor-patient communication is really poor in Morocco; some articles and papers dealt with communication with some chronic patients (diabetic or with kidney failure), but this aspect was more about giving information and educating, which is likely to be the traditional communication type in healthcare. In this sense, the coach-doctor Meryem NCIRI wrote an interesting article in the French magazine *Focus*, entitled 'La communication dans la relation médecin-malade' (Communication in the doctor-patient relationship); NCIRI argued that the relationship is often 'paternalistic', and that the focus of physicians is mostly on the disease and not the human relationship. At last, she insisted on the importance of communication as a foundation of care, on the physicians' non-verbal communication, and on the benefit of communication workshops and their integration in the education programs of medical schools (Nciri, 2009)

Besides, in the cancer domain, communication is still not a topic of interest as well; very few articles tackled the physician-patient relationship/communication, for instance in an article of the *Pan African Medical Journal*, entitled 'Participation du patient Marocain atteint du cancer au choix thérapeutique', Boukir et al. (2015) showed that the notion of patient's

involvement in care is often associated with the ‘respect’ of the doctors’ orders’; the study also highlighted that the physician-patient relationship is often ‘paternalistic’, and that 94% of the patients involved showed a total trust in their doctors’ decisions; when it comes to communication obstacles, they are summed up in two main points namely illiteracy and low receptiveness of information.

Concerning health literacy, the Moroccan Health Ministry frequently organizes some health campaigns; for instance, from the April 18th to May 16th, 2018, the country witnessed the first campaign promoting healthy lifestyles, on the theme ‘Choose the best for your health’, which aimed at disseminating educational health messages about the three major risk factors recognized by the WHO: 1- tobacco use, 2- lack of exercise and sedentariness, and 3- unhealthy food (*Campagne nationale de promotion du mode de vie sain*, 2016).

Besides the healthy lifestyles, other key topics get addressed by Moroccan health campaigns, like breastfeeding; a one week campaign from April 10th to April 16th, in its 7th edition, was held by the H.M on the theme ‘Let us help the mothers to breastfeed their babies, anywhere and anytime’.

Serious diseases also get the attention of the H.M more often; the NGO Association de Lutte Contre le Sida (ALCS) started in 1993 as the first and major association against HIV/AIDS in Morocco, the Maghreb region, and the Middle East as well; this association is the only one in Morocco in charge of the prevention, the treatment, the information/communication, and the psycho-social care of patients with HIV (In July 2017, the number of beneficiaries reached 103240 patients). Also, every year, the ALCS organizes the famous event ‘Sidaction’ – live on the Moroccan TV – to collect donations, invite Moroccan celebrities to host the event, to interview real patients being managed by the association, and to educate the general public about the prevention and treatment of HIV.

In addition to sexually transmitted diseases, cancer is a serious illness in Morocco as well, and it is a major cause of death. According the latest statistics of 2012 by the WHO: there are 34.000 new cases of cancer yearly in Morocco, divided as follows: 24% for breast cancer, 22% for cervical cancer, 17% for lung cancer, 12% for prostate cancer, lymphomas with 8%, and other cancer types with 17%; the most fatal one is the lung cancer, which requires prevention and education about it (*Fact Sheets by Population—Morocco*, n.d.). In this direction, The Lalla Salma Foundation was created in 2005, and its main objective is to make the fight against cancer a public health priority in Morocco. Since the breast and cervical cancer are regarded as a serious public health problem, several information and awareness-raising campaigns are organized all over the country, as well as early detection programs that take place in over than 2500 centers. When it comes to information and awareness strategies the H.M adopts during these campaigns, they could be mass media, newspapers and lifestyle magazines. Besides, the TV ads about symptoms, detection, and treatment are presented by either Moroccan actresses or real-life female cancer patients who narrate their experiences with the disease and how they have gone through, which implicitly transmits powerful educational as well as motivational messages to a large female – and male – audience all around the country; these videos adopt a simple language using the Darija (Moroccan Arabic), sometimes with French subtitles, and they make use of demonstrations to facilitate the understanding of people. In this sense, the oncology hospital of the CHU Hassan II of Fez created in 2011 two manuals for cancer patients' education, the first one is entitled 'The patient's booklet in oncology', and the other one is: 'The side effects of Radiation therapy' (See Appendix section), and they both provide simple knowledge – using Arabic and French - about cancer, its treatments, as well as their side effects.

It is important to note that the website of the Moroccan Ministry of Health (www.sante.gov.ma), as well as the sub-sites the latter directs to, remain very important

measures of proactive publication of health information; it is also worth mentioning that the Moroccan Association of Health Communication is also aiming at educating the general public – using mainly Arabic - through its web site (<http://www.tawassol.ma/>), to update the audience on the current health issues on both national and international levels.

Chapter III. Methodology

III.1 Introduction

The methodology chapter aims at explaining the choice of the research methods used in the dissertation, the data collection tools of each method, and the data analysis process to come up with the findings that will be presented in the next chapter. Also, the research purpose and questions of this study will be stated in the following sections.

III.2 Research aims, questions, and hypotheses:

III.2.1 Aims of the study:

- Providing brief and general knowledge about cancer;
- Exploring the concepts of :
 - ✓ Human communication ;
 - ✓ Healthcare communication ;
 - ✓ Cancer communication ;
 - ✓ Physician-patient communication.
- Investigating the status of health communication, and cancer communication in particular, in Morocco;
- Identifying the different communication barriers between oncologists and their patients (at the level of the oncology hospital of the CHU Hassan II of Fez, Morocco) ;
- Gathering the physicians' suggestions to achieve effective communication with their patients.

- Formulating a set of recommendations to improve doctor-patient communication in oncology care settings.

III.2.2 Research questions:

- 1) Did the oncologists receive any training in terms of healthcare communication? Or more precisely: cancer communication?
- 2) What are the effects of both the socio-economic status and the health literacy level of the patients on the communication process?
- 3) How do patients receive the diagnosis for the first time?
- 4) Do consultations witness a bi-directional doctor-patient communication? Or does it stick to the ordinary interview format?
- 5) Do they discuss medical matters only? Or the patients' personal concerns could be dealt with as well?
- 6) How does the presence of a patient's companion affect the communication process?

III.2.3 Research hypotheses:

- 1- The lack of communication skills, by both patients and doctors, influence significantly the communication process;
- 2- The socio-economic level of patients has a great impact on the perception of their disease (cancer);
- 3- The doctor-patient communication is mainly disease-centered and not patient-centered.

III.3 Case study setting (The research site):

Fez is a Moroccan northern east city, considered to be the second-largest one in the country, with a population of about 1.112 million inhabitants (according to the statistics of

2014). Being the spiritual capital of Morocco, the city attracts students from all around the country, and it also has an appeal to traditional craftsmanship professionals as well as the workers of the industrial zones the city has; all these factors, besides urbanization, contributed to the significant inflow of population from the surrounding rural areas and villages. Therefore, individuals seeking the public sector for health concerns, and more specifically for the management of suspicious or confirmed cancers, their final destination would be the Oncology hospital of the CHU Hassan II of Fez.

Indeed, this research was conducted at the cited oncology hospital, which was inaugurated on March 5th, 2013, and it covers a surface area of 7531 m² (including three departments: medical oncology, radiotherapy, and nuclear medicine). When it comes to the human resources, and more specifically the medical staff of both departments (oncology and radiotherapy, where the study took place), this hospital has an overall number of 48 doctors: 27 radiotherapy physicians and 21 oncology ones (This number is specific to the period during which the study was conducted).

Moreover, given the fact that this study dealt with one of the aspects of cancer care (which is communication), here are some very brief statistics of the cited hospital concerning the year 2016 - being the official year when the study has started – to give a hint about the number of new cancer cases that were registered to be managed in both departments (*Table A*). It is imperative to note that these statistics have been provided by the direction of the hospital (see the ‘Permission for access to information’ in the appendix). Also, since the qualitative method concerns only the patients attending the external consultations, the second table (*Table B*) represents the numbers concerning this category (non-hospitalized patients).

Activity	Number of patients												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Newly managed patients (1 st consultation)	77	112	112	93	115	97	86	134	90	92	119	120	5394
Regular patients (already under cancer management protocols)	380	430	457	384	459	468	449	556	386	446	524	455	5394

Table B: Number of outpatient consultations in 2016

III.4 Research design:

The present research adopted both quantitative and qualitative methods for data collection, and this process is called ‘Triangulation’. In this regard, Alexander pointed out that:

By combining multiple observers, and empirical materials, researchers can hope to overcome the weakness or intrinsic biases and the problems that come from a single method, single observer, single theory studies. Often, the purpose of triangulation in specific contexts is to obtain confirmation of findings through convergence of different perspectives. The point at which the perspectives converge is seen to represent reality. (Alexander, 2001, p.n.d)

As matter of fact, the purpose of adopting triangulation in this dissertation was to increase the validity and accuracy of the research findings, to combine the advantages of both approaches (quantitative and qualitative) to make research more reliable and to come up with credible answers to the research questions.

In the article ‘Triangulation’ research method as the tool of social science research’, Yeasmin & Rahman (2012) claimed that, in social sciences, triangulation aims at achieving validation of findings by gathering data from the same respondents, about the same research topic, via different methods.

Another definition was provided in the same article stating that:

Triangulation is a process of verification that increases the validity by incorporating several viewpoints and methods. In the social sciences, it refers to the combination of two or more theories, data sources, methods, or investigators in one study of a single phenomenon to converge to a single construct, and can be employed in both (quantitative) validation and qualitative (inquiry) studies. Discussions about whether and how to combine social research methods go back to debates about the use of survey and fieldwork or the use of interviews and participant observation. (p.156)

Hence, each method of the mix-research paradigm in this dissertation adopted a specific data-collection tool, and they will be both discussed in detail below.

III.4.1 Survey research

In social sciences, and especially in healthcare research, the survey is a commonly used research design to investigate several topics, and it often uses questionnaires as a tool of data collection. In this research, the survey was a cross-sectional one, which means that it was carried out in a particular time, and it often takes a descriptive or exploratory form that simply sets out to describe behaviors or attitudes (Mathers, et al., 2007).

III.4.1.1 Advantages and limitations of surveys:

In fact, the NIHR Research Design Service (2007) presented some advantages and limitations of surveys:

III.4.1.1.1 Advantages of surveys:

The main ones are:

- They are efficient and have validity: a survey based on a random sample that is representative of the particular population under study, will produce findings that may be generalized to the wider population;
- They can be combined with other methods to produce rich data (flexibility);
- They can cover geographically spread samples.

III.4.1.1.2 Limitations of surveys:

- Surveys are dependent upon the accuracy of the chosen sampling frame;
- They are not good at explaining why people think or act as they do.

III.4.1.2 Methods of data collection (questionnaires)

There are several methods of data collection, and in surveys, the most commonly used ones are:

- Face-to-face interviews;
- Telephone interviews;
- Questionnaires.

In this study, questionnaires were chosen as a tool of data collection, to elicit data from the oncologists; a questionnaire can be defined as “a data collection instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents” (Abawi, 2013).

III.4.1.2.1 Advantages and disadvantages of questionnaires:

Questionnaires have several advantages and disadvantages; Zohrabi (2013) cited in his article the most pertinent ones, as follows:

- **Advantages of questionnaires:**
 - They are one of the efficient means of collecting data on a large-scale basis;
 - They can be sent simultaneously to a great number of people;
 - The inquirer can easily gather data in field sites;
 - Respondents’ anonymity makes them to share information freely;

- When similar questions are administered simultaneously to a large number of people, the acquired data are more identical, correct and standard;
 - They are a time-efficient way of collecting data from many people;
 - Closed-ended questionnaires can easily be analyzed in a straightforwardly;
 - They are cost-efficient.
- **Disadvantages of questionnaires:**
 - Sometimes the answers are inaccurate and questionable;
 - There is usually a low return rate when sent by post or email;
 - Ambiguity and unclarity of some questions might lead to inaccurate and unrelated responses;
 - Some questions may cause misunderstanding;
 - The wording of the questions might affect the respondents' responses.

III.4.1.2.2 Sampling

During this research, before even designing the questionnaire, and right after determining the purpose of the study, the sample was identified; sampling is used to gather information about a population, by choosing a part (sample) out of the whole, as representative of the entire population. In fact, there are two types of sampling: probability sampling (also called: random sampling) and non-probability sampling (non-random sampling). In probability sampling, the subjects of the population get an equal opportunity to be selected as a representative sample, whilst in the non-probability, it is not known which individual of the population will be selected as a sample (*Difference Between Probability and Non-Probability Sampling (With Comparison Chart)—Key Differences*, n.d.). Additionally,

each sample type has its own sub-types. For the current research, the sample chosen was random (a probability sample), and the intended population was the oncologists (interns, residents, and professors) of Moroccan oncology hospitals (these physicians are known as the sampling frame). Unfortunately, due to cost and time constraints, this research concentrated on the oncology hospital of the CHU Hassan II of Fez, and the oncologists working in this hospital were the sample of the study.

III.4.1.2.3 Questionnaire design

After the sampling, comes the step of designing the questionnaire; this is a crucial step since it determines the clearness and preciseness of the questions, which would affect the validity and accuracy of the results. Abawi (2013) highlighted some points to consider while writing a questionnaire:

- Clarity (questions should have the same meaning for all the respondents);
- Phrasing (short and simple sentences, only one piece of information at a time, and avoid negatives if possible);
- Sensitive questions (they should be carefully stated);
- Hypothetical questions (they should be avoided if possible).

Indeed, the study adopted a standardized questionnaire, which is by definition:

When each respondent is to be exposed to the same questions and the same system of coding responses; the aim is to ensure that differences in responses can be interpreted as reflecting differences among respondents, rather than differences in the process that produced the answers. (Bidhan, 2010)

That is to say, a standardized questionnaire is written and administered to the participants so that the questions are the same to all the participants, and all the responses are recorded in the same manner.

On the whole, questionnaires should preferably adopt both closed-ended and open-ended questions to complement each other (which was applied in this research); still, it is worth to mention that the first type (closed-ended) are easy to analyze but they limit the respondents' creativity, and the second is a source of "greater level of discovery" (as cited in Zohrabi, 2013, p.255), but they remain difficult to analyze.

The questionnaire being conducted was semi-structured (or quasi-structured); the latter consists of a combination of a structured questionnaire (including pre-coded questions) and an unstructured one (including open-ended and vague opinion type questions). A matter of fact, it was judged quasi-structured one because it contains different types of questions:

a- Close-ended questions:

It is the case when the participants are asked to choose among a given set of answers/choices, including the 'dichotomous questions' (which have two mutually exclusive answers). Indeed, close-ended questions were used a lot in the questionnaires (for which the answers consisted of checking the convenient box), and they obviously presented some advantages such as being easy and quick to answer, easy to code and to analyze and also presented some disadvantages by limiting the participants' creativity and kind of forcing the respondents to choose between the potential answers. As a solution for these disadvantages – after they were detected in the pilot study – the survey provided, at the bottom of the given choices, an additional box called ' **Others**' to make respondents feel free to add the answer that was not mentioned within the suggested ones.

Example from the questionnaire:

- To ensure the psychological support during the consultations :

1 are you sometimes accompanied by a psychologist, or:

2 you do it yourself?

3 Others:

This approach is called ‘pre-coding’, which consists of predicting some potential answers without influencing the respondents’ choice (Mathers et al., 2007).

b- Open-ended questions:

They are called ‘free response’, and they are asked with no choices of answers, in which the participants are required to interpret the question and to answer freely (by using a number, a word, or a short text) (Abawi, 2013). As in the previous category (close-ended questions), this one showed some advantages and limitations as well. As for the advantages, this type of questions allowed the participants to express themselves spontaneously, and it also brought new information about the topic; on the other hand, these questions were misunderstood at times, the handwriting was illegible in some cases, and sometimes the questions were not answered at all.

c- Contingency questions:

They are a special case of close-ended questions because they are limited to a subset of the participants, using a filter question that directs a subgroup of the respondents, and the adopted questionnaire in this research made use of this type of questions as well.

Example:

- At the end of consultations, do you ask for feedback?

1 Yes

2 No

* If yes, why?

- 1 To evaluate the quality of care/ patient’s satisfaction;
- 2 To assess the patients’ knowledge;
- 3 To evaluate your own communication skills.

This means that if the participant's answer is 'Yes', s/he will have to elaborate more, and if 'No', s/he can skip to the next question.

Besides, it is important to mention that the questionnaires were 'respondent-completed' ones and that the principal researcher was not present while the oncologists were filling out the questionnaires, and this had a minus and a plus: a minus if they had ever needed him (the researcher) to provide them with any additional information/clarification about any potential ambiguous/misunderstood question, and a plus since it put them at ease while completing the survey.

When the questionnaires were distributed to the doctors, some of them were available at that time and filled them out immediately, others were busy so the researcher left and went back a day or two later to collect the rest of the questionnaires; the distribution process was carried out in one month, from mid-June to mid-July 2016. On the whole, forty-five (45 out of the total of 48) oncologists (residents and professors) were given the questionnaires (the remaining three were absent for personal/professional reasons), and then only thirty-eight (38) were collected back and this means that just 84% of the respondents filled the survey for this study. Moreover, since the medical sciences are taught in Morocco in French from the very beginning, and since it is the primary language used in Moroccan healthcare and medical research, it was assumed that designing the questionnaire in French would be suitable for all the participants. Thus, questionnaires were first written in French, and then they were translated into English to be analyzed; the translation was approved by French/English bilinguals belonging to the field of healthcare, as well as the supervisor of this dissertation.

III.4.1.2.3.1 Patterns of questions' asking:

When it comes to the sequence of questions in a questionnaire, the order is very important and it affects the participants' responsiveness and attracts their attention. Therefore,

questions should be asked in a specific order, and the presentation of Bidhan (2010) highlighted two widely used patterns of questions' asking:

- a- ***Funnel sequence***: every question relates to its previous, and general questions are leading to the more specific ones;
- b- ***Inverted sequence***: it is when the questionnaire begins with specific questions, leading to more general ones; this allows the respondents to assess their attitudes about specific matters before getting the big picture.

Indeed, in the questionnaire designed for this research, the 'funnel sequence' was used, not in the sense that every question was related to the previous one (because it was the case for a few ones only), but in the sense that questions were designed to tackle the topic from general into specific.

III.4.1.2.3.2 Scaling:

Scaling is "a way of ensuring that a question is asked in a fair and balanced way" (Taylor, n.d.), and it helps determine the strength of the attitudes. The most four important scales used are: graphic rating scale, Likert scale, semantic differential scale, and the side-by-side matrix. Nevertheless, in our study, these cited types were not used in the questionnaires.

III.4.1.2.3.3 Pilot-testing:

It is a crucial step within the process of questionnaire design, especially for self-administered questionnaires, since it consists of making the questions as clear as possible to the respondents by solving any form of confusion. The pilot test method is applied to a small number of participants belonging to the study's sample frame. Pre-testing has several advantages, such as making sure that the pre-codes are accurate and that there are no ambiguities in the questions, as well as checking if the issues under study are tackled by the questionnaire.

As a matter of fact, our study's pilot-testing consisted of 10 doctors (out of 48), who were given the initial draft of the questionnaire, and it was very beneficial since it was deduced that some participants were not able to tell their age, many questions were open-ended and were converted into close-ended ones and vice-versa, others were reformulated because they seemed ambiguous to the participants, some pre-codes were corrected, and some questions were added and few others were deleted (since they presented very low significance to the physicians). Moreover, the questionnaire's size was reduced from 8 to 6 pages.

III.4.1.2.3.4 Pre-coding:

In this research, pre-coding was used after assessing the results of the pilot study, and also by guessing some of the answers; in fact, some answers were proposed, yet, another box 'Others' was added to allow the participants to provide answers that were not suggested at first.

III.4.1.2.3.5 Coding:

In their report *Surveys and Questionnaires*, Mathers et al. (2017) stressed on the importance of coding in questionnaires, since the answers have to be processed in the computer to be analyzed; thus, every answer in the questionnaire should be attributed a numeric code, and this technique is efficient for close-ended questions only. As for the open-ended ones, answers are unpredictable and hence might not be coded until all the questionnaires get collected. Besides, some close-ended questions do not need to be coded, for instance numerical data asking: age, date of birth, or the years of service, then the participants would be given a blank to fill with the appropriate number.

Further, the questionnaire contained some nominal categories to which codes were attributed to "act as a numeric labels for each category....Nominal data, also known as categorical data, is a set of unordered categories. Codes are assigned on an arbitrary basis and

have no numeric meaning” (Mathers et al., 2007, p.22). Indeed, this technique was applied, for instance, at the very beginning of the questionnaire when oncologists were asked about their gender: 1 Male 2 Female.

III.4.1.2.3.6 Instructions:

The very first page of the questionnaire was the covering letter; it was headed by the title, and it mentioned that this survey is being conducted as part of the fieldwork concerning a doctoral thesis (with its full title) that is registered at the Faculty of Arts and Human Sciences of Fez-Saïss. Then, it was indicated that the data gathered (using the questionnaires) will remain strictly confidential and that the research’ fieldwork was permitted by the Director of the Oncology Hospital, as well as the direction of the University Hospital Hassan II (CHU) of Fez. At the bottom of the letter, the principal researcher’s full name was written, and at last, the oncologists were thanked for their precious help.

III.4.1.2.3.7 Identifier:

Each questionnaire, after being returned, was given a ranking number: the first questionnaire that was collected back had number ‘1’, and the last one was the 38th.

III.4.1.3 Data analysis:

The analysis of the quantitative data collected made use of **SPSS v.20**, also called IBM SPSS (The Statistical Package for the Social Sciences), due to its accessibility and ease-of-use features that provide an effective analysis of data.

III.4.2 Qualitative method:

In an article entitled ‘Qualitative research: Data collection, analysis, and management’, the authors stated that “qualitative research can help researchers to access the thoughts and feelings of research participants, which can enable the development of an understanding of the meanings that people ascribe to their experiences” (Sutton & Austin, 2015, p.230). The

authors went on and provided a simple distinction that differentiates between qualitative and quantitative research, arguing that the first method tries to demonstrate how such people adopt such behaviors, and the second one aims at answering ‘how’ and ‘why’ such behaviors are adopted; this shows that the qualitative method deals with the explanation of specific behaviors within specific people under study (participants).

There are different ways of data collection in qualitative research, and when it comes to healthcare, the most common methods are interviews and focus groups (Gill et al., 2008), and the latter is the technique that was used in this research. By definition, a focus group is “a group discussion on a particular topic organized for research purposes...the discussion is guided, monitored, and recorded by a researcher (called also: facilitator or moderator)” (Gill et al., 2008, p.293). In fact, in this study, the recording was performed by the principal researcher himself, being a passive observer and not a moderator, nor a facilitator of the discussion.

The criteria for choosing a focus group are multiple, and Bloor et al. (2001) cited some of them:

- Being a standalone method for research relating to groups’ norms, meanings, and processes;
- Exploring a topic or collecting group language or narrative to be used in later stages;
- Aiming at clarifying, extending, and qualifying or challenging data collection through other methods;
- Receiving feedback results to research participants.

III.4.2.1 Data collection tool: Audio recordings.

As argued by FitzGerald, in her presentation entitled *Analyzing video and audio data*, the audio data are recorded to document processes, procedures, or interactions; and these data are to be analyzed later on “to make sense of what was happening at the time of recording” (2012); this technique aims at exploring how people interact with each other and allows the researcher understand some of the complex processes of human interactions.

Aikvenhald argued that ideal fieldwork consists of observing the language in use while being involved in the environment (or system) under study (as cited in Chelliah & Reuse, 2010). In this sense, the researcher in the fieldwork has to remain quite close to the participants, and – if possible – to get integrated in their area of interest for a while to understand the basics of the specialty under study, and this was exactly what happened in the present research: the principal researcher remained present all the time while the recordings were taking place, and also since he has been working as a nurse in the CHU for quite a long time, this made him extremely familiar with the healthcare settings.

Indeed, this research method was of important need to generate relevant data, since audio recording permits noting contradictions between the discourse and behaviors, it minimizes the intervention of the researcher and allows him/her to view the data several times, and it also ensures the emotional detachment during the study (Garcez et al., 2011). Although there are other instruments related to this method, such as video-recording or interviews, they were not adopted in this study, and only the audio taping was; firstly, this method is accepted by patients because they are likely to be identified through their voices (audio tapes) than in the videos; secondly, videotaping might be intimidating for both physicians and patients, which might influence the ‘spontaneity of speech’, and it would also require additional fees for adequate electronic equipment; thirdly, interviews necessitate a private office, and for oncologists, finding time for interviews is not an easy task (due to

workload, or even refusal for personal/professional reasons), and when it comes to patients, they might not feel at ease talking to the researcher (who is considered unfamiliar and does not belong to their healthcare team). Besides, cancer patients are often physically and psychologically fragile; hence, their participation in a study might not seem like a good idea to them. Thus, conducting audio recording was a suitable choice: it is less intimidating, it requires only an adequate hardware tool, and it could be performed simultaneously with the course of the consultation without interrupting both parties (physicians and patients).

In fact, according to Merriam (n.d.), an interview (considering the doctor-patient communication a form of interviews) can be recorded in three ways: a- To tape-record the interview, b- To take notes, and c- To attempt to write down every detail occurring in interview immediately after it finishes. Indeed, in this research, the two first methods were adopted (a. and b.):

- a- The tape-recording was performed using a mobile application called ‘Voice Recorder HD’ (a high-quality application that is highly recommended and very easy to use), installed on a Samsung tablet v.2.

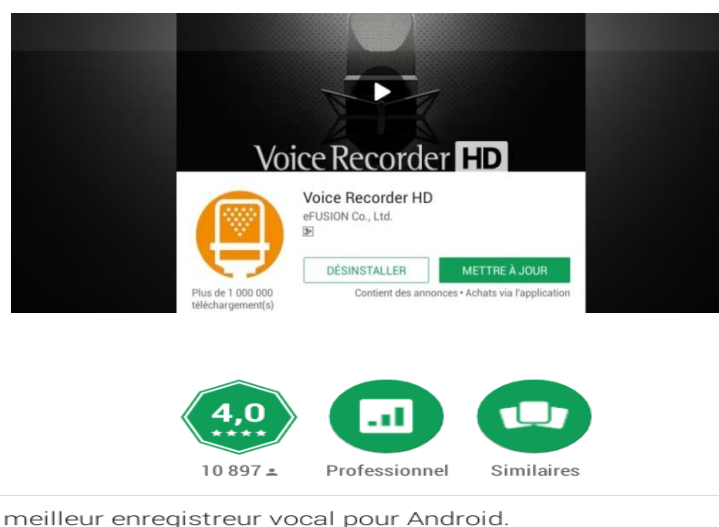


Figure N°11: Voice Recorder HD (Source: Play Store)

b- Some extensive field notes were taken, and this process was incorporated within the ‘passive observation’ approach; according to Gorman et al., observation “involves the systematic recording of observable phenomena or behavior in a natural setting” (2005, p.40), and this aims at studying people’s behaviors or interaction, within their natural environment. In this approach, the researcher or observer can play various roles, and as far as this study is concerned, ‘passive observation’ was adopted and performed simultaneously, and the researcher was called ‘passive’ (did not interact with the participants) and ‘complete’ (present during the recordings), and this allowed him to take some extensive field-notes (called also: observational notes) to grasp the non-verbal cues what were seen or felt and not caught on tape, and these notes were effective to complement the tape recordings and did not consume time for the researcher since they were taken simultaneously as the recordings were taking place. For this purpose, a note-book was used to take ‘informal’ notes, using some abbreviations and symbols; these notes were very useful to gather information and contexts when interpreting the recordings, and also to remind the researcher of some situational factors that are essential for the data analysis.

It is also important to note that the recordings were carried out in ‘The consultation unit’; it consists of four consultations rooms, equipped for the examination of patients and follow-up appointments, which means that it is an outpatient’ care unit (not for the hospitalized patients).

III.4.2.2 Ethical and legal considerations:

At first, this research received the approval of the direction of the CHU Hassan II, then, the researcher was introduced to both oncologists and patients and informed them about the recording process. Furthermore, the patients signed written consent acknowledging their approval to be tape-recorded, and the researcher explained to them several times that the data generated by the fieldwork will be safeguarded and the results will remain completely

anonymous. Plus, the researcher acknowledged that he will remain - during the sessions - a passive observer, being completely uninvolved in the discussions occurring in the consultations.

III.4.2.3 Data collection and pilot-testing:

As stated earlier, a high definition recording application was used; then, at the beginning of consultations, and right after informing the patients about the recording process and signing the written consent, the recordings had started. About twenty recordings were performed as a test (pilot-testing), and after reviewing them, some modifications were necessary, such as the positioning of the recorder (tablet) on the desk to be able to hear both patients' and doctors' voices clearly, setting the sound quality, and even changing the consultation room – to perform the recordings - when it seemed a little noisy (next to a waiting room, or a crowded hall). After making the necessary modifications, the recordings started over until 100 audio recordings were reached, and this process took about eight months (from June 2016 to February 2017).

III.4.2.4 Data analysis:

This step focuses on bringing meaning and order to the collected data, and it is a very crucial step during research since it deals with very important information about the participants, as “it is the voice that the researcher is trying to hear, so that they can be interpreted and reported on for others to read and learn from” (Sutton & Austin, 2015, p.227).

III.4.2.5 Transcribing:

Transcribing is the first step of the data analysis of audio recordings, and it consists of converting the spoken dialogues to the written format, and to make the analysis of data easier. Some highly funding researches make use of a professional transcriber to do the task, especially in research areas where participants are using a jargon or medical terms (Sutton &

Austin, 2015), which is exactly the case for the present research; however, the researcher ensured the transcribing task, since – as cited previously – he has been working as a nurse for more than ten years in the same university hospital and has dealt with many similar cancer encounters throughout his career. Plus, there are some transcribing software that organize data and media files, but they remain expensive and cannot be used in our case, as the language being used by both doctors and patients to communicate is mainly Darija (Moroccan Arabic), which is different from the standard Arabic that might be incorporated within the transcription software.

Moreover, audio recordings should be transcribed ‘verbatim’, which was performed carefully; also, the observational notes already made were transcribed as well, and each response was numbered in a separate line, and each of them was transcribed in a different color to distinguish between them and to make a kind of dialogue (because there were multiple voices involved: physicians, patients, and family members/companions). Right after, the researcher had to get back and listen again to some recordings that were a little ambiguous, or just to highlight some pauses, laughter, or any non-verbal signs that were essential to the conversations.

As a matter of fact, the transcribing process required the translation from Moroccan Arabic - and a little bit of French – into English. Again, the provided translations were reviewed by a professional translator, by bilingual oncologists and epidemiologists from the domain, as well as the thesis’ supervisor.

III.4.2.6 Coding:

After the transcription comes the process of coding, which refers to “the identification of topics, issues, similarities, and differences that are revealed through the participants’ narratives and interpreted by the researcher” (Sutton & Austin, 2015, p.228); this technique

enabled the researcher to gather all what had been recorded (by both parties) and to separate them according to the issues they illustrate. On the written transcriptions (generated in the previous process), the most relevant responses were highlighted and classified into sections to make data more organized, and this was performed by hand on the hard copies.

III.4.2.7 Theming:

In fact, “theming refers to the drawing together of codes from one or more transcripts to present the findings of qualitative research in a coherent and meaningful way” (Sutton & Austin, 2015, p.229). Indeed, after making sections out of the transcriptions, each one was given a theme that could be its heading. Then, each theme was accompanied by codes, examples or quotes from the transcripts, in addition to the researcher’s own analysis.

III.4.2.8 Data synthesis:

After the data analysis process, which consisted of transcribing, coding, and theming, the detailed findings of the qualitative method will be presented more clearly in the findings chapter, as follows:

- ✓ Theme of each section;
- ✓ Inserting quotations that support the theme;
- ✓ Interpretation and analysis.

III.4.2.8.1 Conversation analysis:

The last element of data synthesis (interpretation and analysis) adopted a complementary theory in qualitative research that is ‘conversation analysis’ (CA), which is a sub-branch of discourse analysis (D.A); Cruickshank (2012) argued that D.A aims at describing and explaining discourses, as well as their impact on the phenomenon being studied.

Additionally, and as its name implies, conversation analysis consists of the analysis of the spoken interaction (which is also called ‘talk-in-interaction’). Merrison et al. (2005) provided two clear distinctions between discourse analysis and conversation analysis, arguing that the first focuses on the production rules of meaningful ‘units of language’, whilst the second addresses the organization of talk. Another brief – yet concise - definition was given by Antaki in a chapter entitled ‘Discourse Analysis and Conversation Analysis’ arguing that C.A studies social action resulting from the verbal interaction (as cited in Alasuutari et al., 2008); on the whole, C.A deals with the spoken discourse within social interaction in everyday life.

Concerning the mechanism of C.A, the most common ones are turn-taking, agreements/disagreements, openings/closings, and issues related to institutional talk, and its main aim is to understand how participants use language in their conversations. At last, it is worth mentioning that more characteristics of C.A are to be discussed in *Chapter IV* (Results).

III.5 Validity and reliability:

As was noted earlier, the research adopted a mixed-method approach, and this allowed gathering quantitative and qualitative data. Further, the use of triangulation increased the validity and reliability of the data collected, as well as their interpretation.

III.5.1 Validity:

Validity shows to what extent a conducted research is accurate and believable, and Burns (1999) stressed that validity is an assessment criterion for the quality of research. While conducting a study, the researcher uses several data collection instruments, and thus the quality of these instruments is debatable since the generated data are the basis of the

researcher's final conclusions. Generally, the following procedures could be used to ensure validity:

III.5.1.1 Content validity:

Content validity reflects the extent to which the test is efficient to measure the intended construct(s). For that purpose, the data collection instruments of this study were reviewed by experts in the field, and the instruments were piloted as well, which allowed the researcher to make the necessary modifications when it comes to ambiguous or 'useless' questions, too vague/specific questions, and the items to be added to/removed from the questionnaires.

In the article 'Understanding reliability and validity in qualitative research', it was stated that the construct is "the initial concept, notion, question, or hypothesis that determines which data is to be gathered and how it is to be gathered" (Golafshani, 2003, p.599). The definitions of the important concepts of the present study were provided in the two first chapters, and during the research process, the researcher abided by the research objectives and questions. Moreover, the structure of the thesis (outline, general to specific concepts, clear data representation, the transition between parts...etc.) was designed to be easily understood by the readers.

III.5.1.2 Internal validity:

Internal validity is concerned with the extent to which the findings of the research match reality; also, Zohrabi added that internal validity "deals with the degree to which the researcher observes and measures what is supposed to be measured" (2013).

To this end, Merriam (2007) provided six methods to increase the internal validity of the research data and instruments:

1- Triangulation;

- 2- **Member checks:** a process through which the findings of the research are brought back to the participants to be approved and ‘validated’, and this boosts the truthfulness of the results;
- 3- **Long term observation:** carrying out observations in the field of interest, over a relatively long period, helps increase the validity of research;
- 4- **Peer examination:** in this process, the researcher might ask for experts – but non-participating – in the field to review the findings of the study;
- 5- **Participatory or collaborative modes of research:** it consists of involving different participants (specialists) belonging to the same field of interest, and their opinions would immediately be helpful for the study;
- 6- **Researcher’s bias:** it is true that every researcher has his/her own ideologies, beliefs, and values, and while conducting research, s/he should remain neutral, ethical, and non-judgmental along the research process, all to obtain the best accurate findings possible.

As far as this study is concerned, it adopted four strategies out of the six cited above (Number: 1, 3, 4, and 6):

- **Triangulation;**
- **Long-term observation:** during the pilot study, and while handing and collecting the questionnaires to the different physicians of the oncology hospital, and even the audio recording process, the principal researcher spent a lot of months in the oncology setting, which made him – to some extent – familiar with the research cite, and this observation process has continued until a certain ‘saturation point’ (as stated by Zohrabi (2013)) was achieved;

- **Peer examination:** from the data collection instruments' design process to the analysis and representation of findings, the review of experts was of great help: the thesis' supervisor, epidemiology specialists from The Faculty of Medicine of Fez, as well as doctors from the oncology hospital of the CHU; they all provided some necessary modifications to advance the validity of the study ;
- **Researcher's bias:** Even if the researcher belongs to the healthcare domain, he tried – as much as he could – to remain honest and objective during the research process, with the ultimate goal to gather accurate findings.

III.5.1.3 External validity:

Merriam stated that external validity concerns “the extent to which the findings of the study can be applied to other situations” (2009, p.223). On the whole, this concept deals with the generalizability of the research to other contexts.

III.5.2 Reliability:

Joppe defined reliability as:

The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. (Joppe, n.d.)

In addition to the idea of repeatability or replicability highlighted in the citation above, the concept of reliability deals also with the consistency and dependability of the findings produced by a piece of research (Nunan, 1992). When it comes to the quantitative approach, obtaining –almost- similar results is a possible thing since the researcher deals with numerical data, but in the qualitative approach, obtaining similar findings is less frequent “because the data are in a narrative form and subjective” (Zohrabi, 2013, p.259). Thus, the data collection instruments determine how consistent and dependent the findings are.

Generally, Merriam (2007) claimed that the dependability of the results can be guaranteed using three techniques:

- a- **Investigator's position:** reliability can be increased if the researcher describes – in detail– the different processes of the research ;
- b- **Triangulation** (as explained numerous times in the dissertation) ;
- c- **Audit trial:** a research's reliability increases once the researcher shows exactly how the data were collected, processed, presented, and analyzed.

Indeed, these three elements were adopted in this research, with the ultimate goal to make the study as reliable as possible.

III.6 Conclusion:

This chapter has first highlighted the use of triangulation in this research, intending to increase the validity and the accuracy of the findings. Then, it tried to describe the two research methods that were used; the quantitative method, being carried out in a healthcare context, consisted of a cross-sectional survey using questionnaires as a tool of data collection, and these questionnaires were designed to target the probability (random) sample of research (the oncologists working in the Oncology Hospital of the CHU Hassan II of Fez). Regarding the qualitative method, it aimed at adopting the focus group' method but without the principal researcher's participation as a moderator, rather, he remained a passive observer during the recording of the conversations occurring between the oncologists and their cancer patients. Of course, the patients involved in the study were informed about the recording process, and they even signed a written consent after understanding that the data collected will be strictly confidential and that the recordings will remain anonymous. Besides, the data gathered by the quantitative method were analyzed using the SPSS v.20 software, while those of the qualitative method were dealt with mainly through two processes: 'data analysis' and 'data

synthesis', to extract the socio-linguistic elements, as well as the obstacles influencing the physician-patient communication in cancer care contexts. Hence, the next chapter (*Chapter IV*) will present, in a very detailed way, the results collected by each method.

Chapter IV. Description and analysis of the study's results:

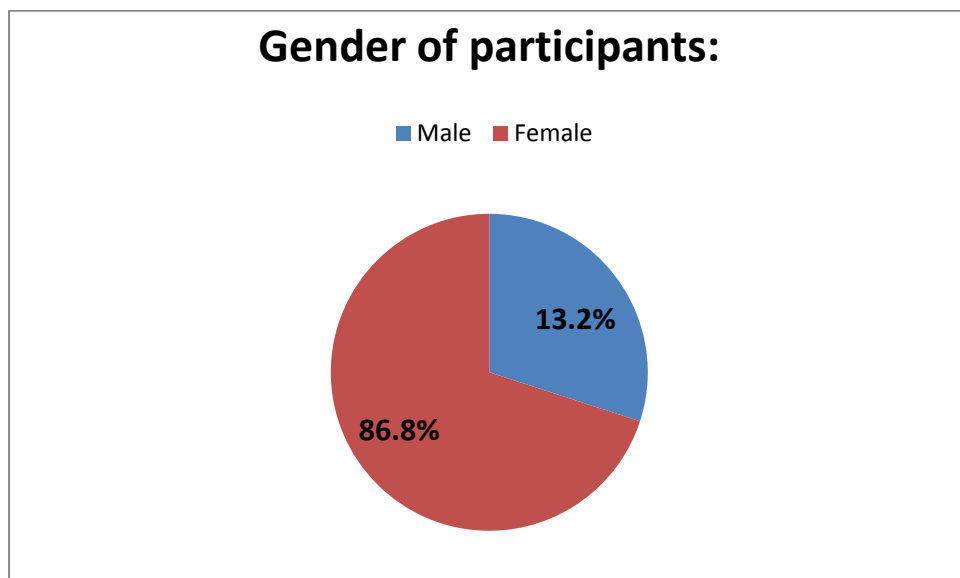
IV.1 Introduction

The findings generated by both methods are to be presented in this chapter, which consists of two sections: the qualitative data and the qualitative data; the first one presents the graphs/tables concerning different variables with analyses, and the second deals with different communications barriers that were encountered by both parties (doctors and patients), as well as the results of the passive observation process within the qualitative method.

IV.2 Survey results:

The quantitative analysis was realized using the Statistical Package for the Social Sciences (SPSS or IBM SPSS Statistics); it automates the process of running statistical tests, it is considered to be user-friendly, and it provides precise and efficient results despite the complexity of the research data.

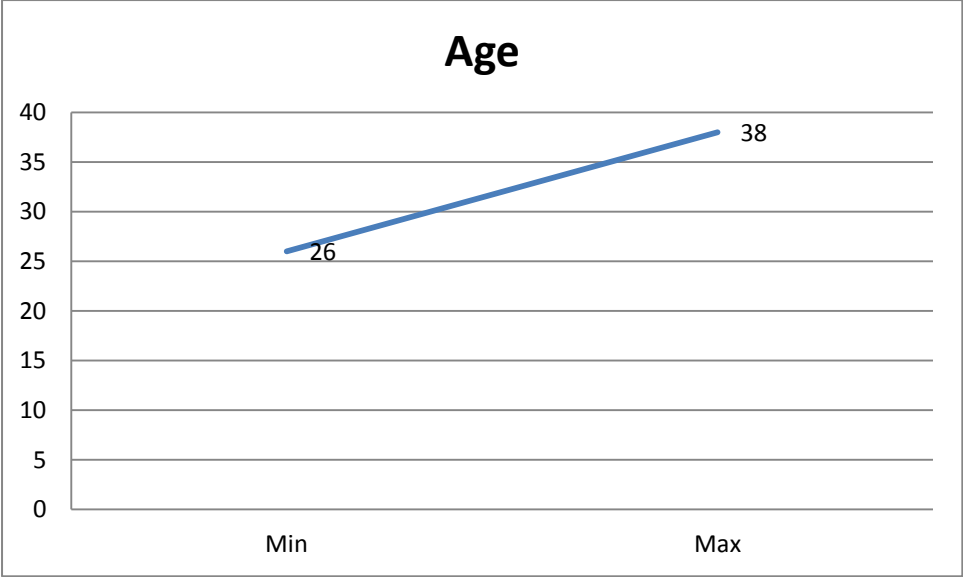
a. Gender:



Graph N° 1: Gender of participants.

The graph shows that the oncologists involved in this study were female-dominated (86.8%), and although there might be an association between the female gender and the choice of oncology as a specialty, the factors that affect this choice were not explored in this study.

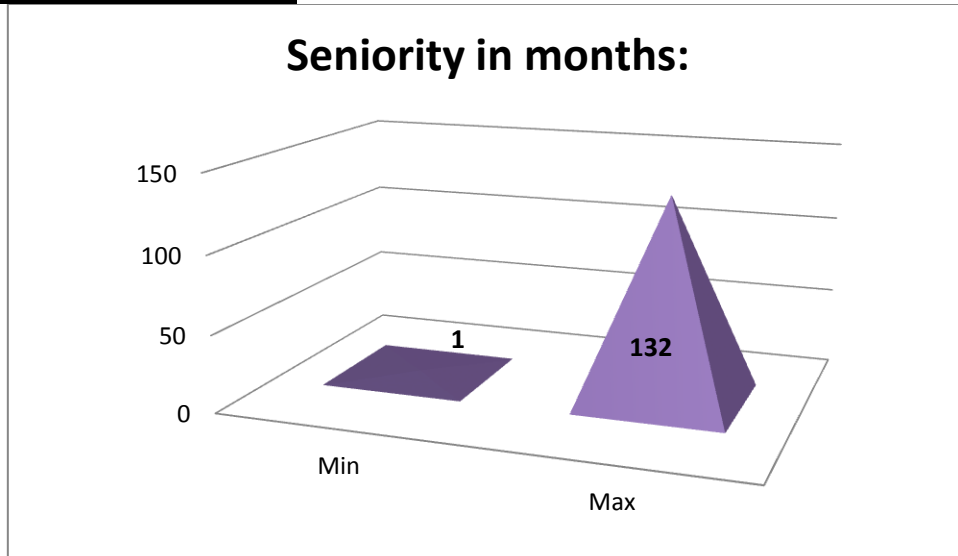
b. Age:



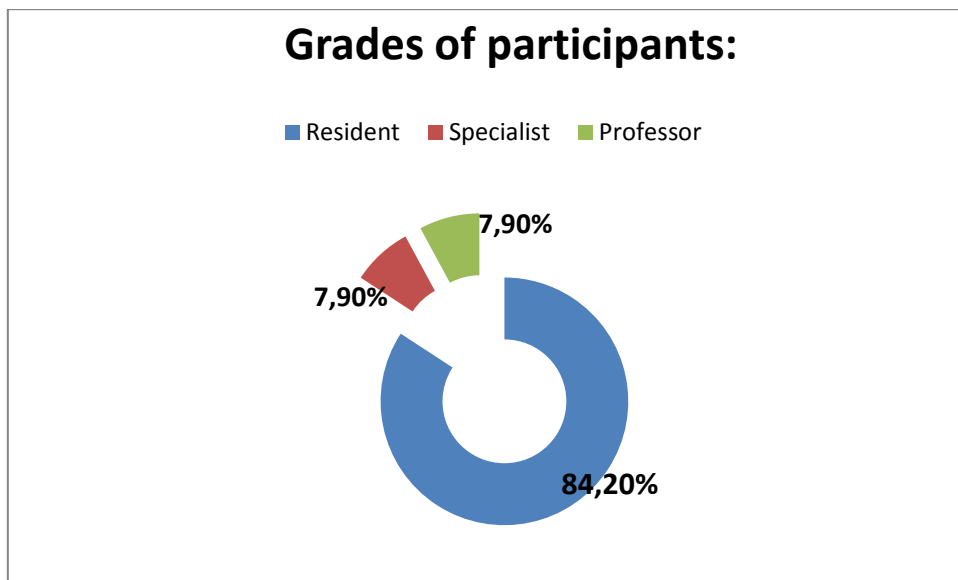
Graph N°2: Age of the participants.

Our participants were relatively young with an average age of 25.54 (Min: 26, Max: 38), and this demonstrates that many newly graduated doctors choose oncology as a specialty, a proof that oncology is gaining ground in Morocco.

c. Seniority and grade:



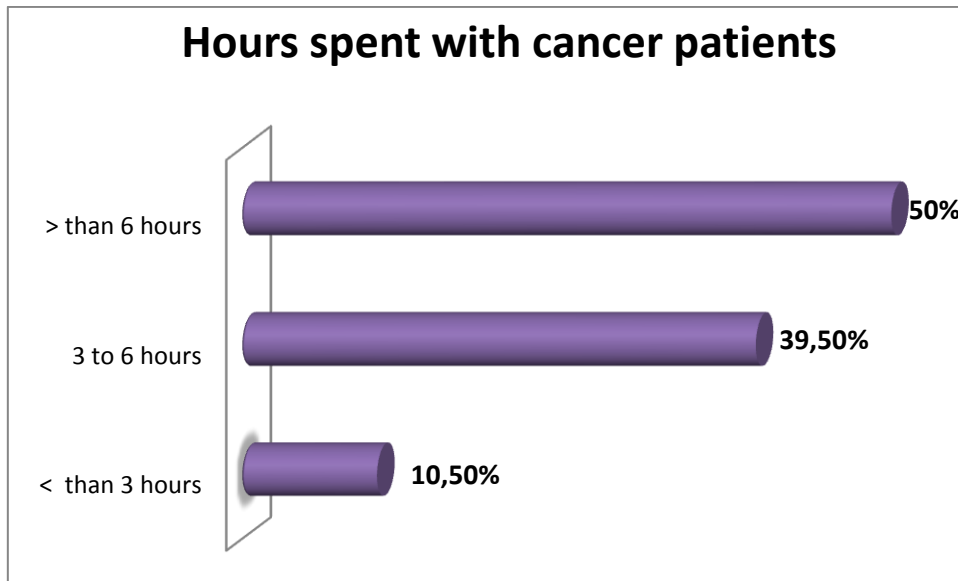
Graph N°3: Seniority of the oncologists.



Graph N°4: Grade of the oncologists.

The seniority of the respondents was 31 months as an average (ranging from 1 to 132 months), including 32 residents (84.2%), 3 specialists (7.9%), and 3 professors (7.9%). In Morocco, a doctor is called ‘resident’ when s/he gets enrolled in the four/five-year specialty training, which generally starts at the age of 26, and this category is considered to be the basis workforce of the CHU Hassan II of Fez, and more specifically the oncology hospital.

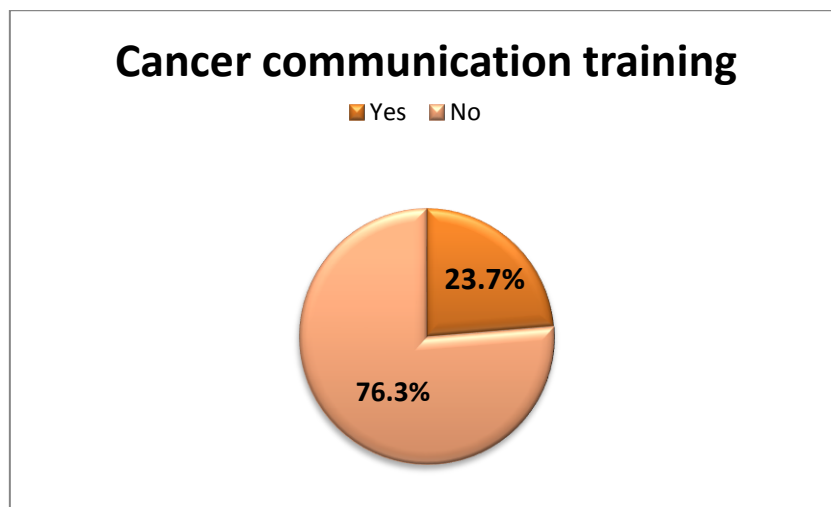
d. Hours spent with cancer patients on a daily basis:



Graph N°5: Hours spent dealing with cancer patients

Daily, half the participants spend more than 6 hours, and 39.5% of them devote between 3 and 6 hours every day, and only 10.5% devote less than 3 hours with patients, which is something reasonable since the work schedules are set from 8h30 am to 4h30 pm, and the follow-up consultations generally start between 9h30 and 10 am.

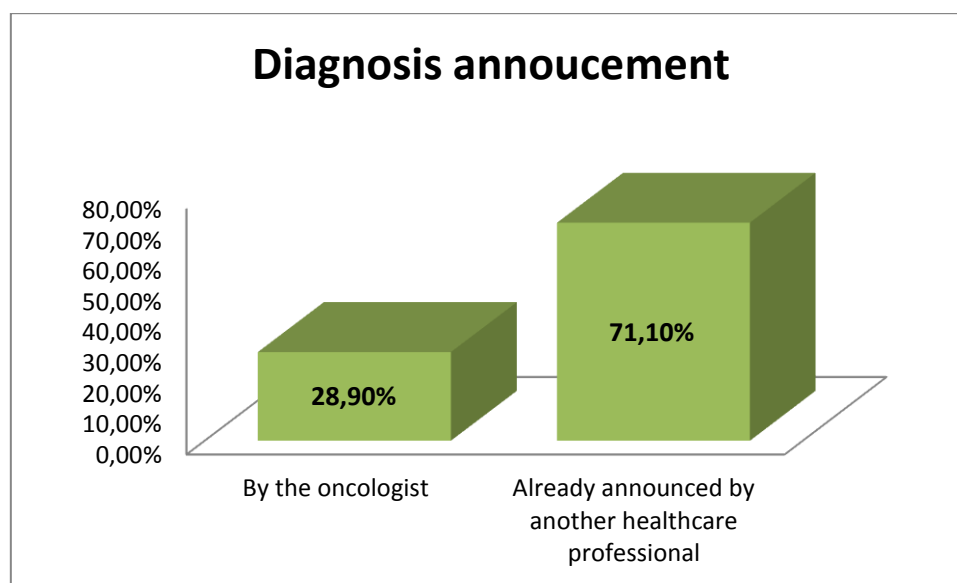
e. Cancer communication training:



Graph N°6: Communication training.

As shown in the *graph N°6*, only 9 oncologists (23.7%) have received a communication skills training, which might seem unsatisfactory. In fact, coaching in terms of communication with cancer patients is not a part of the residency training or continuous training inside the hospital. Rather, the doctors who received communication training had probably taken the initiative themselves to get enrolled in a conference, an exchange program, or even an online training, reflecting their desire to develop their own personal and professional communication proficiencies, which answers the *R.Q N°1* and indicate the majority of participants have not received a specific training in terms of healthcare communication (and cancer communication particularly).

f. Announcing the diagnosis of cancer:

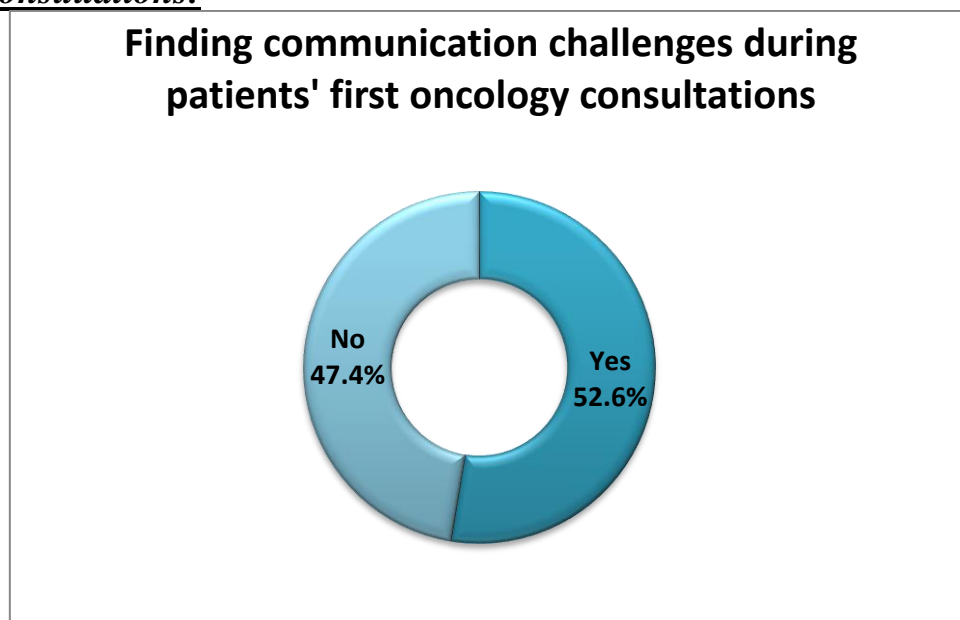


Graph N°7: Diagnosis announcement.

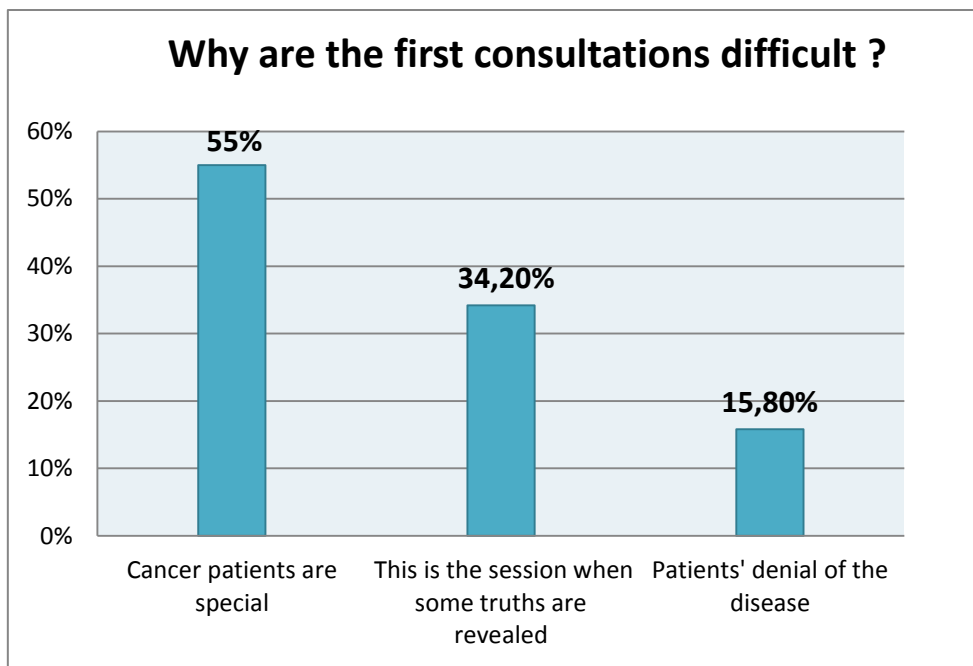
The diagnosis announcement consultation (or session) can be considered as ‘the foundation stone’ of the cancer management: it is the time when the patient will be introduced to the ‘journey of illness’ with all the related information and recommendations about the treatment, as well as the setup of the doctor-patient relationship, and hence, this announcement should meet certain points (as cited in the review of literature, *page 71*).

Concerning *R.Q N°3*, *graph N°7* highlights that 71.1% of the oncologists claimed that the patients come to the consultation with the diagnosis already in mind (informed by a radiologist, a surgeon who discovered cancer... etc.). However, only 28.9% of our oncologists announce the diagnosis, which seems to be the perfect opportunity to introduce the notion of cancer to the patients and progressively facilitate their acceptance of the disease since doctors are the right ones for this arduous task and who will be responsible for the cancer care henceforth.

g. Finding communication challenges during patients' first oncology consultations:



Graph N° 8-A: Communication challenges



Graph 8-B: Reasons why these consultations are challenging.

It is normal that the first oncology consultations are challenging for both patients and oncologists, and this is what the survey demonstrated. According to *graph N°8-A*, more than half of the participants (52.6%) assumed that they find communication difficulties, mainly because cancer patients are special (55%), and that these appointments are the ones that initiate the patients to the cancer field and then a lot of detailed answers or ‘truths’ get delivered to them (34.2%) (*Graph 8-B*). Indeed, this category of patients is called ‘special’ because they need quality management for the psychological and social effects of cancer, such as stress, depression, and fear, all caused by a life-threatening disease and the physically and economically demanding treatments.

h. Definition of healthcare communication:

In the review of literature, we have provided a lot of definitions of healthcare communication. As this study aims to investigate the state of health communication in Morocco, the conducted survey focused on examining Moroccan doctors’ perceptions towards the issue in question. Therefore, respondents were asked to define the concept of ‘health

communication’; 27 answers were collected for an open-ended question, and the original answers in French with their English translation will be presented in the Appendix section.

From the different definitions given by the participants, we can notice that among the 27 answers, the term ‘Healthcare communication’ was mostly defined as ‘Physician-Patient Communication’ by 19 respondents. For instance, respondent N°38 stated that it is “the way of communicating with patients about their diseases”. These definitions were very specific since the physician-patient communication is one of the aspects of healthcare communication. Others explained further that health communication is concerned with other aspects such as the psycho-social and physical ones. In this vein, respondent N°16 said that “the different psycho-social and physical aspects should be taken into account while communicating with patients’. Plus, other definitions linked the concept of H.C with ‘the physician-patient relationship’, notably the answers of the participants N° 5, 26, 28, 34 (see Appendix). Furthermore, ‘interpersonal communication’ was given by doctors as one of the main components of health communication; for instance, respondent N°15 wrote that health communication is “the way of communicating in a hospital, either between the doctor and the patient or between the medical staff and nurses”;

At last, it is believed that among all the answers collected, the most accurate definition was given by respondent N°3, stating that H.C is “the use of interpersonal, physical, and medical communication strategies aiming at informing the patient”. These communication strategies are very varied in healthcare communication, and the target audience includes the general public as well (not only the patients).

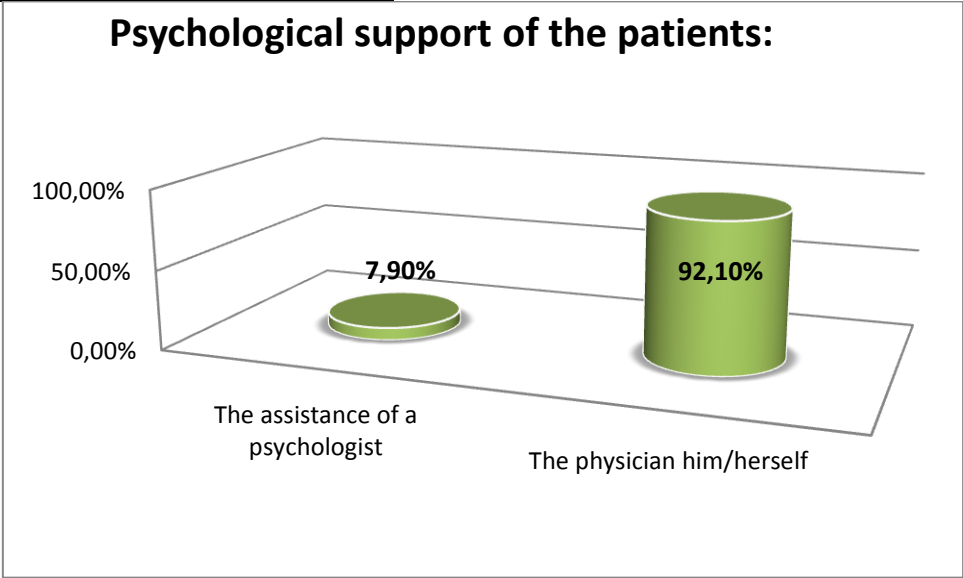
i. Terms used other than cancer:

Additionally, to further examine the respondents’ perceptions towards health communication, another question was designed to explore the different ways they - as

oncologists - deal with ‘cancer’ as a term. As a matter of fact, the word is often associated with some stereotypes that might be a little shocking (See review of literature, *page: 61*). Therefore, according to their answers, oncologists try to avoid it by using other substitutes. *Table C* in the appendix section represents the different terms and percentages of their use by our participants in their daily practice.

Indeed, the table shows that 31.6% use ‘malignant illness’ (Arabic transliteration: **mrđ khbyt**), while 28.9% use both ‘aggressive disease’ (**mrđ qbyh**) and ‘node/mass’ (**hbwbh**), and 18.4% use ‘**dak almrđ**’ (English literal translation: ‘That disease’); these terms are used in the Moroccan context to refer automatically to cancer that should better not be spelt out in public, which shows that cancer is still considered an incurable disease for many people. Plus, 7.9% use ‘Chronic disease’ (**mrđ mzmn**), and only 5.3% use ‘Neoplasia’ (**wrm ghyr hmyd**), which is rarely used due to its technical nature and might be understood only by the ones who are educated and familiar with the medical jargon.

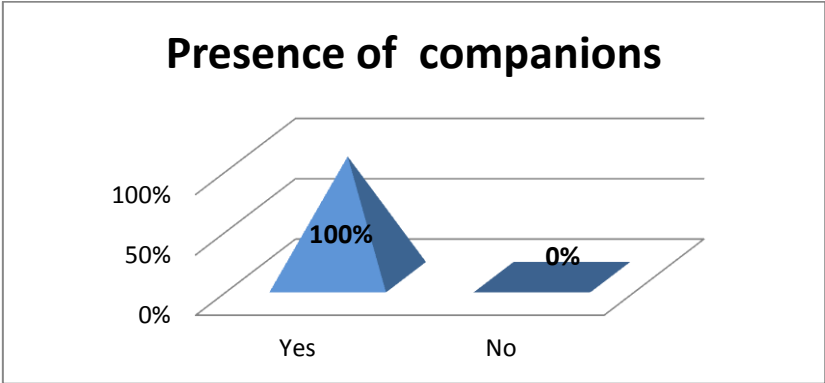
j. Presence of a psychologist:



Graph N°9: Psychological assistance for patients

Cancer patients are emotionally sensitive and often need psychological support, especially during the first weeks of their disease management; in this context, 92.1% of the oncologists claimed that they ensure this task themselves, while only 7.9% seek for a psychologist's assistance, either when it comes to delicate cases, or when they do not want to assume that responsibility themselves.

k. Presence of a companion:

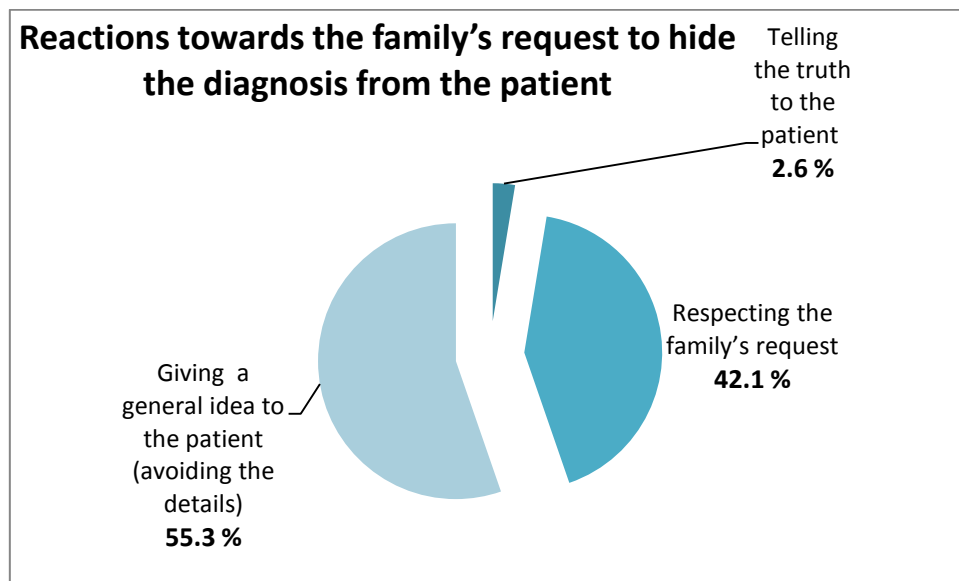


Graph N°10: Presence of companions.

To answer the **R.Q N°6**, the respondents of the study were asked about the presence of companions during the medical visits, and they all confirmed that the patients are always accompanied during oncology consultations. Generally, patients' relatives attend the consultations for transportation (bedridden patients), psychological support, or just for company. In terms of communication, if a companion attends the consultation, s/he might help the patient understand (and even translate the speech for him/her if s/he does not speak Arabic), and can also remind the patient about the oncologists' recommendations; besides, companions (especially when it comes to family members) might be a good source of information for physicians because they can be aware of symptoms or medical histories more than the patients themselves.

l. Reaction towards the family's request to hide the diagnosis of cancer

from the patient:



***Graph N° 11:** Reaction towards the family's request to hide the diagnosis.*

At times, oncologists are asked, by patients' families, to withhold some information about the disease (diagnosis, prognosis...etc.) from the patients, claiming that some news might harm their psychological well-being.

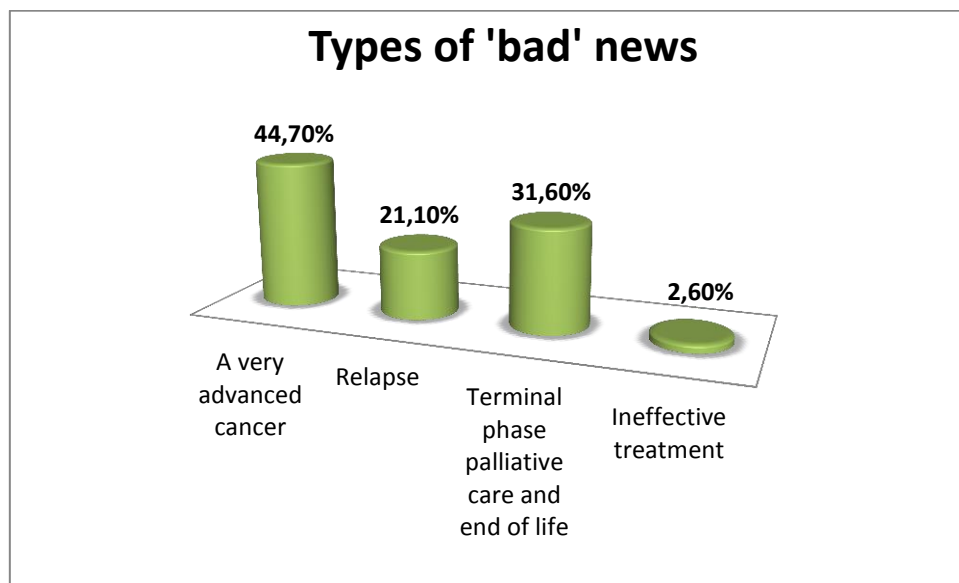
In the Moroccan context, article 31 of **Title II** of The Moroccan Code of Medical Ethics states that:

A serious prognosis can legitimately be hidden from the patient. A fatal prognosis should be revealed only with great caution: but it should be revealed to the family. The patient can prohibit the disclosure or appoint a third party to whom it could be made (Code de déontologie des médecins, 2005, p.7). (See the original French definition in the Appendix section)

In oncology, serious prognoses can be cancers like cervix, ovary, breast, and colon; fatal prognoses are the ones like lung, kidney, stomach, and pancreas; hence, the decision to

fully/partially reveal or hide some serious information remains the task of the physician him/herself, and not the patient's family. In our context, 2.6% of the oncologists involved in the study claimed that they would tell the truth to the patient anyway, 42.1% would respect the family's demand, and 55.3% would give only a general idea without overwhelming the patient with technical details.

m. Bad news delivery:



Graph N° 12: Types of bad news in oncology.

Bad news delivery is an integral part of the doctor-patient communication in oncology; as shown in the graph, the oncologists involved in the study indicated that the most difficult serious (or bad) news they deliver are:

- Having a very advanced cancer (44.7%);
- Terminal phase of cancer/palliative care (31.6%), and
- Relapse (21.1%).

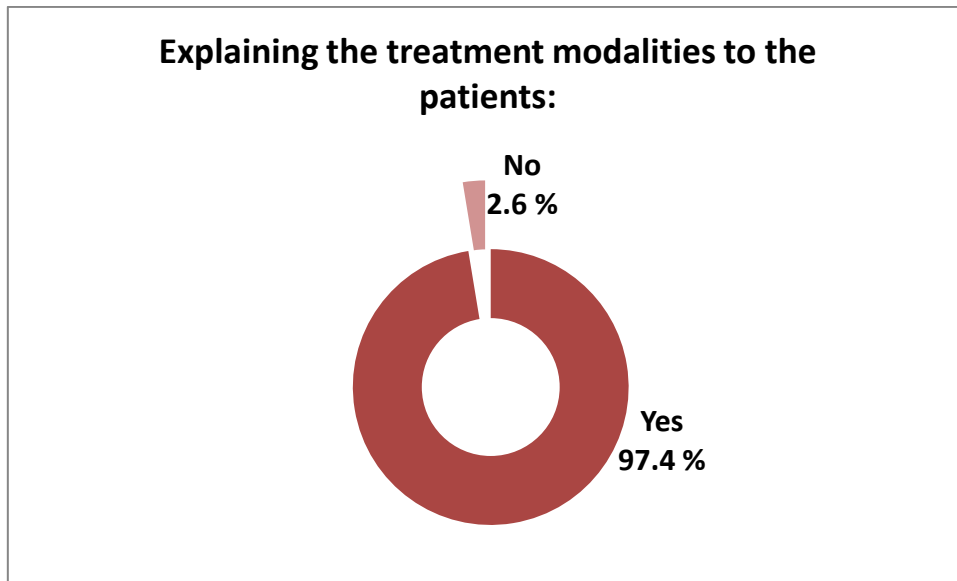
Concerning the first one (advanced cancer), it is normal that almost half of the participants chose it as the most difficult news to announce to the patients; on the one hand, a

lot of patients take some minor symptoms for granted (for instance: a persistent cough in winter, an unexplained pain in a body part, unexplained weight loss, a change in the bladder activity...etc.), and thus, people with low health literacy might ignore those alarming signs and do not consult a doctor. Given the fact that early screening is the key to reduce the burden of cancer, patients are diagnosed late and this lowers the chance of cure. On the other hand, the cause of the delay in diagnosis might be the low socio-economic level, especially in developing countries. In this sense, announcing such news to the patients might create feelings of sadness and even shocks, which might generate an emotional flood that could not be managed by the physicians.

The second one is ‘Terminal care’, also called ‘Palliative care’, ‘comfort care’ or ‘supportive care’, and its aim is not to cure cancer, but rather maintain or even improve the quality of life in cancer care, by dealing with symptoms or the side effects of the treatment (in addition to the psycho-social issues as well). Hence, once the patients hear such news, they find a difficulty in understanding the situation, linking it sometimes to the lack of medical competence to handle their health status, or even to the idea that death is inevitable and it is just a matter of time; this somehow explains why announcing such news is very challenging for the oncologists.

The third one is ‘Relapse’: it is often associated with many communication difficulties for the physicians, and a lot of deception and regret for the patients; the relapse means that the treatment did not work, that all the physical and psychological pain the patient went through will be repeating itself all over again, and maybe the situation will be worse than last time; announcing ‘relapse’ is a turning point in a patient’s life, which is often associated with depression and a total loss of trust in the healthcare team responsible for the cancer management.

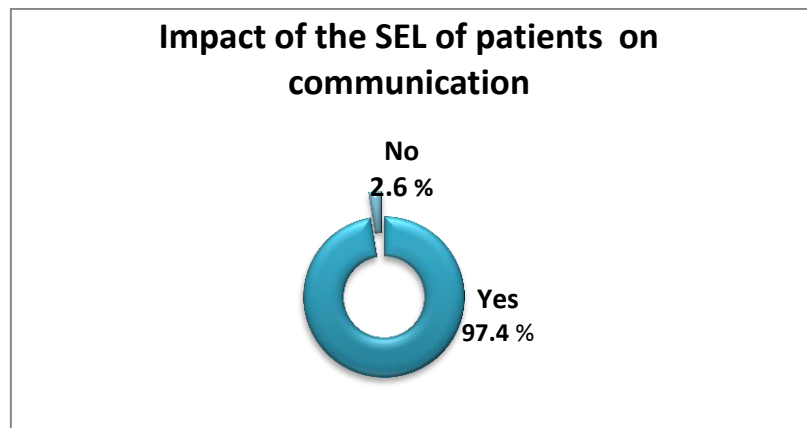
n. Explaining the treatment modalities:



Graph N° 13: Explaining the treatment modalities to the patients.

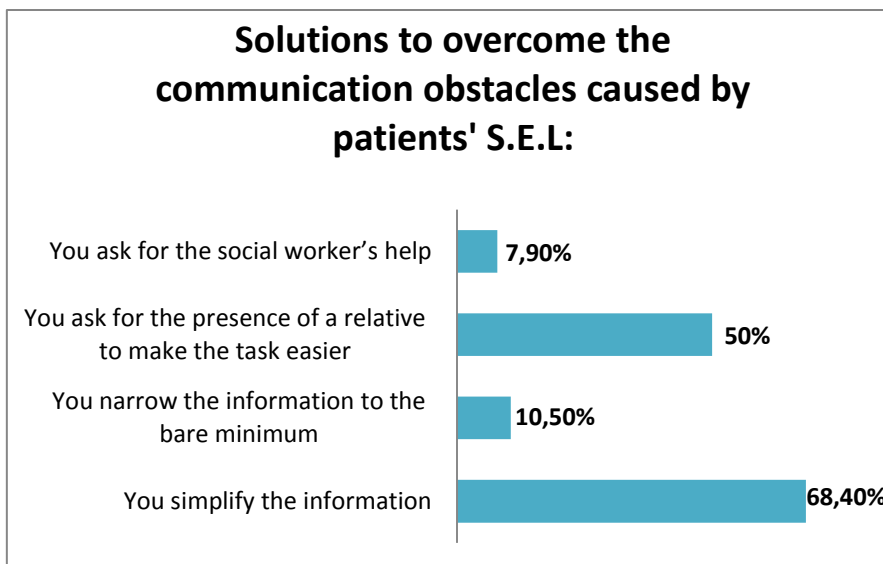
Ethically speaking, cancer patients have the right to fully understand the treatment they will undergo, including its nature (hormonal, chemo, or radiation therapy), its length, procedures (or protocols), the side effects, as well as its efficiency degree (and this before they even sign the consent form). In addition to the ethical side, communicating such information has other advantages, notably: increasing the patients' autonomy, and making them feel involved in their own care and decision-making. Indeed, 97.4% of the participants indicated that – before the beginning of the treatment – they always explain the different treatment' aspects and options to the patients, while only 2.6% (one oncologist) claimed that s/he does not. For the ones who explain the treatment to undergo, the communication task is not an easy one: the goal is to convert the medical jargon into the regular (everyday use) language and to provide explanations, taking into consideration the patients and their companions; also, these information deal with providing arguments for the choice of using a specific treatment and not others, which might be very challenging.

o. Socio-economic level (S.E.L) of patients as a communication barrier:



Graph N°14-A: Impact of S.E.L on communication.

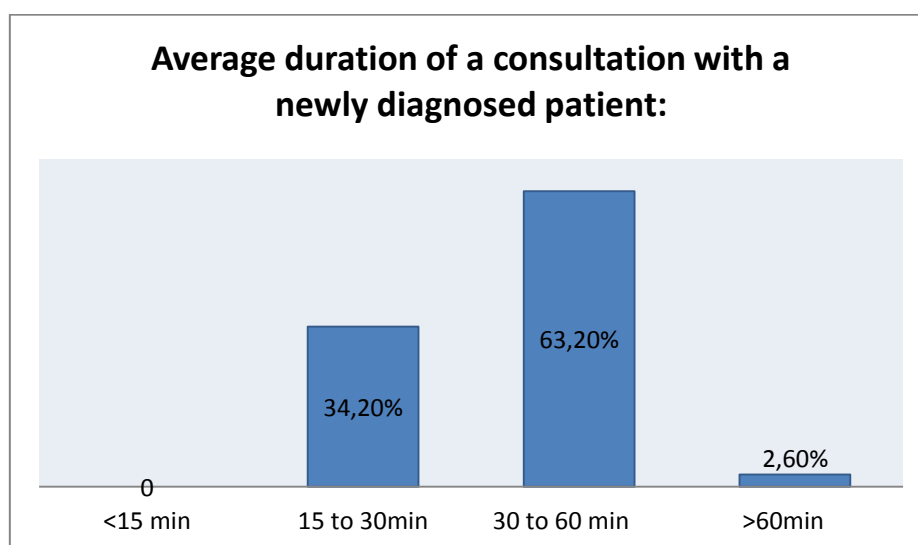
Here, in an attempt to answer the **R.Q N°2** and to deal with the hypothesis **H N°2**, this question aimed at assessing how the socio-economic level of the patients affects the process of doctor-patient communication, and then almost all the participants (97.4%) confirmed that the S.E.L does really affect the quality of communication, while only 2.6% (one oncologist) argued that it does not. In fact, even though some physicians might have good communication skills, the patients' level of literacy is influenced by social determinants like income, education, employment, which affects the way they receive information, as well as formulating questions and feedback, such as a better description of the symptoms, a better compliance with the treatment, an easy understanding of the medical recommendations, adopting good health behaviors, and a better management of cancer as a whole.



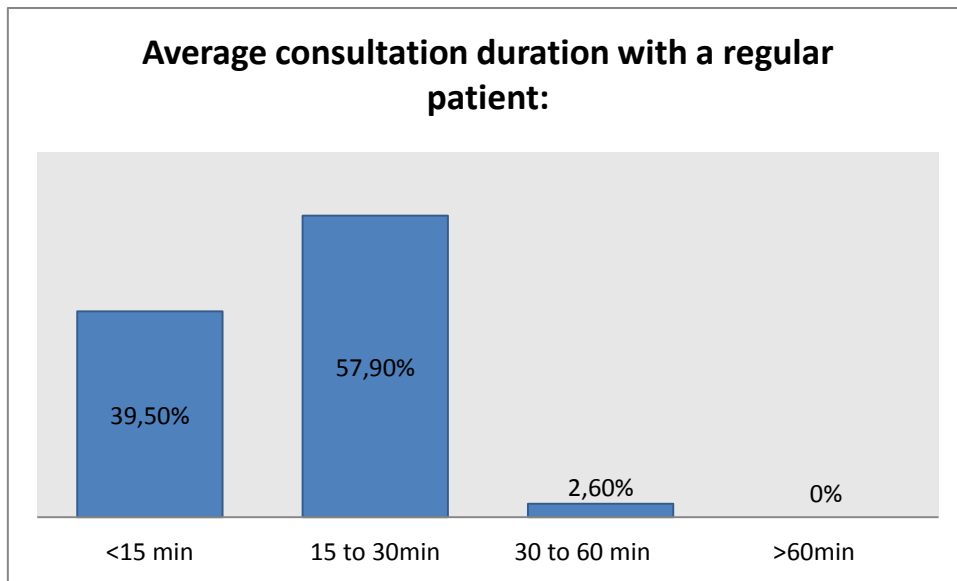
Graph N°14-B: Solutions to overcome the communication obstacles caused by S.E.L.

To overcome that communication obstacle (patients' S.E.L) the oncologists were asked how they manage the situation, then they indicated that most of the time they either simplify the information about the disease without getting into details (for 68.4%), or they ask for the presence of a relative or a close friend who can help the patient understand any information or medical instruction for a better disease management (for 50%).

p. Average duration of the consultation:



Graph N°15-A: Average duration of a consultation with a newly diagnosed patient.



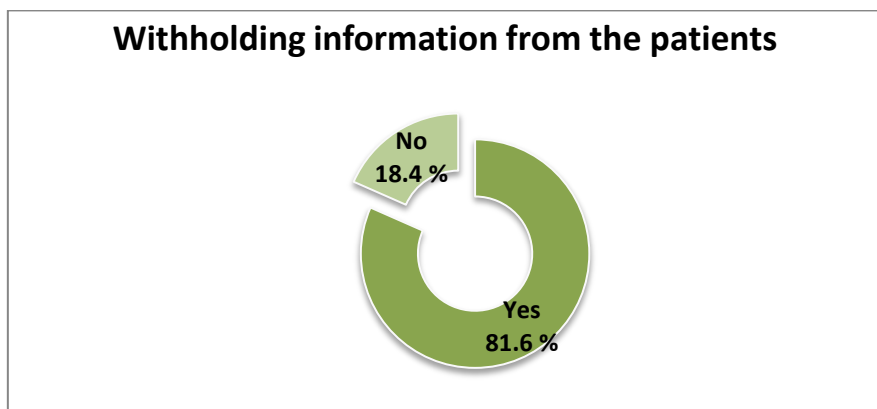
Graph N°15-B: Average duration of a consultation with a ‘regular’ patient.

As seen earlier, oncology consultations witness a lot of medical information exchange, which requires the full attention of both patients and oncologists. In this sense, the physicians were asked about the amount of time they spend during each consultation, and the graphs above demonstrate the following:

- Consultation with a newly diagnosed patient: 34.2% claimed that they spend between 15 and 30 minutes during a consultation, and 63.2% take 30 minutes to 1 hour. Obviously, the majority spend a relatively long period of time with each ‘new’ cancer patient to be managed in the oncology hospital, which shows the importance of the first consultations and their major role in explaining the diagnosis, the prognosis, the treatment...etc. Generally, these consultations aim at knowing the patient and making him/her familiar with the oncology setting and with the cancer journey s/he will be dealing with for a certain period of time, and of course, all these aims cannot be achieved without proper communication.

- Consultation with a regular² patient: unlike the consultations with newly managed patients, 39.5% spend less than 15 minutes, while 57.9% use 15 to 30 min in each consultation, something that makes sense because the patients to some extent – in this situation – are already used to the cancer care, and they attend only for follow-ups or for paperwork when it comes to insurance (if they ever have any); thus, communication is not as detailed and complex as during the first consultations. Besides, by taking into consideration those durations and comparing them with the important workflow in the oncology hospital, as well as the working schedules (8h30 am to 4h30 pm), one can conclude that oncologists make a lot of effort to improve the cancer management of the patients by dedicating such time and attention despite the work circumstances they go through.

q. Withholding information from the patient:

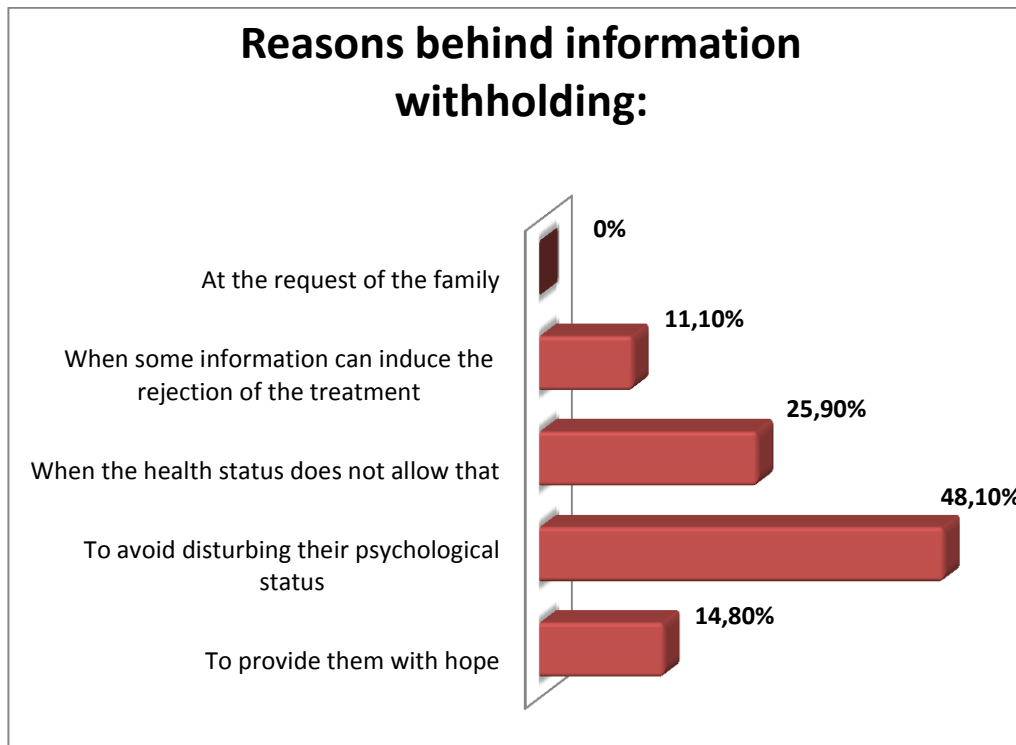


Graph N° 16-A: *Withholding information from the patient.*

In cancer communication, oncologists deliver an important amount of information selectively. In fact, hiding information related to the disease from the patients, without their consent, is ethically unacceptable, as it is stated in different ethics codes worldwide, for

² 'Regular' patient, sometimes also called 'Old': it has nothing to do with the age of the patient, but just shows that s/he has already been enrolled in the cancer treatment program for a relatively long period of time.

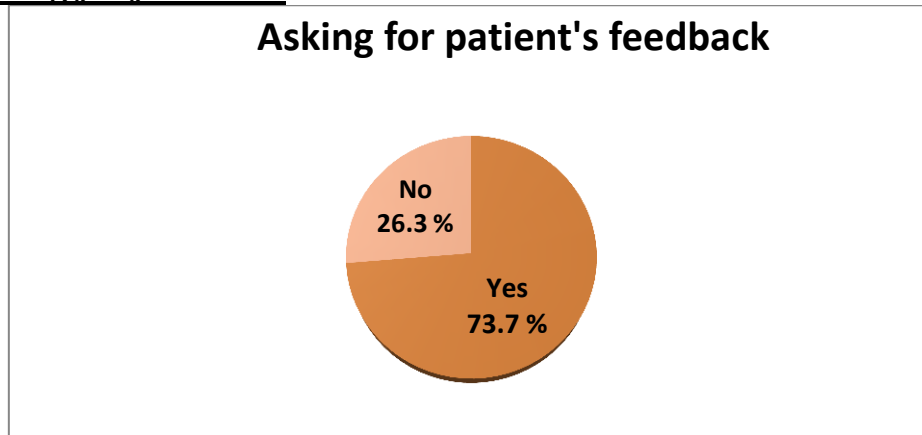
instance: the Medical Ethics code 2.1.3 of the American Medical Association (*Withholding Information from Patients* / American Medical Association, n.d.). In this respect, the participants were asked whether it happens to them to retain some medical facts concerning the disease, and according to the results, 81.6% do indeed hide some information from their patients, while 18.4% do not.



Graph N°16-B: *Reasons behind information withholding.*

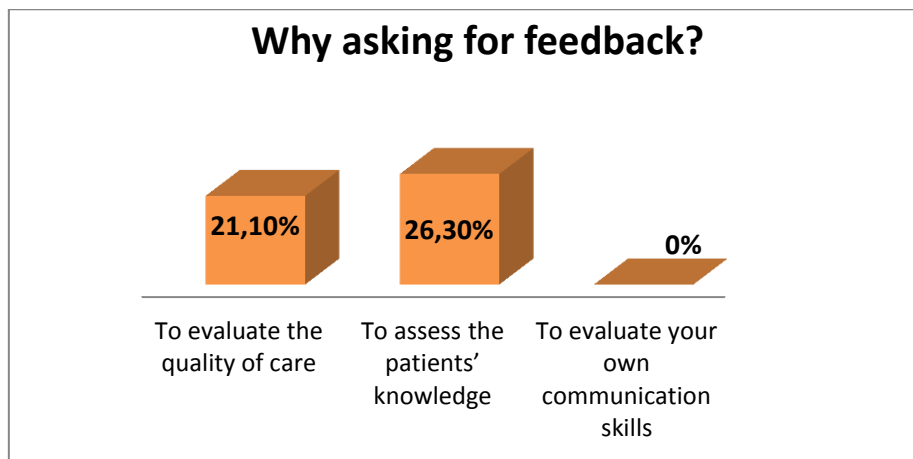
Then, the participants were asked about the reason behind their choice, and almost half of the oncologists (48.1%) claimed that it is to prevent disturbing the psychological status, since providing the patients with some technical data might be so overwhelming, especially for too young patients and elderly ones; the other reasons of information withholding – noted by the participants – are: very poor health status (25.9%), keeping hope and courage (14.8%), and when the information to be delivered might induce the rejection of the only treatment available for that specific case (11.1%).

r. Asking for feedback:



Graph N°17-A: Asking for patients' feedback.

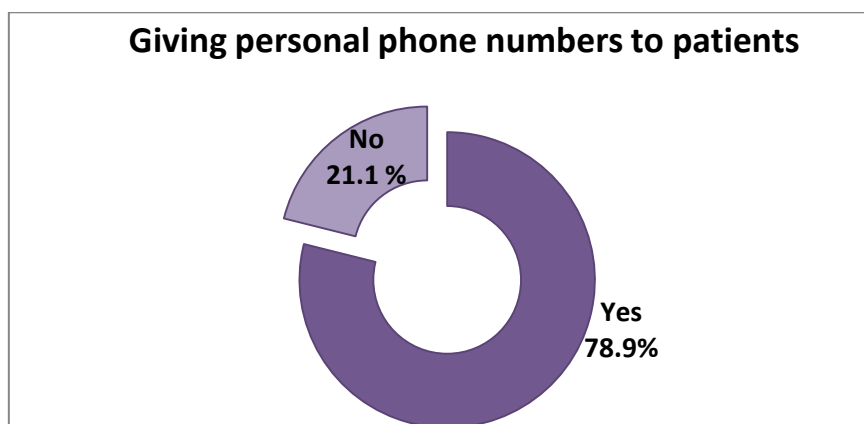
As cited several times in this dissertation, specifically in the literature review (*Page: 18*), feedback is the most trustful tool to ensure the effectiveness of the interpersonal communication process. So, the participants were asked whether they ask for their patients' feedback at the end of the consultations, and it is obvious that 73.7% ask for it, whilst 26.3% do not;



Graph N°17-B: Reasons behind asking for feedback.

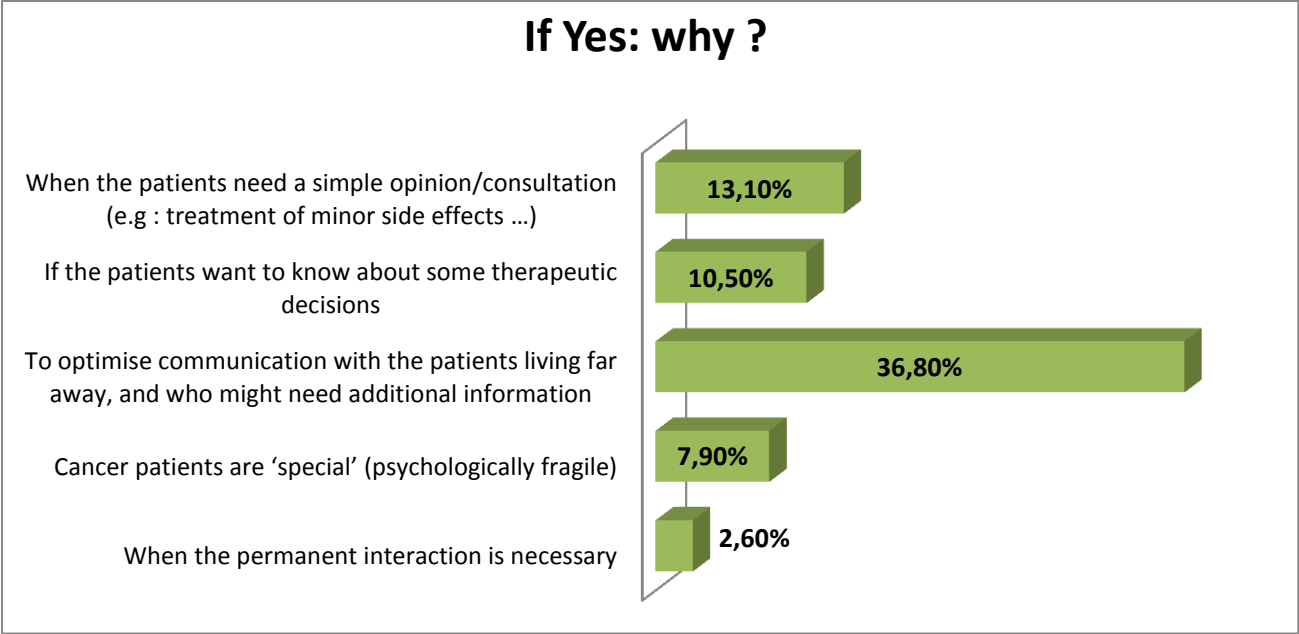
The reasons were varied, mainly: evaluating the quality of the care provided (21.1%), and assessing the patients' knowledge and the amount of information they have acquired during the consultation (26.3%). Obviously, none of the participants acknowledged the use of feedback as an assessment tool of their own communication skills, which somewhat confirms the hypothesis *H N•I*; hence, a complete confirmation of this hypothesis will be sought using the qualitative method.

s. *Giving the personal phone number to patients:*



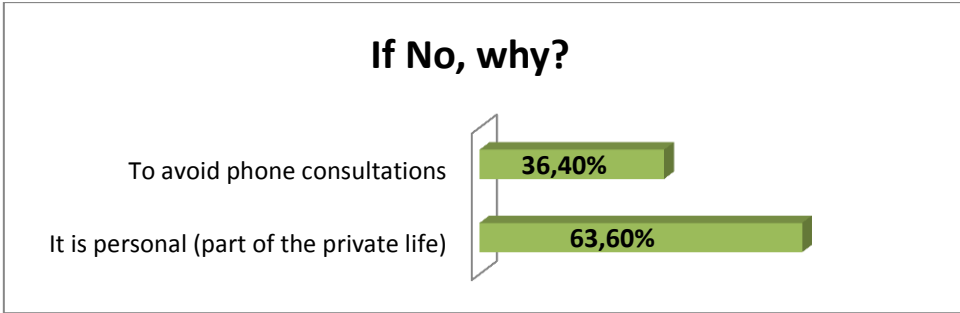
Graph N•18-A: Giving personal phone numbers to patients.

At times, cancer care requires staying in touch with patients, notably the ones who live far away from the hospital and who might find occasional difficulties in coming to oncology consultation (poor weather conditions, lack of transportation...etc.); this sometimes could – partly – be solved using telephones as a means of communication between patients and their oncologists. In that respect, this question examined whether oncologists give their personal phone numbers or not, as well as the reasons behind it; the responses showed that 78.9% do actually give their numbers to patients to be contacted, and 21.1% do not; the reasons for both categories were the following:



Graph N°18-B: Reasons why oncologists give their numbers to patients.

For the majority of the physicians who responded ‘Yes’, they argued that patients might need to contact them if they live very far and might need some additional information (36.8%), others (13.1%) do it because some patients could need ‘a phone consultation’ for some minor symptoms or a treatment for side effects; besides, another category of oncologists (10.5%) give their phone numbers in case there is any treatment decision that should be transmitted immediately to the patients (that is the case when the patient’s medical file has to go through a multidisciplinary meeting to opt for the suitable treatment decision for that specific treatment, and this is generally for the most complicated cases). Moreover, it is to note that 20% communicate with patients via telephone, but unfortunately they did not give justifications.



Graph N° 18-C: Reasons why oncologists do not give their numbers to patients.

Regarding the oncologists who avoid giving their phone numbers to the patients (21.1%), they presented two major reasons:

- 63.6% consider phone numbers are part of the personal life, which should be kept private;
- 36.4% avoid phone consultations, which are – most of the time – not fruitful.

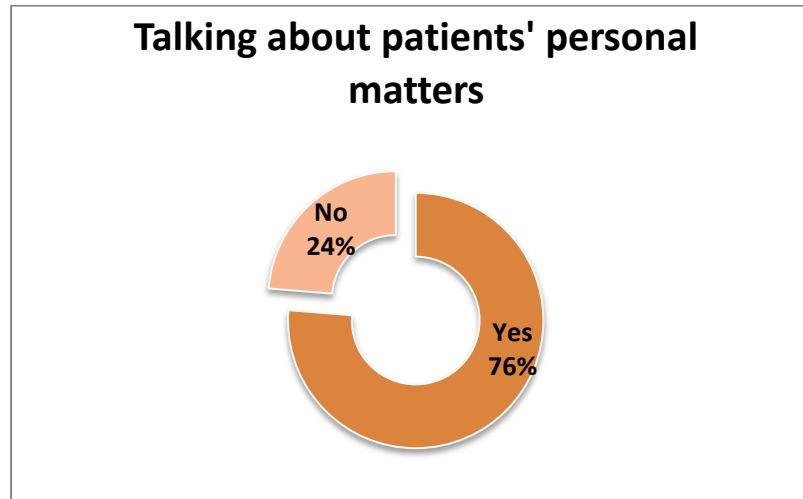
Regarding healthcare, phone communication, and as shown through the results above, plays an important role in facilitating the interaction between the patients and their doctors, but it remains a tool that should not be fully trusted when it comes to the delivery of some serious news; some minor incidents might happen (such as low battery, no network service, or even inability to use cell phones), or even due to the patient's physical symptoms (reduced hearing acuity, or intense pain), and these could be considered as key barriers to phone communication. Still, when it is just about some information that needs to be transmitted to a patient with no immediate urgency, the use of telephones makes the task easier and contributes to the effectiveness of communication, and thus better cancer care.

t. The physician-patient relationship:

It was stressed many times that the basis of building a good physician-patient relationship, is good communication that includes not only cancer management but the patient as a whole. The new patient-centered approach encompasses dealing with the physical, psychological, and social aspects (something that perfectly relates to the definition of 'health' by the WHO).

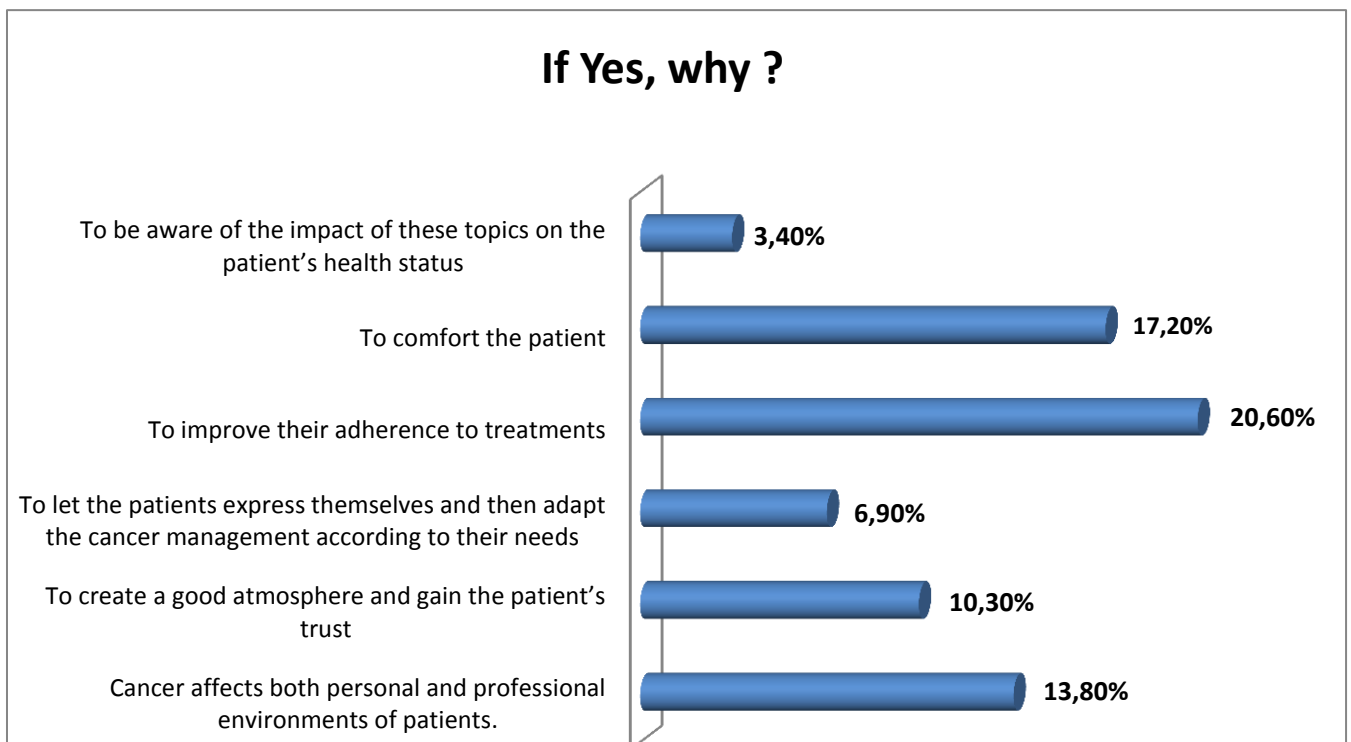
In this regard, the two following questions of the questionnaire – closely connected to each other - aimed at assessing:

i)-If the physicians talk to the patients about their personal matters or not:



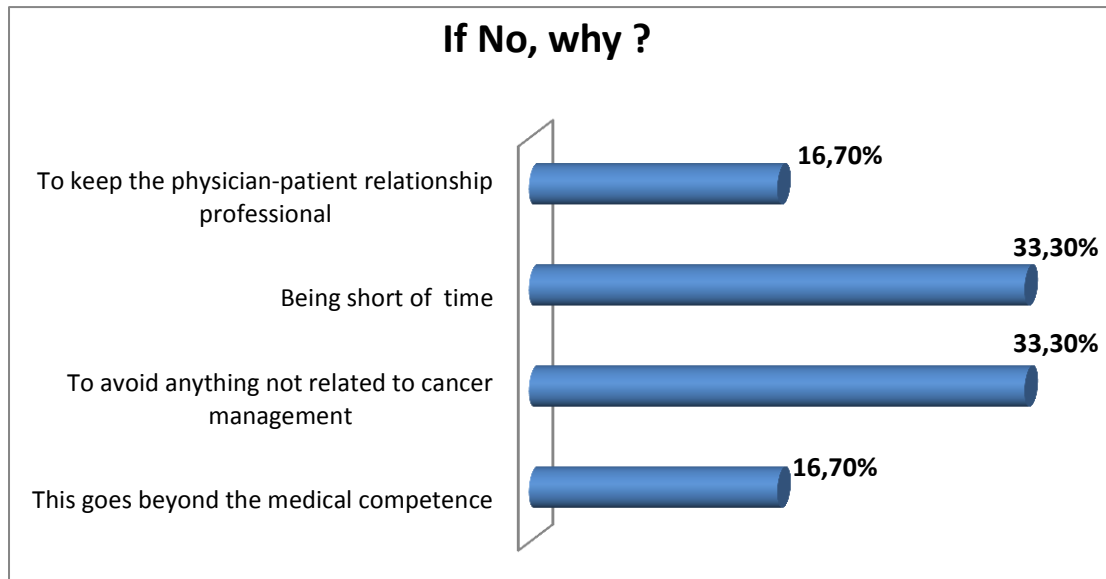
Graph N° 19-A: Talking about patients' personal matters.

Concerning **R.Q N°5**, the results show that 76% do discuss the patients' personal problems within cancer management sessions, whilst 24% prefer not to. Thereafter, we asked about the reasons for which the participants act so, and the purposes were different for both categories as demonstrated in the two graphs below (N° **19-B** and **19-C**).



Graph N°19-B: Reasons behind talking about patients' personal matters.

On the one hand, the physicians essentially discuss personal matters with their patients: because it helps them adhere to different treatment modalities (20.6%), to relieve and comfort them (17.2%), because cancer affects both the family and professional environments of the patient (13.8%), and to create a good atmosphere and gain the patients' trust (10.3%).

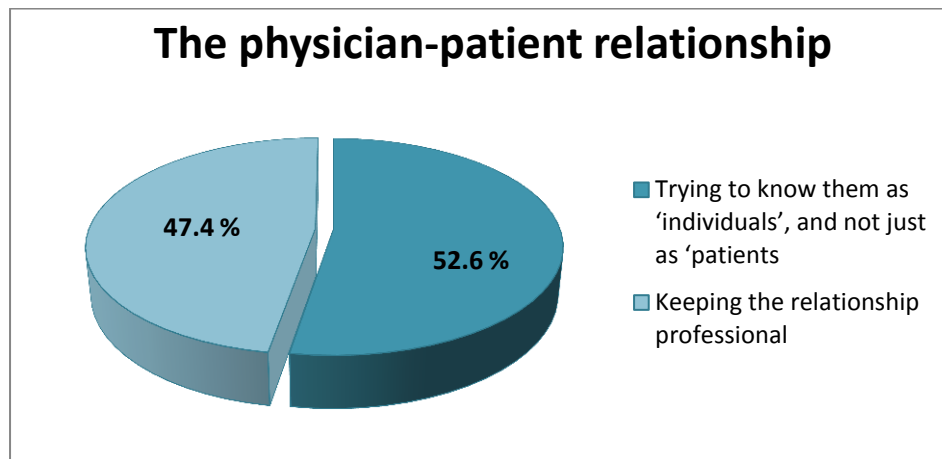


Graph N° 19-C: Reasons behind avoiding patients' personal matters.

On the other hand, and concerning the oncologists who avoid discussing such topics with their patients, 33.3% of them pointed out that they try – during consultations – to avoid anything that is not related to cancer management, and that being short of time does also prevent them to deal with such topics. Besides, 16.7% of the second category claimed that such a task goes beyond their competence and that they prefer to stay professional in their relationships with their patients.

ii)- Then, in connection with the previous one, but in a more general way, the following question for the participants was whether they prefer to build a close relationship with the patients and try to know them as 'individuals' more than 'patients', or they choose to

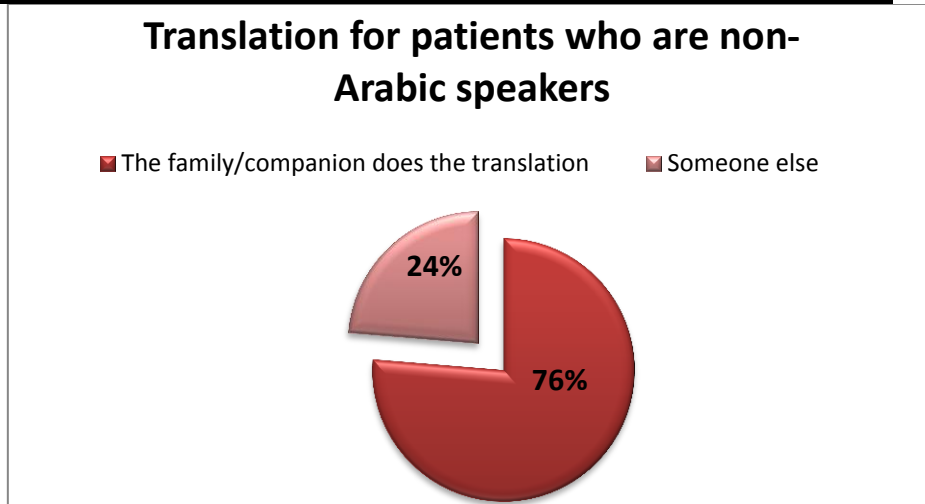
keep the relationship mainly professional; the graph below shows that: 52.6% acknowledged that they opt for getting closer to their patients and to socialize with them, while 47.4% choose the opposite and prefer to keep it professional.



Graph N°20: The physician-patient relationship.

In fact, the two previous questions were among the most important ones in the questionnaire, as they attempted to explore the nature of the physician-patient relationship and its impact on communication; it is logical that 76.3% tend to discuss personal topics because 52.6% are adopting a patient-centered approach, and this usually provides good results in healthcare (which is a clear response to the *R.Q N°5* and a refutation of the research hypothesis *H N°3*); the other category of oncologists (47.4%) obviously embrace a disease-centered approach, focusing on the physical status (symptoms, treatment effectiveness, management of side effects...etc.); although this second approach might seem very specific and concentrated only on the treatment of serious diseases, the patient-centered one is also effective, since it creates - as cited before - trust in the relationship and encourages the patients to adhere in the disease management, along with higher motivation and satisfaction with care.

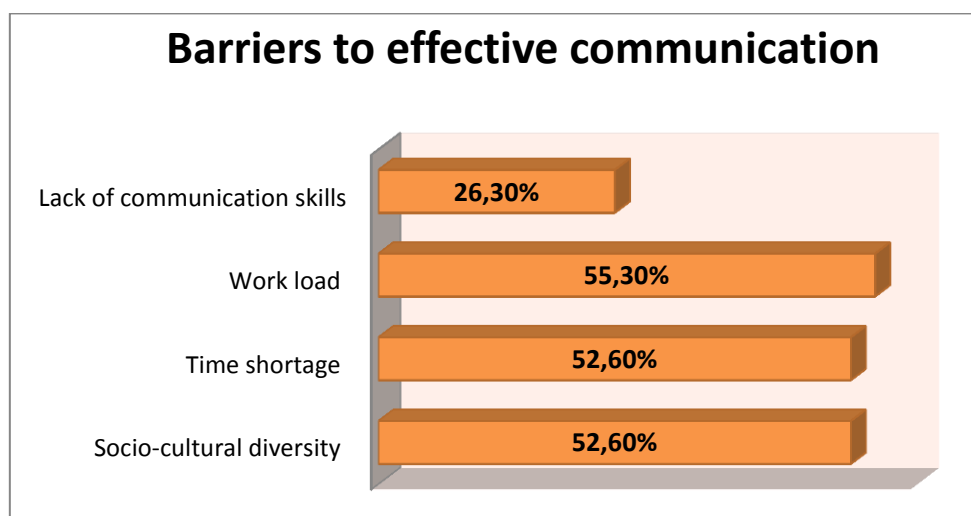
u. Communicating with patients who are non-Arabic speakers:



Graph N°21: Translation for patients who are non-Arabic speakers.

The purpose of this question was to find out who ensures the translation task when the patients who are non-Arabic speakers (speaking: Tachelhit, Tarifit, and other dialects) attend oncology appointments, and 76 % of the participants assumed that the family members/companions are the ones who translate from/to Arabic (which also relates the **R.Q N°6**), while 24% assumed that the task is carried out by someone else.

v. Barriers to effective communication:



Graph N°21: Barriers to effective communication.

One of the aims of the dissertation was recognizing the communication barriers the physicians encounter in their daily practice, and this question's results presented above point out that 52.6% think that the two major barriers are 'socio-cultural diversity' and 'time shortage', 55.3% implicates 'the workload', and only 26.3% recognized 'the lack of communication skills' as an obstacle to effective D.P.C (it is to note that there are other communication barriers that will be suggested by the oncologists at the end of the survey).

Concerning the socio-cultural diversity' factors, language is an important one, since it is the basis of verbal communication; the oncology hospital receives patients from the urban as well as the rural surroundings of Fez (and the east of Morocco), so it happens that some patients either do not fully understand Arabic, or they do not know Arabic at all (especially the inhabitants of the middle/high Atlas who speak only Berber language or 'Chelha'); if these patients are accompanied with someone who knows both languages, then communication might occur correctly to some extent, but if the companions are from the same region and do not speak Arabic as well (which is the case where the companion is there only for physical and psychological support), then communication might break down; the alternatives, in this case, are different and were highlighted in the question N° 24 in the questionnaire.

Additionally, another aspect of diversity was related to the literacy level of the patients and its impact on communication (as discussed in question N°16); the language use of physicians should be addressed as well, in terms of jargon use and 'switching' between the two voices: 'the voice of medicine' and 'the voice of life world' (Mishler, 1984); this socio-linguistic facet will be discussed - among others - within the analysis of the audio recordings.

Moreover, we saw that 52.6% of the participants argued the time shortage is a major communication barrier, which appears logical in connection with the question N°17, through

which it was shown that most physicians spend between 15 and 30 minutes with each patient; also, according to the statistics of the oncology hospital under study of the year 2016/2017, the number of consultations were about 43 patients on a daily basis; this demonstrates the little extra time the oncologists have to communicate with patients, bearing in mind that the priority is given to the physical examination, checking the different follow-up tests, and updating the medical file on the computer (**Hosix Net program**³), which leaves little or no time for socializing with the patients and chatting about what is not related to cancer management.

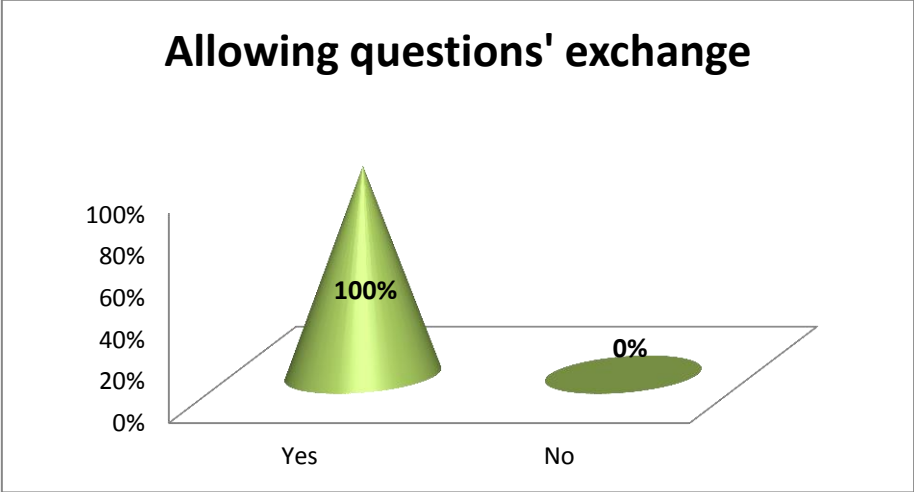
Workload, with 55.3 % was implicated as well; as cited above, the oncologist responsible for the consultation generally starts from 9h30 am to 3 or 4 pm, and even before the consultations start, the doctors have to attend a daily meeting in which they discuss the medical files of the patients being hospitalized, as well as the therapeutic decisions for the other category (who are not hospitalized, call also: ‘external patients’) who need to be called for either delivering some news or to be asked to come to the hospital for a consultation or a test. Also, sometimes after the consultations are done, the oncologists might have to go back to the department to finish any paperwork that needs to be done, and to get an update of the different activities they have missed during the day. Thus, workload – being closely connected to time shortage as cited above – is considered by the participants to be an important communication obstacle.

At last, 26.3% of the participants proposed that ‘the lack of communication skills’ might be a limitation as well; hence, oncologists can always acquire or improve the basics

³ **Hosix Net**: A software for healthcare data management, used in the CHU Hassan II since 2009/2010; it stores anything related to patients’ medical record, and it also generates different medical reports and prescriptions for the patients.

(such as interviewing skills, listening skills, acknowledging concerns for both patients and attendants, and serious news delivery).

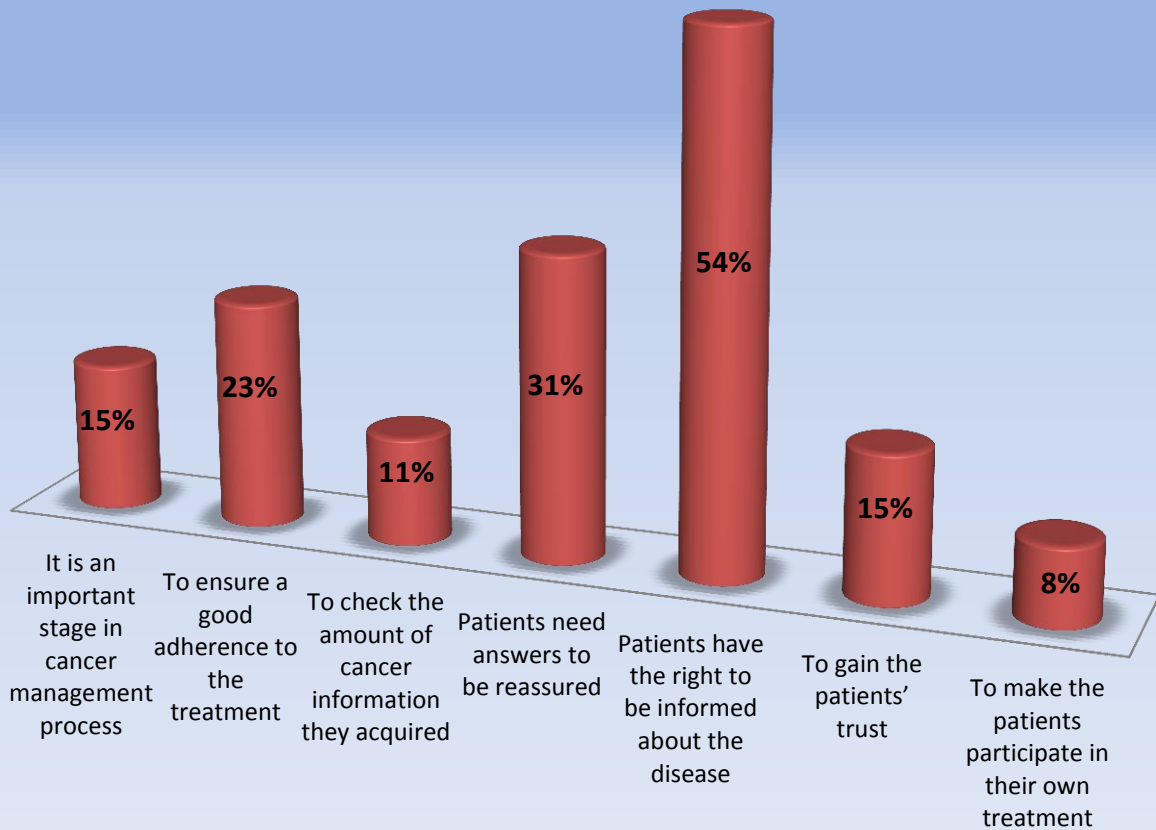
w. Exchanging questions with patients:



Graph N° 23-A: Allowing questions' exchange.

As a response to the research question **R.Q N°4**, about whether oncologists allow the questions' exchange with their patients, or not, the illustration demonstrates that the participants confirm that they allow questions' exchange, and they mentioned various reasons presented in the following chart:

Reasons for questions exchange:



Graph N°23-B: Reasons behind allowing questions' exchange during consultations.

The results indicate that the entire oncologists involved in the study do exchange (ask and receive) questions with their patients; in fact, the classic model of communication exchange is the one with the physician being the interviewer, and the patient being an interviewee whose task is to answer only. However, it was cited several times that communication should be bi-directional, and then questions and answers must be answered and asked by both parties, which happens to be applied by our participants in the oncology hospital of the CHU Hassan II of Fez; the reasons behind this behavior were different, and

will be presented here in the decreasing order of importance; the most substantial one was: 1) – ‘The patients have the right to know about the disease’ with 54%. Indeed, patients have the right to know the amount of information they ask for or that should be immediately conveyed to them (or at least to their families). After, there is 2) –‘Reassuring the patients’: cancer patients often feel insecure, especially during the beginning of the treatment, thus they might have a lot of concerns or ambiguities to be cleared out, just by asking for explanations or even corrections of what they already have in mind; once this objective is met and their curiosity is fed, the patients would feel reassured and their psychological state will improve. Then, the 3rd consideration argued by the oncologists is ‘Ensuring a good adherence to the treatment’ by 23%; as a matter of fact, sometimes patients do not get the right recommendations from their caregivers, either concerning how to use some medicines, or about lifestyle measures (like diet, physical activity ...etc.), and hence they might ask some questions in this regard, and providing them with the suitable answers (taking into consideration their socio-cultural level and physical status) would make them follow the treatment recommendations effectively. The 4th and 5th are ‘It is an important stage of cancer management’ and ‘To gain the patients’ trust’; generally, the first consultations are the ones that witness a lot of questions’ asking from both parties (doctors and patients); afterward, questions get less frequent and are mostly about side effects and improvement of the health status; in this sense, the participants claimed that the questions’ exchange sets the stone for the cancer care process by clarifying all the ambiguities for the patients. Also, others (15%) noted that this fact allows them to gain the patients’ trust, a thing that is obvious since when the questions (or ideas) are shared, it is a proof of good communication and it creates a climate of trust and strengthens the relationship between the patients and the carers.

Moreover, the 6th reason for which 11% of the participants share questions is ‘To assess the amount of information their patients have’; the word ‘assessment’ means: exploring

what a patient already knows, correcting the false information, and adding new ones as needed. In the review of literature, it was shown that in the Moroccan context (as it is the case worldwide), cancer is often linked to a lot of stereotypes and its sources of information are not credible all the times; thus, by asking patients some specific questions (e.g.: diet or treatment dosage), the aim of the oncologist here is not to get the answer (because s/he already knows it), but to perform a brainstorming for the patients to add the necessary modifications for a good understanding and a better cancer health literacy.

At last, 8% of the participants provided the 7th reason for encouraging questions' sharing, which is 'To involve the patients in their own care'; indeed, this last justification is a quite solid one even though it was chosen by few physicians. It is closely related to the concept of 'decision-making': when sometimes there is a choice to be made in terms of treatment or any aspect of cancer management, oncologists ask the patients to choose the suitable option, which is the extreme opposite of the concept of 'paternalism in healthcare', and it makes the patients partly responsible for their own treatment.

x. Suggestions for better communication with patients:

At last, the questionnaire collected the participants' suggestions to improve the physician-patient communication in the oncology hospital under study, and they were as follows:

1- Reducing the workload, and dedicating more time for the patient:

Nine oncologists (out of 29) highlighted this idea; surely, it was previously recognized that the oncology hospital of the CHU Hassan II receives patients from Fez as well as north-eastern area of Morocco, which explains the important workflow; thus, an important workload might lead to the increase of stress and physical fatigue, and less amount of time devoted to each patient; it was highlighted several times how both the physical and psychological

environment state of the patients highly affects the communication process, and here, the oncologists tried to acknowledge the impact of workload on stress and mood disorders (creating a big communication obstacle) as well as physical fatigue. In addition, being short of time obliges the doctors to minimize the consultation duration to tackle the basic issues (what is purely cancer treatment-related), without paying attention to what is non-cancer related. Hence, less workload implicates long consultations and a good mental and physical state for the oncologists, allowing them to listen carefully to their patients and to deal with them adopting an adequate patient-centered approach.

2- Presence of a psychologist:

Eight (out of 29) doctors suggested that the presence of a psychologist, and more specifically ‘a psycho-oncologist’ is mandatory in oncology settings. Psycho-oncology is: “an interdisciplinary science, which includes areas of psychology, medicine, psychiatry and sociology. It covers not only areas of evaluation and treatment of cancer patients, but also support of care givers and professionals” (Fekete & Fekete, 2012, p.27); this definition clearly shows how rich psycho-oncology is, being multi-disciplinary and combining sociology/psychology and the medical field. Also, this definition demonstrates that the psychological support targets not only the patients (which was intended within this suggestion by the participants) but the healthcare professionals as well, to manage the stress and mood disorders they might suffer from. Besides, psycho-oncology is not a new discipline; it dates back to the ‘70s, and it has been acknowledged that all the patients must be evaluated and managed for psychological symptoms (Holland et al., 2010). Unfortunately, this discipline is not recognized in the Moroccan healthcare system yet; however, psychology is, and the proof is that the Oncology hospital under study recruited a full-time psychologist to manage the patients in need of psychological counseling. However, this psychologist has her own private office and does not attend the consultations; she deals with the patients that get addressed to

her by the doctors when the psychological symptoms get noticeable (to the oncologists). In this context, if the psychologist is present during the consultations, she might immediately interfere once there is a serious news delivery, or even to tackle a minor psychological sign (of stress, anxiety, depression...) that could not be detected by the oncologists or the patient him/herself. Unluckily, the hospital's psychologist cannot ensure this task with all different consultations occurring simultaneously in the three departments. Thus, the hospital's policy imposed the recruitment of one psychologist, and she is contacted whenever there is any psychological disorder that the oncologists could not handle themselves.

3- Communication skills training:

Among the suggestions, and for effective physician-patient communication, eight oncologists noted the need of communication training inside the oncology settings. Countless times in this dissertation, we stressed on the role of communication skills training in organizations generally, and healthcare settings more particularly. Indeed, communication skills are not innate, but people acquire the basics through practice; still, more professional and specialized communication can be learnt. Then, the hospital's policy should include ensuring periodical communication training, to improve the physicians' potential, and to draw attention to its role in oncology. Plus, communication classes are being implemented in medical schools as well, to make the future doctors familiar with the concept from their early years in the medical discipline.

4- Education and awareness sessions:

The participants suggested the organization of education sessions to raise the awareness and to explain – in simple manners - the disease (cancer), its potential contributing factors, its symptoms ...etc.; the goal would not be providing technical and medical details, however, these sessions could be very simple – yet precise - to give the cancer patients (and

their families as well if possible) the basic cancer information that are vital and a must to know, such as the types of cancer, how to use oral medication, how to recognize major the side effects, and how to adopt a healthy lifestyle. Also, another important aspect of this education is to refute the numerous stereotypes we have talked about earlier, especially when it comes to the patients of very low socio-economic classes.

In this way, the benefits will be shared between both patients and physicians: the former would be more aware of the disease and more involved in the decision-making (due to a significantly higher cancer literacy and lower anxiety level), and for the doctors, communication would be smoother and more fruitful, since the two parties would be on the same wavelength; again, a good cancer health literacy will immediately lead to a better management of cancer.

5- Improving the working conditions:

The last suggestion consisted of the improvement of the working conditions in the oncology hospital, and the sub-propositions were:

a- Increasing the numbers of physicians:

When there are a higher number of physicians, it allows the division of tasks and then creates an ease in the workplace and prevents burnout. Besides, when the patients come to oncology consultations, they might find the same oncologist who checked in them the last time they came (which is the ideal case), as they might find another one they have not met before, simply because doctors take turn in ensuring consultations for two main reasons:

- It allows them to deal with different patients, which means: different types of cancer and medical records, and this diversity enriches tremendously their medical expertise;

- It ensures better equity in accomplishing different tasks, as well as diagnostic and therapeutic techniques.

However, for the patient, the most suitable thing is to be managed by one oncologist, who is familiar with him/her and who knows best his/her medical status, which makes the patient comfortable and then able to communicate effectively.

b- Providing individual offices:

In the section devoted to ‘Obstacles in physician-patient communication’ in the literature review, it was noted that the physical environment has a very important impact on communication, especially when it fails to ensure privacy; for this purpose, some of the participants suggested that having individual offices, where they can receive patients and talk to them comfortably, would be a good added-value. Sometimes, it happens that patients have a worry and need to consult their doctor (even for a few minutes), but if they do not have an appointment that day, they might not be welcome if the motive is not a serious one. However, if the oncologists have individual offices, they can consult those patients there, a thing that will surely prevent talking with each other in the department’ hall or in a busy consultation room (where there are other patients), and this will significantly improve the communication quality.

IV.3 Analysis of the audio recordings:

The complete transcriptions of the tape-recordings are to be found in the appendix section, and below, the relevant doctor-patient conversations will be presented within themes; it is important to note that these ‘quotes’ were translated from Moroccan Arabic (Darija) into English and that any French term used (by either doctors or patients) were kept as they are without translation. We have already pointed out in the methodology part that the recordings were performed over eight months, and this generated various tape-recordings, with a total length of 23 hours, 27 minutes, and 37 seconds.

In fact, the analysis of the recorded conversations allowed us to identify several barriers and aspects of the communication between oncologists and their patients; the majority of these obstacles were mainly ‘patient-related’, yet, some physician-related ones were highlighted as well.

IV.3.1 Patient-related barriers:

Let us start with this category, since it includes various aspects, and it is really worth investigating.

IV.3.1.1 Cancer literacy:

IV.3.1.1.1 Side effects of treatment:

One of the patients’ main concerns during consultations was about the side-effects of the cancer treatment they were undergoing, for instance:

- #1: *’I have period disorder...’*
“ ndy h̄t̄a h̄q̄ āls̄h̄r ma mq̄ādash̄ ”
- #13: *“Please doctor, do not prescribe any oral medication for me, I have had enough and my stomach hurts a lot”;*

“‘afaḳ aā duktẉṛ ma ta ʔinīsḥ ḍwā līy kaỵikaḷ, kḥdī ḅzāaf̣ ẉ ma ʔidī kaīdaṛnī ḅzāaf̣”

- **#15:** “*I feel some tingling in my arm after chemo sessions*”.

“kāṇḥaṣ ḅshī ṭnmaḷ f̣yidīy mūrā sḥhīmyū”

Although these examples might seem serious concerns for patients, they are just some side effects of the treatment, and should not be that worrying.

IV.3.1.1.2 False cancer information:

- **#3:** “*... it looks like the chemo sessions I have been taken were useless*”

“...dwḳ alhīsaḥ̣ allīy kḥdyṭ ma daru walu”

The patient whose intervention stated in the quote above had ascites (the presence of a serous fluid in the abdominal cavity), which is a sign of the disease (an abdominal cancer in this lady’s case), but it does not immediately reflect the uselessness of the treatment. Apparently, the patient had in mind that the chemotherapy will eradicate cancer although her diagnosis was a bit late; rather, the treatment would only reduce (but not ‘fully cure’) the symptoms and improve the quality of the patient’s life; this misconception influenced the patient’s psyche, which made her express dissatisfaction with care.

- **#4: Patient’s companion:** “*Is there anything serious?*”

“wasḥ shỵ ḥaja kḥatīra?”

The misconception is that: ‘If a patient is about to get chemo, it is because the cancer is getting advanced, which means a worse health status’; thus, instead of asking about the patient’s status, the only thing the companion thought about was something serious going on.

- **#5: Patient’s brother:** “*Please prescribe to us what is necessary so she can start chemo as soon as possible*”.

“‘afaḳ ḳtaḅ līnā dakshỵ līy ndīru basḥ tabdā alsḥhīmyū f̣ aaq̣raḅ waqṭ”

Oncologist: “Well as you know, your sister has a complicated cancer due to metastases, and chemo will not fully eradicate the disease, it will however make her feel better”.

“kyf rāk ‘arḥāh kḥtak ‘andḥa saratān majhad ḥyī sarḥ, w
alshīmyū maghādīsh ṭḥaydū f mṛāq, lakin gḥadī tathāsh
lḥalah dyālḥā”

Again, the companion (brother) of a very ill female patient with advanced cancer initiated the conversation first, by asking for the necessary testing so that his sister could start chemotherapy as soon as possible, with a misinterpretation in mind: ‘the sooner she takes the treatment, the quicker cancer will disappear’. Then, the answer of the doctor consisted of three elements:

- A reminder of the case (Melanoma, which is: ”A highly malignant tumor that metastasizes widely and rapidly” (*Dictionary by Merriam-Webster, n.d.*) ;
 - Correction of the misinterpretation ;
 - Explanation: why she had not started the treatment yet.
- **#6: Doctor:** “So, here are the prescriptions for oral chemo and the next blood tests”.

“hahūmā lwraq dyāl ḍwā d alshīmyū w dyāl tāḥalīl jāyīyn”

Patient: “Blood tests again? Why? Is there anything wrong?”

“tāḥalīl ‘awṭānī? ṭash? yak laḥas?”

In fact, blood tests are prescribed to assess the status of the disease, and to evaluate the treatment being used; however, some patients – such as this lady – think that tests are asked only when there is something serious, she even used the word ‘**again**’ to - maybe - refer to that first time when she was sicker (at the diagnosis or the very beginning of the treatment).

Besides, the oncologist's answer aimed at calming her fear and explaining that it is just a routine test that gets repeated every three-month appointment.

- **#8: Doctor:** *“Why did he miss a lot of chemo sessions?”*

“lāsḥ mā jasḥ ḷ ḅẓaf̣ ḍyāḷ ḷḥiṣaṣ̣?”

Patient's daughter: *“He was still smoking ... now he stopped so we came to see you ... he is feeling so sick...”*

“kaṇ̣ māzāḷ kā ỵkmy, dābā q̣ṭa ʿẉ ja...ma ḥaṣṣḥ brāsū ṃzyaṇ̣”

This situation is a little similar to situation #5; the patient's family (especially the daughter) thought that the chemotherapy became so urgent when the patient got extremely sicker, and the patient himself decided to miss chemo sessions because he had been struggling with addiction (smoking) at that time. Again, the physician explained that an extremely ill body can never resist chemo and that it should be taken when the physical status is relatively stable.

- **#10: Patient:** *“I cannot wait to begin chemo”*

“fwqasḥ ṇbdā dyḳ aḥsḥyṃyū!”

Doctor: *“I will have to see you in one week with these tests done, to evaluate your health status and to decide about when to start it”.*

“khaṣnī ṇshūfḳ maṇ̣ ḍaba ṣimāna ḅ hāḍ tāḥalỵḷ, bāsḥ ṇshūf̣ ḥālīḳ ẉ ṇqaṛrū f̣ūqasḥ naḅḍaẉha”

Same as the previous situations, the patient's main concern was to start chemo.

- **#17: Patient:** *“Do I have to do tests regularly and bring the results in every consultation? Because I heard some women do tests in every check-up”.*

“wāsḥ ḳhāṣnī ṇbqā ṇdīṛ tāḥālīḷ dīmā ẉ ṇjīḅ ṃ ʿāyā j̣wāḅ kuḷ ṃrāq̣? ḥīṭ smạ ṭ shī ʿyālāṭ kāỵdīrū tāḥālīḷ kuḷ rūndīvū”

The question might seem normal and logical, being part of the follow-up protocol, but when the patient mentioned the reason behind the question (hearing other women chatting about the tests in waiting room), it explains that some cancer information provided by other patients are not always accurate, the proof is that the case of this patient is totally different from the others, and this is what the answer of the oncologist tried to clarify.

- **#18:** *“No, why? I already removed the breast because of cancer... should I do it?”*

“lā, ʿlāshū? rāh dījā mḥyḍdah lbzūwlah ʿlā wā ʾlkūnṣīr...wāshū kḥaṣnī ndīrhā?”

The lady is being treated for breast cancer, and she had not done the mammography for the follow-up session, thinking that since she removed one breast, there will be no chance for cancer to appear again.

- **#19: Wife of a newly diagnosed patient:** *“So, this cancer will spread nowhere else with radiation therapy?”*

“dābā hād lkūnṣīr mā ghādī yṣrah ʾltā shī blāṣah mʾa ʾlqāshī ʾāh?”

The patient’s wife had concerns obviously; she thought that – since it is their very first time in the radiotherapy department - the patient was addressed to the oncology hospital because of having an aggressive cancer (that he could not be operated for), but the progression of the disease will be assessed after the first sessions of treatment; in this sense, the doctor corrected the false information, and explained the nature of the situation as well as the treatment plan that will be adopted.

- **#21: Oncologist:** *“It looks like his liver is too sick!”*

“bānī lkābdah ʾandū yāqna bzāqf”

Patient's companion: *"We think that chemo is the cause... he took it for a while"*

"wāqilā shīymyū hīa sābab, khādāhā shī yāqamāt"

The misinformation is that 'Chemotherapy harmed the liver'; the truth is: the liver was too sick due to the disease (cancer), and then the staff's decision was to stop chemo once they had realized that the liver cannot resist it.

- **#22: Patient's companion:** *"Do not you think, doctor, that maybe an error in the chemo dose was the cause?"*

"mākādāshī ā dukūr' aānā shī ghalaḥ f' lqyās d' shīymyū hīa sābab?"

Oncologist: *"No absolutely not, the liver has a great role in the process of drug metabolism, since it is sick now, the chemo will have little- or sometimes – no effect"*

"lā, lkābdah nādhā dawr' bāshī taqašm d'wā, w' dābā hīt' m'rīdah shīymyū ghādī ykūn' maf'ūlhā qlyl' aāv' mun' adim"

This situation is almost the same as the previous one; the answer of the physician was a detailed one and aimed at correcting the false ideas.

- **#16:**

	Doctor	Patient
Q		<i>"Sometimes when I get exposed to the heat, my eyes hurt a bit" (shī m'rāqī mlīy kaḥkhrāj ī skhwnīāh, īnī kayḍaru'wnī)</i>
A	<i>"You do not need to worry about this" (blā</i>	

	<i>mā ihawāl min hādshī</i>	
Q		“Also, I got surgery on the back bone years ago, no problem with that?” (<i>w rānī faytah faṭḥah la šnsūl shḥāl hadi, mašhy mušḥkil?</i>)
A	“Yes, no problem...” (<i>āh, mašhy mušḥkil</i>)	
Q		“I did an abdominal ultrasound, and it showed gallstones, and this happened right after I started chemo” (<i>ārī wāḥd ilfaza dyāl ikaṣḥ, qālūt ‘andī lḥjar f lmrāqrah, wqa l hādshy mūr shīmyū</i>)
A	“This has nothing to do with chemo, you can get surgery later on for that, it is not urgent” (<i>hādshī ma ‘andūsh ‘alāqah b shīmyū, mumkin tāl min ba ḍ w faḥī līhā māshī mušta jalah</i>)	

The conversation above was made of separate questions/comments, and unfortunately, all her concerns had nothing to do with cancer signs or chemotherapy’s side effects, rather, it was all about some random symptoms any person could have; these concerns could be generated either by a psychological disorder, or by a very poor cancer literacy (thinking that any physical symptom a patient under chemo has, is automatically related to cancer and its treatment). Besides, this situation shows that communication is bi-directional and that questions and answers are being asked and answered by both parties (doctors and patients), and this responds to the *R.Q N°4*, confirming that the doctor-patient communication is certainly a bi-directional one, and that the medical consultations witness a switch of participants’ roles between interviewer and interviewee.

From this section, it is to conclude that the cancer literacy was a major communication issue, and this closely relates to the **R.Q N°2**, and highly proves that low knowledge about cancer significantly influences (negatively) the communication process.

IV.3.1.2 Health literacy:

- **#2: Oncologist talking to the family:** *“I am going to prescribe some pain killers and some vitamins for him ...”*

“ghādi nkharj lyh dwa dyal alhryq w shy vytamynat ...”

Companion: *“Vitamins? In food or what”*

“vytamynat? f lmākla w lāa shnū?”

While prescribing some medication for the patient, the doctor pronounced the word ‘vitamins’, then the question of a family member was: *“Vitamins? In food or what?”*; this question is a spontaneous one, but the word ‘prescribe’ would have given a hint that the oncologist meant ‘supplementary vitamins’ that would quickly help the patient get better, but unfortunately this was not the case.

- **#7: Doctor:** *“The tests are good in general, except some low levels of sodium and potassium. I will prescribe a syrup for potassium, and for the sodium, you will have to add some extra salt in the food you take”.*

“tāhālyl ‘u’ mūma’ā mzyāniñ, aīlāa sūwdywm w lbwtasywm naqšīñ. ghady naktab līk sīyrū l lbwtasywm, w khašk tbqly tzydī lmlha f lmākla dyal k”

Patient: *“Yes... I know I have an anemia... they already transfused me with two blood units”*

“āh rany ‘arfaḥ... andī faqr dām...rah zaḍwny shy jwj khnāshī”

The physician’s argument was a clear one: the only thing abnormal is the low levels of two - out of many - blood components: the sodium and the potassium, and he also provided the solution for both abnormalities: a syrup for the first, and adding salt in food as far as the

sodium is concerned; yet, it is obvious that the patient was not paying full attention, and all she has caught of the physician’s talk was ‘low’ and ‘blood’, which immediately made her think of ‘anemia’ as stated in her answer (Anemia is a quantitative deficiency of the hemoglobin, often accompanied by a reduced number of red blood cells, (‘Dictionary.com, n.d.). Therefore, two factors were associated with this communication breakdown: lack of listening skills, and poor health literacy.

- **#12: Patient’s wife:** *“I came to show you the tests’ results; he could not come because he is very tired, he has diarrhea and he feels something like fever or pain in his abdomen ... I do not really know”*

*“j̣ḅṭỵḳ ṭsḥẉf̣ ḥaḍ̣ tāḥ̣aḥ̣ỵḷ, maq̣aḍ̣sḥ ỵj̣ỵ ḥūa ḥiṭ ṇ̇ḍụ̄ ḷaḥ̣sḥāḷ ẉ kaỵḥ̣aṣ̣
ḅ ḅḥāḷ ṣ̌kḥana wlāq̣ ḥ̣ṛīq̣ f̣ ḳṛsḥū...mā ṛ̣af̣ṭsḥ”*

This is a special case, when the patient did not attend the consultation (due to his critical health status) and his wife brought the tests’ results they were asked to do. Besides, she began expressing her concerns about her husband’s poor physical condition by describing the symptoms; the description was ambiguous, associating different symptoms, and then she finished the sentence by ‘I do not know’, which proves total confusion. Generally, physical symptoms should be ideally described by the patient him/herself, and in case s/he cannot do so, the observation of the doctor should provide a general idea of the overall state; unfortunately, in this case, the description of the wife was not as accurate as intended, and then the oncologist asked to see the patient in person in the next appointment for a better management.

- **#20: Patient:** *“Is it too bad if I do not get my period anymore?”*

“ẉaṣ̣ḥ musḥkiḷ aḥ̣lā maḅq̣ātṣḥ kaṭj̣īnī ḥ̣q̣ sḥḥṛ?”

Oncologist: *“No madam, this is not a problem, and you are already 47 or 48 years old, so this is normal”*

“lā qa lālāh mashī mushkil, rāh dābā mīrak 47 wālā 48 ‘ady”

The doctor’s answer was a clear one and calmed the patient’s worry; she thought that the cause was the chemotherapy she was taking, but it is rather a normal thing since her age is almost 48, then obviously the patient had no idea about the concept of ‘menopause’.

- **#23: Patient’s daughter:** “I thought it was a flu, I bought the meds and it did not work... then I thought it might kill her and I stopped it (thinking that chemo might be a contraindication) ... the fever gets to 38°C sometimes”

“ḥsābī f lwal r wāh, shrī līh d wā w mā qdāsh... khfī la yqtālā w ḥbastū... shkānah kātwṣal tāl 38 shī mīraq”.

Oncologist: “Do not worry, 38°C does not have to concern you, and the results are normal for the time being... a simple inflammation of the throat can cause that, do not worry”

“ma ikhāfīsh, matkhal aksh 38 w tāhālīl ‘adīyīn hād sāq ‘ah..ghīr ltiḥab bsyī f lhalq mumkin ydīr ḥadshy, ma ikhāfīsh”.

The patient, with very critical health status, was under chemotherapy and her daughter was apparently the one in charge; her words sounded very confusing, and she was not paying attention to what the doctor was saying or asking; she kept repeating the same concerns (fever and pain). Also, we have noticed that there was the notion of ‘self-medication’ due to poor health literacy (38°C considered as a high fever, and confusing flu with other diseases or side-effects of chemo... etc.). The oncologist’s argument was clear, explained the cause of the symptoms, and even corrected the false health information.

- **#24: Oncologist:** “How are you doing today?”

“kī bqīty lyūm?”.

Patient: “Fine, actually I have the CT scan’s result and the PSA’s as well... the PSA level is too high... it is 38 and the last time it was only 22”

“mzyaṅ, jbi jwab dyāl škānīr w dyāl l PSA... l PSA tāl‘ah ... 38 w ākhir mrāh kānt ghīr 22”.

In this case, the doctor’s question was general, aiming at initiating the conversation. Then, the patient’s answer was very accurate, including even the purpose of the visit (bringing the tests for prostate cancer assessment); besides, he was able to recognize the normal level of the blood test too and compared it to the last time he had done it. On a side note, the patient came alone to the consultation and was giving the necessary accurate answers/comments, using both French and Arabic, and this explains why the communication was effective and smooth, and this confirms the research hypothesis **H N°2**.

Similar to the previous communication obstacle (cancer literacy), health literacy is another major barrier: it clearly affects the patients’ understanding of the doctor’s questions and recommendations, and it creates additional unnecessary concerns for patients and companions alike.

IV.3.1.3 Socio-economic barriers:

This category presents examples of limitations to effective communication that were caused by the socio-economic level of patients, within the attempt to answer the **R.Q N°2** and to confirm/refute the hypothesis **H N°2**.

IV.3.1.3.1 Illiteracy:

- #26:

	Doctor	Patient
Q	“How old are you?” (shḥāl f ‘amrak?)	
A		“I do not know” (maṅ raf...)

Q	“What did the dermatologist prescribe for those skin rashes?” (<i>shnū ktablīk ḥbīb d jld lā wd dūk ḥbāy līy fīk?</i>)	
A		“I do not know, I take 3 pills a day” (<i>mañ raf, kanākḥud 3 dl ḥbāqt f ḥḥar</i>)
Q	“Do you take any pain killers?” (<i>kātākḥud shī dwā dyāl ḥrīq?</i>)	
A		“Yes I take something ... I do not know its name” (<i>ḥḥ kanākḥud shī ḥājah</i>) (She takes her purse and shows the medication to the doctor)

It was noticed that communication broke down from the very beginning of the conversation; it is really a serious matter if a person could not even recognize his/her own age; once asked about the dermatology meds, she replied again by ‘I do not know’, but she gave a hint: the posology (three pills a day); also, to tell about the pain killers, she showed them to the doctor because she could not recognize the name. On the whole, the answers were all misleading and communication was not an easy task in this case.

- **#27: Doctor:** “We will add two more chemotherapy sessions, and then we will do a CT scan to assess the disease status”.

“*ghādī nẓidū jūḥ ḥiṣāqt d shīmyū w mūrāhā ndīrū skānīr nshūfū lmarḍ fīn wṣal*”.

Patient: “I know ... I know... this is what a tall guy told me last time, the one who referred me to the other girl”

“*ārḥah .. ārḥah, ḥaḍshī līy qālīy dāk lwalā ḥwīl dīk lmrāh, hūa līy ṣīḥnī nd lbnt lukhrā*”

When told that he still had more chemo sessions, the feedback was very poor ‘I know ... I know’ since he was distracted and not paying attention to the oncologist’s talk. Moreover, he could not even tell the names of some specific members of the healthcare teams, and his

choice of words strongly proved this, using: *'that tall guy'* to refer to the other oncologist who checked him during the last appointment, and *'the other girl'* to refer to the department's secretary.

- **#28: Doctor:** *"Can you remember when our last appointment was?"*

"āqīl fūqāsh kān lmaʿw id aḵhir mraḥ?"

Patient: *"I think it was in Ramadan"*

"wāqīlā kān f ramḍān".

To that question, the oncologist expected a precise date; rather, the patient's reply was a vague one (*in Ramadan*), which refers to a one month-period and not a specific day.

- **#30: Doctor addressing the companion:** *"Does he (the patient) take any medications?"*

"wāsh kayāḵud shī ḍwā?"

Companion: *"Yes... some red pills"*

"āh... kayāḵud shī ḥbāḳat ḥūmr"

The doctor addressed the companion by asking her a very straightforward question about the medication being used, and the answer was very misleading *'Yes... some red pills'*; this is a very common communication obstacle by patients, thinking that the doctor would guess the medication name by its color, which is wrong.

- **#31: Doctor:** *"What pain killers is he taking?"*

"āyynā ḍwā ḍl ḥrīq kayāḵud?"

Patient's companion: *"The ones that costs 68 dirhams"*

"hadāk līy kayḍīr b 68 ḍḥam"

Similar to the previous case, the companion referred to the pain killers by its price (*The ones that cost 68DH*). The oncologist then provided a solution for her (companion) to make the task easier in future consultations (which is: bringing the medicines or at least its package to know the exact name).

- **#39: Doctor:** “*When did you do the CT scan?*”

“*fūqāsh̄ dr̄tī skānīr?*”

Patient: “*A long time ago ...*”

“*sh̄hāl̄ hādī*”

The aim was obtaining an exact date, then the answer of the patient was ‘*a long time ago*’, which is not accurate and will not help the oncologist in the medical history taking process (since the patient came without the medical files containing the CT scan).

- **#37: Doctor:** “*How old are you?*”

“*sh̄hāl̄ f̄ am̄rak?*”

Patient: “*I do not know... here is my identity card*”.

“*mā raf̄ts̄h̄.. hāhīa lākārī dyālī*”

The patient, non-accompanied, did not even tell the age and presented the identity card to give the doctor an idea.

- **#35 & 36:**

		Doctor	Patient
35	Q	“ <i>What hormonal treatment are you taking?</i> ” (<i>aḥynā fānīd̄ kātākḥud?</i>)	
	A		“ <i>I do not know its name ... I have a pill with me... here it is</i> ” (<i>mā ar̄fāsh̄ sm̄tū.. n̄dī wāḥd̄ l̄ḥabāh̄ hnā.. hāhīa</i>)

36	Q	“Do you take any medication?” (wāsh katākḥud shī ḍwā ?)	
	A		“Yes, here it is...” (āh... hāhūa)

In these two situations, when asked about the medicines being taken, the patients showed them to their doctor instead of telling their names.

- **#38: Doctor:** “Did you use the dental prosthesis?”

“wāsh ḍrtī dīk jldah ḍyāl snān?”

Patient: “No, they asked me to but I did not ... I did not understand what they said ... I am illiterate”

“lā.. qālūlī dīrīhā w mā ḍrthāsh... mā fhamīsh shnū qālūlī.. qānā mā qāryāsh”

The periodontal disease can take place after radiation in the case of head and neck cancers, and then no dental care should be performed during the treatment, and hence, prevention is the key; in this sense, the patient was told to get a dental prosthesis in order to maintain a good dental condition, but unfortunately, she did not, because she could not understand what had been said, and she did not even ask for explanations the time she was asked to (when she surely was not accompanied), and she also admitted it herself: ‘I am illiterate’.

- **#42: A patient’s companion commenting:** “...illiteracy is a problem: we take papers (prescriptions) from one person to another without understanding what they are about”

“ljahl mushkilah... kānākhdū lwraq mn nd wāhd l wāhd w mā ‘ārfinsh shnū fthum”

A clear statement and acknowledgment by a companion ‘...illiteracy is a problem’, showing that literacy is mandatory to facilitate cancer management and the different procedures

(appointments, treatment prescriptions, tests' prescriptions ...etc.), as well as communication with other healthcare professionals involved in the care.

- **#43: (Doctor):** *“Did you do the CT scan we asked for last time?”*

“wāsḥ ḍrṭī ṣ̌kāṇīṛ ḷīy qulnālḳ ḍīḳ ḷmarāh?”

(Patient): *“Euh ... I did not... I do not know, you can check in the file you have in hands...”*

“mā ḍrṭūsḥ... mā ʾrafṭsḥ.. sḥūf̣ f̣ hāḍ ḷmilaf̣ ḷīy ʾndy”

In the answer of this old lady, there was a hesitation at first, a negative answer, then doubt, and the final answer was: *‘I do not know’* as an epistemic device to show that she really had no idea. Additionally, she suggested – as a solution – to her doctor to check the files she gave him.

IV.3.1.3.2 Poverty:

- **#45: Doctor:** *“We need these tests done as soon as possible”*

“khāṣṣnā hāḍ tāḥālīḷ ydāqarū f̣ āāqraḅ waqṭ”

Patient: *“I cannot afford them”*

“mā ʾanḍṭsḥ bāsḥ”

The statement of the doctor was to show how important and urgent it was to do the tests, by using *‘we need’* and *‘as soon as possible’*, which demonstrated the seriousness of the situation; in return, the patient’s reply was not about how serious it was, nor the reason behind the tests; rather, it was all about her financial inability to do them using: *‘I cannot afford them’*.

- **#46: Doctor:** *“Madam, you need to do the cardiac ultrasound and the CT scan to check the status of the node you have”*

“*sḥrīfah, khaṣnā ndīrū wāḥd ilfāzah ḍyāl lqalb w škānīr bāsḥ
nshūfū fīn ẉslāt dīk lḥbūbah līy ‘andk’*”

Patient: “*How much does it cost?*”

“*bsḥhāl kāydṛ haādsḥī?*”

Same as the previous case, the answer was made of a question about the price, and not about anything related to the disease.

IV.3.1.3.3 Social barriers:

In this segment, we will provide some pieces of conversations highlighting some communication obstacles between the oncologists and patients’ companions, who are either fully or partially in charge of the cancer management, and thus they are the ones who answer the questions asked by the doctors during the consultations.

- **#47: Doctor:** “*Sir, did you do the CT scan?*”

“*sḥrīf, wāsḥ ḍṛtī škānīr?*”

Patient’s daughter: “*I do not know; he is accompanied each time by a different person*”

“*mā raftsḥ, kulā mrāh kayjī ṃ ‘āh wāḥd fīnā*”

Generally, if a patient’s companion (a friend or relative) is the one in charge, he/she is the one who communicates with the healthcare professionals on behalf of the patient. However, if this particular person is unavailable (for a particular reason), the patient either comes alone to the consultations, or accompanied by a different - or ‘new’- person, such as the case in this situation; the companion had little/no knowledge about the medical record, and she even acknowledged herself that the patient is very passive and comes every time with a different family member; therefore, this caused a major communication breakdown.

- **#48: Doctor:** “*Does he still take medication?*”

“wāsḥ mazāl kayākhuḍ ḍwā?”

The kid accompanying the patient: “No, he used to take the green pills and now he stopped”

“lā, kān kayākhuḍ shī ḥbāq̣t khūḍṛ ẉ dābā ḥbāshūṃ”

This is a very critical case, where an old male with advanced cancer attended the oncology consultation with a kid (of almost 9 or 10 years); the kid tried to answer the doctor’s question though, doing the best he could: he provided the color of the pain killers in an attempt to give an idea about the medication’s name, but he was not successful. Besides the communication barriers, this situation highlights two aspects:

- A kid could never be able to manage the details of a serious disease like cancer;
 - For him (the kid), witnessing the suffering of ill people in an oncology setting might psychologically traumatize him.
- **#49: Doctor talking to an old patient with prostate cancer:** “Do you have any referral letter?”

“wāsḥ ‘andḳ rīsālāḥ bāsḥ sīf̣tūḳ ḷ ḥnā?”

Patient: “No, all the papers I have are the ones my granddaughter has”

“lā, ḷwrāq̣ ḍyālī kāṃlīṇ hūmā ḷy ḥnḍ ḅntī”

The old man’s answer was very straightforward, mentioning that he came to the consultation without his granddaughter (who is in charge and has all the files), and this is a problem for patients who are used to come with a same ‘permanent’ companion.

- **#50:**

	Doctor	Patient/companion
Q	“Madam, do you remember when did you get surgery?”	

	(<i>sḥrīfah, ‘āqlah fūqāsh drrī</i> <i>ī‘amatāq?</i>)	
A		(The patient’s son) “No, she does not” (<i>lā, rāhā mā ‘āqlāsh</i>)
Q	“I know, I want her to get involved in the conversation” (<i>qānā ‘ārj, bghīthā hīā thdar m ‘ānā</i>)	
A		“I think the surgery was after Ramadan” (<i>wāqīlā f ramḍān</i>) Replied the patient herself.

Here, the patient (in her ‘50s) came with her son, and although she looked physically well, she was extremely passive; her son masters the details of the treatment and he is the only one who talks; the oncologist tried to involve her in the conversation by asking her a question (to which he already had the answer), and that was the only time she said something, and still, her answer was not accurate (After Ramadan, which could mean the period of summer 2016).

IV.3.1.3.4 Linguistic

IV.3.1.3.4.1 Forms of representations of illness:

- #51: Doctor: “Do you get any headaches?”

“*wāsh kayjyk ḥrīq rāq*”

Patient: “Sometimes ...but I feel good, and I vomit also...”

“*mṛāh mṛāh .. wa lakiṅ mzyān .. w kāntqāq*”

The answer to the question was ‘sometimes’, and after a pause for a few seconds, he added: ‘But I feel good’, and ‘I vomit also...’; the argument of the patient was made of fragments, expressing contradictory symptoms, and even though it partially answered the doctor’s question, it still induced ambiguity.

- #52: Doctor talking to a patient with breast cancer: “Do you feel any pain?”

“wāsḥ kāṭhāṣ ḅ sḥī hṛīq̣”

Patient: “Sometimes, when I lean, I feel something in my chest... I do not know”.

“mṛāḥ mṛāḥ ... mḷīy ḳāṇḥnī ḳāṇḥṣ ḅ sḥī ḥājah f̣ ṣ̌drī...
mā ṛaf̣tṣḥ”

Menz stated that “the representation of pain ... in medical communication is problematic, because ... the everyday language provides a limited repertoire of expression” (Wodak, Johnstone, & Kerswill, 2011, p.4). Indeed, when the doctor asked the woman about pain, she started describing a symptom, that might be either a sort of pain (a thing that is related to the question), or might be something else (such as a node); this answer was obscure and failed to determine the ‘localization’ of the pain/symptom, especially when she finished her sentence by ‘I do not know’, which means that she could not describe her subjective experience of pain.

IV.3.1.3.4.2 Poor feedback:

- **#44: Doctor:** “Do you have other diseases? Like: high blood pressure or diabetes?”

“wāsḥ kaṭdāwī īā sḥī ḥājah? bḥāḷ ṭūṇsyū wḷāq̣ ṣ̌kāq̣”

Patient: (He did not answer and remained silent)

The answer to the question was ‘a silence’, with no feedback at all; the old man showed no sign that he did not get the question, nor he got it and did not understand, or even that he had no idea.

- **#57 : Oncologist :** “You also need a sunscreen to protect your skin once outside”

“kḥāṣ̌ḳ ḥṭāq̣ wāḥḍ ḷkṛīṃ ḍyaḷ̣ sḥāmṣḥ ḅāsḥ īḥaf̣ḍ īā ḷbṣḥrah mḷīy
iḳūṇ bṛāq̣”

Patient: “I feel a pain in my head and chest too”

“kānḥṣ̣ bshī hrīq̣ f̣ rāq̣ ẉ ṣ̣dṛ tāhūa”

Here, we do not have a question, rather, a recommendation, and thus, the doctor was not waiting for an answer; still, the use of a ‘discourse marker’ (like: ‘alright’ or ‘ok’) by the patient would have constituted a clear feedback. Instead, the patient started expressing another concern without any reference to the given recommendation; therefore, the oncologist would not conclude whether the patient received and considered the advice without displaying any feedback, or she denied it and expressed another symptom when she took the turn to speak.

- **#58: Oncologist reassuring a patient:** “*You do not have to worry, these are just some side effects of chemotherapy*”

“mā ṣ̣dḳsḥ lāsḥ tḳhāf̣, hādū ghīṛ aā rāḍ jānibīāḥ dyāḷ sḥīyṃyū”

Patient: (She remained silent)

In this situation, after listening to the patient’s distress, the physician tried to calm her, explaining that her symptoms might occur to anyone under chemotherapy, then the patient showed no reaction at all; again, one could not tell if she has recognized her doctor’s reassurance, or not; such poor feedback is another major communication breakdown in cancer care.

This category shed light on the socio-economic level of patients and its influence on communication, and it provided an answer to the **R.Q N°2** and confirmed the hypothesis **H N°2**.

IV.3.1.4 Patient’s status:

IV.3.1.4.1 Physical:

- **#59: Doctor:** “*Did you take Doliprane* yesterday?*”

“wāsḥ kḥdītī Doliprane lbāṛḥ?”

(The lady had dysphonia and she could not talk loudly, so she whispered to the accompanying woman, and the latter replied):”*Yes she did, she had fever last night*”

“*āh kḥdātū, kāṇṭ škhānah tāl‘ah līhā lbāṛḥ bḷyī*”

This patient with dysphonia (difficulty in speaking) could not talk loudly at all; all she had done was whispering, a thing that might have required being so close to hear her talk. Luckily, the patient was accompanied by her daughter, and the latter was the intermediary, which- mostly- facilitated communication.

- **#60: Oncologist (talking loudly to a deaf, old lady and non-accompanied):**

“*Madam, what is the problem?*”

“*sḥrīfah, sḥnū lmusḥkil?*”

Patient: “*I lost the results ...*”

“*īfūlī tāhālī...*”

The point to shed light on is not the answer of old patient; rather, it is about her getting the question in the first place: she had a very reduced hearing acuity, and unlike the preceding situation, she was not accompanied (by someone to answer the questions or play the communication facilitator), and this made communication harder: even the first question had to be repeated – loudly – several times so the patient could hear it.

- **# 61-62:**

		Oncologist	Patient
61	Q	“ <i>Have you ever undergone any surgery?</i> ” (<i>aṃṛḳ ḍṛṭ sḥṭ ‘amalīāh?</i>)	
	A		“ <i>I do not remember</i> ” (<i>mā qaḷṭsḥ...</i>)

62	Q	“Sir, did you do the blood tests we asked for last time?” (<i>sḥrīf̣, wāsḥ ḍṛtī tāḥālū līy ḥlabnā dīk lmrāh ?</i>)	
	A		“No, I did nothing” (<i>lā ... mā ḍṛtī wālū...</i>)
	Q	“Why? Last time I asked you to” (<i>lāsḥ? dīk lmrāh qulīk idīrhum?</i>)	
	A		“I forgot” (<i>nsī...</i>)

These two encounters witnessed conversations with two different old patients (over 70 y/o), who both came alone to the oncology hospital, and who had a partial memory loss, and thus communicating with them was ineffective: they remained silent most of the time, and replied to the questions with either short affirmative questions, or using negation expressing their inability to report meaningful answers (*‘I do not know’*).

IV.3.1.4.2 Psychological:

- **#64: Oncologist talking to a newly diagnosed patient:** “How are you? Fine?”

“kī bqītī? laḥās”

Patient: “If I were fine, you would not have found me here ...”

“kūṇ ḳṇṭ laḥāṣ mā ṭlqānīsḥ ḥnāyā”

The question was a clear one, intending to socialize and set the floor for the consultation, especially because the patient is ‘new’ to the setting, but her answer was an indirect –and somehow an ironic – one that includes two messages: ‘she does not feel fine, at all’, and ‘she does not appreciate her presence in the oncology consultation/hospital’; her psychological distress was very obvious and prevented her from explaining clearly what was wrong with her.

- **#65: Patient:** “I need a prescription to do an MRI, because I am afraid the disease spreads to other parts of my body”

“*kḥāṣṣnī wṛqah bāshī ndīr rāḍyū lkbīr, khāyḥah laykūn lmarḍ
srah lshī blāṣah khurā*”

Oncologist: “Madam, listen carefully: the urinary symptoms are related to radiation, and the MRI will be useless in your case”.

“*shṛḥah sma ṭī mzyān: laā rāḍ d nbūlah ‘andhum ‘alaqah bl
aashī ‘āh, rāḍyū lkbīr mā ṣālḥ l wālū fl ḥālah dyālk*”.

Unlike the ordinary conversations’ format seen earlier, where the oncologist was the one who initiated the talk, here the first request was the patient’s; she looked very anxious because of the urinary symptoms (being side effects of the radiation taken for endometrial cancer). Also, the patient was a little obsessed and afraid of any metastases that could occur, so instead of asking for explanations, she requested a radiological testing: MRI scan (Magnetic Resonance Imaging) to check if cancer has spread somewhere else. In that sense, the answer of the doctor showed the uselessness of the test in her case and tried to calm her explaining that it was just a matter of side effects.

- **#66: Oncologist:** “So how do you feel today?”

“*kībqītī lyūm?*”

Patient: “I feel no improvement; my (bad) status remains the same ...”

“*mā kānḥaṣṣ btā shī taḥasūn, ḥālī bāqī hūā hūā...*”

Generally, a ‘How do you feel today?’ question deals with two facets: to start the conversation and socialize with the patient (as cited earlier), and to make him/her tell about any (physical or psychological) unease, and the reply of the patient - being managed for a prostate cancer - clearly shows how unsatisfied he was with the obtained results, without explaining the rationale behind that conclusion.

- **#67: Oncologist:** “So Madam, when did you do the CT scan?”

“*sḥrīfah, fūqāsḥ ḍṛtī ṣ̌kānīṛ?*”

Patient: “I do not know, but my husband does... I am afraid alone... I have kids and I do not want to leave them (to die)”

“*mā ʾrafīsḥ..rājīlī līy ʾārf̣ .. qānā kaṅkhāf̣ būhdī... ʾndī ẉlīdāt mā bāghāsḥ ṇmsḥī ẉ ṇkhalīyhuṃ*”.

Oncologist: “It is good to have your husband by your side, but still, you need to memorize some important things related to your treatment”

“*ṃzyāṇ ỵkūṇ ṃ ʾāḳ rājīlḳ... lakiṇ̃ khāṣ̌ḳ ṭ ʾaqlī ʾā ḷḥwāỵj̣ ḷmuhimāḥ ḷṃṭ ʾalqaḥ ḅ ḍwā ḍyāḷḳ*”

The patient was not concentrated, and her answer sounded so confusing, associating three elements:

- She does not know the details of her case;
- The husband is the one responsible for care (even though she is young and physically well);
- She is anxious: fearing to be alone (without her husband) even in a consultation room, and afraid of death.

Apparently, she replied to the oncologist’s question using ‘I do not know’, a thing that is justified by the three elements cited above.

- **#68: Doctor to the patient’s brother:** “We need to do urgent blood tests and a cardiac sonography, to decide when she can start chemo”

“*khāšīynāq̣ taḥālīḷ muṣṭa jālaḥ ẉ tlfāzaḥ ḍyāḷ lqaḷḅ bāsḥ ṇqarrū fuūqāsḥ ṇbdāẉ sḥīyṃyū*”

Patient herself: *“I cannot afford to pay ... I am too ill... I want to die... I am in pain”*

“mā ‘andīsh̄ bāsh̄.. aānā ‘yāqnah b̄zāqf̄. bāghā n̄mūt̄ ... f̄tāq lahr̄īq̄”

The female patient came with her brother, and the latter was the only one communicating with the oncologist during the whole consultation (because the patient was very ill due to her advanced cancer); at last, the doctor mentioned the need for urgent tests to decide about starting chemotherapy, and at that time, the patient spoke for the first and last time in that session, commenting *“I cannot afford to pay... I am too ill... I want to die... I am in pain”*, which highlights several things: her poor economic status (making them unable to pay for the tests), the exhausted psychological state (making her wish for death to get relieved), and the poor physical state as well. Also, none of the two (patient & her brother) asked about those tests (degree of urgency, usefulness... etc.).

- **#69: Doctor:** *“What medicines are you taking now?”*

“sh̄m̄n̄ d̄wāyāī katāk̄hud̄?”

Companion: *“I do not know... I will show them to you now”*

“mā ‘raft̄sh̄... hānā n̄war̄ȳhūml̄ik̄”

Patient: *“These medicines seem useless”*

“hadāk̄ d̄wā mā kaȳd̄īr̄ wālū”

Again, for a straightforward question, the - illiterate - companion tried to provide an indirect answer by showing the meds, but the patient himself was upset about his case, and then, his comment was about the ineffectiveness of the treatment, which sounded more psychological than physical. Besides, in this session, the patient and his companion were sometimes talking simultaneously (about different matters), and none of them was providing accurate facts.

IV.3.1.5 Combination of many factors:

Even if the previous situations demonstrated how the association of both the physical and psychological status – or the physical and the social ones - affects the communication process, we did categorize them according to the predominant aspect. However, some cases showed a very strong combination that no one could have ever missed; in this particular consultation, a male in his '40s (with advanced cancer) attended the consultation with his sister, and the oncologist noticed his very poor general condition, then she asked:

- **#70: Doctor:** *“Sir, what is the matter? Despite being physically ill, I have been noticing for a long time that you look depressed!”*

*“sḥrīf̣ yāḳ lābāṣ? ‘ārḥāḳ ʿyāḥ wa lakiḥ lāḥẓṭ ṃṇ sḥḥāḷ hādī qānāka
ḅḥaḷ aīlā ṃktaỵḅ”*

Patient, with aphonia, using signs and whispering to his sister, and the latter reported: *“I have allergies, and I cough a lot”.*

“ ‘andī ḅzāḥ̣ ḍḷ ḥasāsīāḥ̣ ẉ kāṇkaḥ̣ ḅzāḥ̣”

The man could not answer; he already had aphonia (the inability to produce voiced sounds), and he even tried using sign language and failed, then he whispered to his sister (sitting close to him) so that she could report that he had allergies, which missed the point of the doctor’s question. On a side note, we were told later by the sister that the patient was left by his wife when he got diagnosed with cancer, he became homeless and since then his state started getting worse; the social worker and the psychologist were contacted afterward to manage the situation because the case was extremely critical. Back to the main point, this context highlighted how the combination of the socioeconomic, physical, and psychological status has negatively influenced his communication with the physician; this particular case is mainly related to **R.Q N°5** and demonstrates that personal concerns of patients can sometimes be

dealt with as well in oncology consultations when the oncologist's aim is to improve their well-being.

IV.3.2 Physician-related barriers:

In the previous section (physician-related barriers), we shed light on the different communication obstacles that have been encountered in our study (within the qualitative approach). Besides, this one will deal with the physician-related barriers, which are not as rich as the patients', but they turned out to be purely socio-linguistic, and they will be presented below.

IV.3.2.1 Choice of expressions:

- **#71 and 75: Oncologist:** “*What is the problem?*”

“*shnū ḥmushkil?*”

Initiating the conversation is the first step of the physician-patient talk (after greeting of course), and it is very crucial especially for doctors since it highly influences the whole course of the consultation because it shows their readiness to interact with their patients (and companions).

Concerning the example above, in both situations, the oncologists used ‘*What is the problem?*’ (Arabic transliteration: *shnū ḥmushkil?*) to start the conversation at first. In fact, it is a very common question (used by doctors in general), and despite the literal meaning of the word ‘problem’, this question generally means:

- What is the motive of the consultation?
- Any abnormal symptoms?
- Do you need to know about something related to the disease?
- Do you have a paperwork issue?

Although this expression became familiar and understood – as it is intended by doctors - by most patients, it might still be misinterpreted by others (as the word ‘problem’ refers usually to something serious that needs to be solved or dealt with). Therefore, this question can be substituted by others, such as *‘What concerns you?’*, *‘Can I help you with something Sir/Madam... etc.* Also, it is worth mentioning that the expression was understood correctly by our participants (patients), however, we thought it will be worth discussing in this section.

- **# 74 & 92: Oncologist:** *“You/we need to do...”*

“khāṣṣk idīr/ khāṣṣnā ndīrū...”

This is used to express the immediacy to do some tests, on which the medical staff would get based to decide about the cancer management: when to start? What treatment to change/maintain? ...etc., and this kind of expression is used in almost every follow-up consultation. As stated earlier, in oncology settings, any testing (like blood tests or imaging examination) is just a routine to assess the progression of the disease as well as the effectiveness of treatment protocol being used. Therefore, when a doctor handles the prescription to a patient, the former explains the purpose (of the tests) as well as their urgency, and this might resuscitate fear or doubt for the patient depending on the way it is done. For example, in situation **#74**, the patient replied *“Why? Is there something wrong?”*, because the lady thought she had something bad that needed to be explored; however, it was just a routine testing that women with breast cancer perform every six months. Also, in **#92**, the patient assumed that he had a renal and/or kidney failure simply because he was asked to do some kidney and liver blood tests.

In both cases, the format of the doctor’s request/prescription through *“we/you need to do ...”* sounded somehow alarming, which highly demonstrates how the linguistic format of the utterances influences the patients’ understanding and therefore their feedback.

IV.3.2.2 Lack of specificity:

- #72 & 77:

- **72: Oncologist:** “You can take vegetables, fruits, and avoid the red meat”

“*mumkin tākul lkhubar w lfawākih, w b’ād min lham*”

- **77: Oncologist:** “Take whatever you want with moderation”

“*khud lly bghiti wa lakin b lqyas*”

A very common question asked by cancer patients is: ‘What should I eat?’ or ‘Is there a strict diet I should follow?’ It is a very simple question that implicates a very detailed answer (of course to achieve better outcomes for the patient). In #72, the physician’s answer was a basic one; although it did not include some food quantities or the name of specific vegetables that should be consumed with moderation/excess, the answer was still efficient for a patient who just recently started attending oncology consultations. Nevertheless, #77: ‘Take whatever you want with moderation’ seemed too broad; indeed, a dietician’s opinion always remains the best option to explain diets, still, the physician would have provided the patient with some general notions about the regime, instead of using ‘anything with moderation’ or ‘eat a little bit of everything’.

- **#76: Doctor talking to the patient’s daughter:** “Did she get that ‘plastic thing’ to put on the teeth?”

“*wash khdat dik lplastikah lly kaydiru l snan?*”

The oncologist was asking about the use of the dental prosthesis using: ‘plastic thing’ (referring to the prosthesis by the material it is made of), which was somehow better than using ‘gouttière’ in French in the middle of an Arabic sentence (as will be seen in another example).

- **#80: A newly diagnosed patient:** “Will I be taking chemo sessions every day? Because I am wondering if I would be able to go to work... I was fired from previous one because of my sickness?”

“wāsh^h ghān^bqā ndīr^r shīmyū kulā nḥār? ḥīt^t kānfakār^r wāsh^h
ghādī nqad^d nkḥdam... jrāq^w ṭīāq^m mḥ lkḥadmah^h lāw^lā ghī ṭā w^d lmar^d”

Doctor: “Actually No, you will be taking a 30 minute chemo session, and we will be seeing you 3 weeks later”

“lā, ghādī ṭbqā tākḥud^d ghīr^r ḥiṣāh^h flātīnⁿ (30) dāqāh, w^w nshūfūk^k
ilātah^h (3) d^d sīmānāt^t mūrāhā”

Here, the patient is asking if he would be able to go to work, but the answer of his doctor was not detailed enough; indeed, the chemo session last for about 30 minutes and then the patient will be free for 3 weeks, however, the side effects of chemo (such as pain and fatigue, nausea, and vomiting), especially after the first session, will be very noticeable and would immediately prevent the young man from working.

IV.3.2.3 Poor feedback:

- **#81: The patient’s daughter:** “My mom has fever and severe headaches... I am afraid it is because of the chemo she is taking... I want to know the reason”.

“l^wālīdah^h nḏhā shkḥānah^h w^w ḥrīq^q rāqāṣ^s mḥjad^d... aānā khāy^fah^h ykūnⁿ
hādsḥī^h mḥ shīmyū līy^y kātdīr^r.. bāghā nⁿ raf^fsābab...”

Doctor: (Remained silent).

The first thing the female companion claimed was the worrying physical symptoms, and she even asked for an explanation about them; once she had finished talking, the doctor remained silent, checking the medical files and reading the tests’ results; one could not realize if the oncologist got the question and that the silence was a moment of deep thinking and concentration, or that he had nothing to comment about the complex case, or even whether he

was listening to the companion talking in the first place; this demonstrates how poor the doctor's feedback was in this scene.

IV.3.2.4 Silence:

In the previous paragraph, we have seen the impact of silence (as poor feedback), but here we would like to deal it as a 'gap' in the middle of the conversations between patients and their doctors. In the tape-recorded consultations, moments of silence were sometimes detected, varying between 2 and 10 minutes, and this was either when the oncologist was reading the medical files, or when typing the updates of the medical record on the computer (especially for newly diagnosed patients).

IV.3.2.5 Code-switching:

- **#79: Doctor talking to a (cavum cancer) patient:** “*Madam, do you still put your ‘gouttière’?*” (‘Gouttière’ in French means the dental prosthesis)

“*sḥrīfah, wāsḥ māzālā kādīyīrī ḷgūtyīrī (gouttière) dyāḷk?*”

- **Patient:** “*No, I never did!*”

“*lā, ‘aṃrī dṛthā*”

- **Patient's daughter:** “*You did mom, she (the doctor) is talking about that thing in which you put that paste (referring to the Fluorine paste)*”.

“*lā aṃy dṛthā.. ḥ̣ḅbah kātḍwī lā dīḳ ḷḥajah ḷy kayḍrū ṭihā dāḳ ḷma jūṇ*”

While talking to an old lady, being treated for a cavum cancer, the doctor asked her about the use of the dental prosthesis, and for this purpose, he used its French term ‘*gouttière*’ in the middle of an Arabic sentence; the patient, being illiterate, did not ask for a clarification, so it was easy for her to respond using negation. Luckily, her daughter was present and could recognize the term, and she even gave a simple description to her mom using ‘*that plastic thing*’ (prosthesis) that is used with ‘*that paste*’ (**Fluorine***); we can notice how the presence

of the companion in such situation contributed effectively in the physician-patient communication and corrected the misunderstanding for both parties (patient and doctor). Hence, we can conclude that the communication breakdown – almost - occurred for two major reasons:

- The patient: being illiterate, did not understand the French term, and provided poor feedback;
- The doctor: used code-switching (due to the habit of using French in the workplace and the medical training in general);

Also, this case showed that the presence of a companion (the patient’s daughter) improved the communication quality, which supports the research hypothesis *H N°2* and answers the *R.Q N°6*.

▪ #76:

	Doctor	Companion
A	(Talking to the patient’s daughter) “Did she get that ‘ <i>plastic thing</i> ’ to put on her teeth?” (<i>wāsḥ ḳḥḍāi ḍīḳ ḷplāsḥtikah ḷīy ḳāỵḍīrū ḷ śnāṇ?</i>)	
Q		“No I do not think so” (<i>lā... mā kaṇḍḥsḥ</i>)
A	“Then she has to, and she must also use a ‘ <i>produit</i> ’ that is rich in ‘ <i>Fluor</i> ’ to protect her teeth”. (<i>ḳḥāsḥḥā tāḳḥdḥā ẉ īsṭ mḷ tā wāḥḍ ḷprūḍwī ḷīy g̣hanī ḅī flūū bāsḥ iḥāf̣ẓ tā śnānḥā</i>) (The words ‘product’ and ‘Fluorine’ were spelled in French).	

Very similar to the previous scene, and in the sense of the dental prosthesis’ use (in radiotherapy contexts), the second recommendation witnessed the use of two French terms

‘produit’ (‘product’ in English) and ‘Fluor’ (even if it sounds the same as in Arabic). Here also, code-switching was part of the communication obstacle.

This category highlighted the different physician-related communication barriers that were depicted during the audio recordings, and the results confirm the research hypothesis *H N°1* about the impact of doctors’ communication skills.

IV.4 A sociolinguistic analysis of the physician-patient communication:

The qualitative method of this study was empowered by the use of ‘passive observation’ during the tape-recording process; since the researcher was ‘passive’ (not actively involved in the conversations between oncologists and patients) and ‘complete’ (present during the recordings), he was allowed to gather some field notes (or observational comments) about the encounters under study, because a lot of non-verbal cues occurred and could not be recorded, yet they – most of them – were collected by the researcher, classified and then analyzed at last, and when this process was combined with the literature, it allowed gathering some socio-linguistic elements of the doctor-patient communication in oncology, and they will be described below.

IV.4.1 Potential determinants of language variation:

IV.4.1.1 Nature and number of participants:

In the healthcare setting, as well as in our study, participants in the speech consisted of two parties: the doctors, and the patients (with or without a companion), which means it is either the doctor talking to one person or two people (or even more: patient and companion(s)), and vice-versa. This setting is considered to be a formal one where the consultation takes the form of an interview with the doctor being ‘the host’ or the one organizing the turn-taking process in the conversation (this will be discussed later in the analysis of the interaction format).

IV.4.1.2 Role of participants:

Generally, the physician is considered to be the care provider, and the patient is the healthcare seeker.

IV.4.1.3 Function of speech:

In consultations, and apart from the physical examination and the assessment of the health status through different tests, the function of speech takes the form of:

- Information seeking (by both parties): using yes/no questions, either/or ones, and open-ended ones as well; these questions greatly help make the accurate diagnoses and treatments, through an intensive examination of the medical history;
- Persuasion, medical recommendations and expertise (by doctors): by giving the medical instructions to achieve effective treatment, better management of side-effects, and also some advice to adopt measures of health and hygiene. Mainly, this function of speech deals with any instruction aiming at improving the overall health status of the patient;
- Expressing concerns and needs (by patients): besides questions, patients tend to use speech acts, like statements or even directions, and this is the case when they are really concerned about their health condition, or during the early consultations when they just get newly diagnosed and are not familiar with the medical settings.

IV.4.1.4 Nature of medium:

The medium of interaction is mainly speech; sometimes, some prescriptions given to patients are written, but they get explained verbally as well. Also, some minor aspects of non-verbal language occur (by both parties); still, the most dominant medium remains the verbal

language, and it is the one that had been recorded (or caught) and analyzed within the qualitative method of our study.

IV.4.1.5 Genre of discourse:

In consultations, the discourse generally takes three forms:

- Regular (the one used by individuals in their daily interactions, and it is neutral since it adopts no specific terminology);
- Scientific (it makes use of scientific terminology, using different medical/technical terms for specific purposes);
- A combination of both.

IV.4.1.6 Physical setting:

The setting of the interaction - in our research - was the consultation room, and it is characterized by two things:

- ✓ Being formal:

It is a professional setting, and it adopts both formal and informal communication, taking generally the form of interview/conversation depending on the situation.

- ✓ Witnessing physical noises :

In the recorded consultations, we were able to depict some types of noises that create significant impediments to clear communication:

- ***Distraction***: caused essentially by cellphones;

- **Interruption:** consultation room' door opening, either by patients (who came in intentionally to ask for something, or who got in the wrong room by mistake), or other healthcare professionals;
- **External noises:** people talking loudly in the wards, ambulance sirens...etc.

IV.4.2 Sociolinguistic aspects of physician-patient communication:

IV.4.2.1 Turn-taking, structure, and timing of the questions:

IV.4.2.1.1 Turn-taking:

As stated earlier, the conversations took the format of an interview, with the oncologist being the interviewer, and the patient as the interviewee, but sometimes the roles get reversed (the patient becomes the interviewer depending on the level of curiosity/concern s/he has, which makes the doctor the interviewee). Nevertheless, patients have the habit of getting involved in everyday conversations and are not used to be interviewed, which makes the task a little tricky for them.

Research in turn-taking focused on its two concepts: the competitive and the cooperative; it is important to distinguish between the two types of overlap while dealing with simultaneous (overlapping) speech: the competitive one is a sign of power, control, and dominance, while the cooperative one shows rapport and connection (Truong, 2013). Thus in medical encounters, it is far away from being competitive, then the cooperative turn-taking is the model being adopted in the patient-centered communication, intending to move the conversation forward (with alternation of turns leading to new topics), knowing that “all the conversational parties have responsibilities in the co-construction of the setting” (Menz, 2010, p.10), which – once again – proves that communication should be directional and not unidirectional.

In our context, the conversation usually starts by the oncologist: 1- asking a question followed by a pause which marks the patient's turn to talk, or: 2- providing an affirmative utterance, and the pause afterward might be the occasion for a comment by the patient if s/he wants to. Sometimes, our study witnessed a 'self-selection mode' by the patient, which means s/he is the one starting the conversation if there is a specific topic or aspect the oncologist might not evoke during the consultation.

According to Simmons (1998), a two-person conversation (patient and doctor) might usually witness a 50% share of turns (called: symmetry in talk), but we noticed in our encounter that the speech length might vary according to the topic being discussed and to the number of participants (Doctor vs. patient, or doctor vs. patients and the accompanying person/people). Moreover, in healthcare settings, and as stated by Belaskri (2011), the interview pattern obviously gives control to the interviewer, which –sometimes - makes the physician the dominant interlocutor.

IV.4.2.1.2 Format of questions/medical exchange of information:

In medical consultations, conversations are maintained through sequences of questions/responses. When it comes to the format of questions asked by the physicians, they often take a specific pattern, like the list of questions in a questionnaire they have in mind; in other words, the exchange of information (questions) is controlled by 'institutional agendas' using a set of standard expressions and questions (Menz, 2010); these questions are short, and most of the time close-ended (Yes/No, multiple choices...), limiting the patients' answers, which makes the process of questions' asking an 'automated' one; still, open-ended questions are also used when necessary. Besides, what gives the advantage to doctors in medical conversations is the fact that they are 'rehearsed': they know what questions to ask and what answers to expect; but when it comes to patients, they are often neither prepared nor used to

this kind of interaction. However, the fieldwork of this research showed the use of both close-ended and open-ended questions by the oncologists, depending on the aspect being discussed.

IV.4.2.2 Language and group membership:

The concept of ‘language’ was discussed as an indicator for social membership in several studies (notably the ones of Wodak et al. (2011) and Ghafournia (2014)) since the way a social group speaks a particular language makes it distinctive from others; also, apart from the communicative function of speech, the latter has an identity-making one as well,

Likewise, Belaskri (2011) argued that an individual’s choice of vocabulary, style, and dialect, not only accomplishes communication, but also serves as a way of:

- Identifying a group membership of the speaker;
- Setting the relationship between the sender and the receiver in the communication process.

In this sense, and even if language can act as a tool of solidarity within the members of a specific social group, or a sign of higher education or socio-economic status, this was not the case at all within the context under study, and this aspect of ‘language and group membership’ was not witnessed in our research.

IV.4.2.3 Code-switching:

As it was noticed in some of the utterances (related to the physician-related barriers), code-switching is a major language variation occurring in medical communication.

Medical communication has been known – as in many studies - by its two distinct voices (Mishler, 1984), which are: the voice of medicine, and the voice of life-world. Where the ‘voice of medicine’ refers to the discourse used by healthcare professionals (oncologists in

our case), and the ‘voice of life-world’ means the discourse used within society or other non-medical related people (patients).

Moreover, Belaskri (2011) highlighted that, on the one hand, doctors have a personal life (in which they use the everyday language) and a professional one; also, it may happen that they were patients at a certain time of their lives, which makes them able to switch between the two discourses, intentionally or not. On the other hand, the patients who have never been doctors (or healthcare professionals) before, just like normal people, are not familiar with the medical jargon, be it the description of symptoms, or the semiology and anatomy (names of body part), or even the types of medication, so the only discourse they are good at is the general (everyday) one.

As examples of our study, we can cite the following:

- **(Doctor talking to a cavum cancer patient)** “*Madam, do you still put your ‘gouttière’?*” (Arabic transliteration: “*sḥrīfah, wāsḥ m̄āzālā kādīyri l̄gūtīyir̄ (gouttière) dyāl̄k̄?*”?)
- **(Talking to the patient’s daughter)** “*Then she has to, and she must also use a ‘produit’ that is rich in ‘fluor’ to protect her teeth*”. (Arabic transliteration: “*kh̄āsh̄hā tākh̄dhā w̄ īst̄ ml̄ tā wāhd̄ l̄prūd̄wī l̄y ghanī bl̄ flūr̄ bāsh̄ ih̄āf̄z̄ l̄ā snānhā*”; the words ‘product’ and ‘fluorine’ were spelt in French).

(P.S: These examples were cited earlier, but in this part, we dealt with them being a specific part of the socio-linguistic aspects of language variation).

Plus, it is always the doctors’ decision to choose when to switch their ‘code’, or style of talk, according to the communication situation being encountered during the consultation. However, as stated earlier, code-switching can be unintended, due to the influence of many factors (like the literacy level, work environment, and the nature of the training received).

IV.5 Conclusion

This chapter consisted of the representation and analysis of both the quantitative and qualitative data generated through the use of triangulation; the survey provided a clear idea of the oncologists' perspective on communication with their cancer patients, mainly the lack of communication training in terms of the doctor-patient communication in Morocco, the lack of psychological support for patients, and the different obstacles to effective communication that are encountered by oncologists; the latter provided lastly different suggestions to improve the quality of the doctor-patient communication in cancer care settings. The qualitative method of the research – based on tape recording and passive observation - contributed considerably to the fieldwork, since the audio recordings allowed analyzing conversations during the medical visits, and this helped to categorize the communication barriers into two main categories, and each one of them has its own sub-categories as well, which all demonstrated how important effective communication is essential to the delivery of good healthcare services, better health outcomes, and patients' satisfaction with care. Moreover, passive observation shed light on different sociolinguistic aspects of physician-patient communication, and the following chapter will discuss in detail the overall findings of this study.

Chapter V. Discussion, conclusion, and recommendations:

V.1 Discussion of findings:

V.1.1 Quantitative results

As cited earlier in the dissertation, the study was conducted using two major research methods: a quantitative approach based on surveys, and the qualitative one adopting the focus groups method (in which the passive observation method was included as well), both to attempt providing answers to the research questions and corroborations/refutations for the research hypotheses, and in this section, we will discuss the generated findings of the study. To the best of our knowledge, this study is the first to be conducted in Morocco to explore the doctor-patient communication in cancer care and to carry out a brief socio-linguistic analysis of this particular type of communication.

As far as the questionnaires are concerned, the survey's results showed a female predominance of the oncologists involved in this study, aged between 26 and 38 years old, which demonstrates that many newly graduated doctors choose oncology as a specialty and also proves that cancer care is gaining ground in Morocco, as it is the case in some countries like France, and this was shown in the study of Loriot et al. (2010) who stated that all (98%) the French oncologists enrolled in the study had a special interest in oncology and thus chose it as a specialty. Among the participants, there were 84.2% residents and it exceeded the percentage of professors (7.90%); as a matter of fact, the residents were extremely helpful in this study, and even though they were favorably respondent, they were also available and understood well the aim and the importance of the study being conducted, unlike the professors who - for supervising and teaching responsibilities - were often busy and in short of time; half of those residents spend more than 6 hours with cancer patients on a daily basis, which means that the physician-patient interaction is important in the oncology setting, something that requires effective communication to build a good doctor-patient relationship

and to help the patients achieve better health outcomes. The findings indicated that only a few oncologists (23.9%) received a communication skills training, and this looks unsatisfactory and reflects that such training are not part of the professional continuous training of doctors, and also that communication is not getting the attention it deserves in the medical education.

Besides, one of the major tasks in oncology is the diagnosis announcement; indeed, this news delivery is crucial to an effective cancer management, and the basis of a good doctor-patient relationship as well, and as claimed in the report by the National Breast and Ovarian Cancer Center (2007), announcing the diagnosis is difficult for anyone involved, and especially for the oncologists because it affects the patient's perception of cancer and the long term psychological state; as far as our study is concerned, the diagnosis is not always announced by the oncologists as shown in the results (28.9%), which is different from other studies like the one of Figg et al. (2010) where the diagnoses were announced in medical offices (54%), while in the other cases the participants claimed that the patients get the information from other sources (such as the radiologists who discovered cancer through imaging, or the primary referring physicians), and then the oncologist's role, in this case, is to assess the amount of knowledge the patients have, to correct any false information or stereotype, and to add some new selective data to make them cope with the disease and to facilitate their integration in the cancer management process. In this sense, almost half of the participants (53%) assumed that the cancer patients' first consultations are challenging, and 55% of them claimed that it is mainly because 'cancer patients are special'; the term 'special' is used in this context to refer to the communication needs of these patients, which was highlighted in the study of Hack et al. (2005) suggesting that cancer patients have unmet communication needs related to the status of cancer and the treatments options, which means that patients have expectations to be met while interacting with their oncologists, and this

interaction cannot be fruitful if communication gets ineffective from the very first consultations.

One of the general concepts of this study is ‘healthcare communication’, and it seemed that this notion was a bit ambiguous to the respondents, since the majority directly linked it to one specific aspect that is ‘the physician-patient communication’, and this proves that Moroccan doctors (and health professionals in general) should develop an appreciation for the important role communication plays in the health sector, focusing on raising awareness and educating the public audience about health issues, which means: improving people’s health literacy.

Cancer is a serious disease in Morocco, and talking about it within society is a tricky task, since many terms are used to avoid spelling the word ‘cancer’ itself, and the healthcare settings witness the same thing; the survey’s results showed that our participants tend to choose different alternatives to refer to this illness without mentioning it, knowing that the patients might already have stereotypes about it, especially the ones from the low socio-economic class; hence, the majority of oncologists choose the Arabic equivalents of the terms ‘malignant illness’ or ‘node’ to refer to cancer.

In addition, in oncology consultations, the communication task of doctors is difficult, because the patients need psychological support, and this is what Adler and Page (2008) stressed out in their book, claiming that despite the remarkable advances in the biomedical care of cancer, it is still far from providing an effective care for the patients’ psychological effects of the disease. In our context, we acknowledged the impact of the psychological status on communication and we attempted to discover who ensures this task during medical visits, and the results showed that the psychological support is often ensured by the oncologists themselves (92.10%); however, the extent to which they are successful in fulfilling this task is

questionable, due to their ability to identify patients' psychological distress, and this is what Söllner et al. (2001) treated in their study.

The presence of patients' companions in the medical practice has a very significant role, and this is what was argued by Andrades et al. (2013); in this respect, the survey aimed at assessing the communicative role of companions in medical visits, and all the participants stated that the patients always come accompanied to oncology consultations. In terms of communication, the presence of a companion (usually a family member, or sometimes a friend) can be recognized as an asset; some cancer patients are either physically or emotionally ill (or both), and this makes communicating with them very challenging; thus, companions can have a translation task if the patient does not speak Arabic, or an informative task by providing additional knowledge about the patient's health record.

In fact, the amount of information the patients have about cancer highly influences their understanding of the illness, and hence the way they communicate about it. Nevertheless, sometimes the patient's family asks the doctors to withhold the diagnosis of cancer; ethically, the patient has the right to know about his/her case, but the question remains about the amount of information s/he should know; each country has its own policy about hiding 'the truth' to patients, and in the Moroccan context, and as stated in the article 31 of The Moroccan Code of Medical Ethics, serious prognoses can be hidden, while the fatal ones should be carefully delivered to the patient and his/her family; sometimes, the latter would like to hide fatal diagnoses (that refer generally to terminal care), thinking that it might harm the psychological status of the patient, something that was noted by Ong et al. (1995); the majority of our respondents expressed their will to inform the patients about the case without getting into details, which is a middle ground between telling the truth as it is, and not informing the patients at all; this approach is far from being a paternalistic one, and it is based

on sharing the information with patients to integrate them in the shared-decision making process.

Additionally, one of the most significant survey's questions was to explore to what extent the oncologists judge that the socio-economic level of patients influences communication, and 97% of the respondents confirmed this fact, and this replicates the findings of a study by Willems et al. (2005) who showed that the communication style of doctors was highly influenced by the way their patients communicate since the ones from lower classes tend to get less involved in the talk, as well as a more directive communication mode, while the others from higher social classes communicate more expressively and asked more pertinent questions; indeed, patients from the second category have basic communication skills and an educational background, and hence they collaborate effectively in the interaction by providing accurate answers and clear statements about the different topics being discussed during consultations.

A matter of fact, lack of time is one of the major environmental barriers to communication in healthcare; according to the statistics of the oncology hospital under study (year: 2016/2017), oncologists perform – on a daily basis – 5 consultations with newly diagnosed cancer patients and 38 visits with regular patients on average, which makes a total of 43 patients to be managed on a workday from 8h30 am to 4h30 pm, and this shows clearly how time would affect the overall patients' management, including the therapeutic communication.

Besides, in human communication, effective feedback is another significant obstacle, and when it comes to the doctor-patient communication, 73.3% of our participants argued that they ask their patients for feedback at the end of consultations, mainly to assess their knowledge and to check if there was anything ambiguous or misunderstood, because the least

misunderstanding can influence the cancer management as a whole; also, our respondents were not asked why they sometimes tend to avoid asking for verbal feedbacks, and among the possible reasons: not realizing its importance in human communication, judging the patient's status inappropriate to provide accurate responses, or even being in short of time; in addition, some studies such as the one of Baldie et al. (2018) showed that in developed countries, patients' feedback is also used as a criteria of their satisfaction with the healthcare services, where online reviews are posted by patients in order to rate the quality of the care they have experienced, and this extremely influences the reputation of some given healthcare institutions and also motivates the ones with less 'rating stars' (negative reviews) to work on their negative aspects of care for the future; however, in our study, the questioned feedback was mainly related to the communication process, aiming at assessing patients' understanding, and not as a tool of evaluation of care, nor a scale of patients' satisfaction.

In addition, the telephone is a very good invention that allows people to communicate with each other no matter what the distance is, but sometimes it decreases the communication effectiveness, notably in terms of the non-verbal cues that get transmitted between the two parties (receiver and sender), the length of phone calls that are generally shorter than face-to-face conversations, and the inability (of the sender) to depict any immediate spontaneous feedback.

At times, the medical practice requires a permanent contact between the patients and their attending doctors, and this makes both parties opt for telephones as a communication tool, being a major facilitator for patients, especially the ones living far from the healthcare facilities in which they are managed. In our research setting, the use of telephones is a practical method of information exchange, and mainly delivering news or updates about the patients' treatment protocols, and the majority (79%) of the respondents allow this process and give their personal mobile phone number (not the work phone), and their main reason

was: optimizing communication with the patients who do not live in Fez and who might need additional information/explanations, while the other oncologists who do not allow being contacted by patients presented two major reasons: considering phone numbers as part of the personal life, and judging the phone consultations ineffective, and this replicates the findings of Evens (1989), who argued that the doctors – and their families – can sometimes be disturbed, especially by after-hours phone calls, and who also claimed that phone communication in the medical context requires specific communication skills to make ‘phone counseling’ more effective.

Concerning the physician-patient relationship, it was highlighted earlier that there are two main approaches: the disease-centered approach, and the patient-centered one, and in order to determine which one is likely to be adopted the most, the participants were asked whether they talk to their cancer patients about non-cancer related topics (e.g. personal life matters) or not, and the findings showed that 76% do really discuss such topics, mostly to improve the patients’ adherence to the treatment and to comfort them, leaning towards a more ‘human-centered’ or ‘patient-centered’ approach that is based on empathy, a finding that was judged to be more effective by several researches, notably by Sung Soo et al. (2004) who confirmed that empathy improves patients’ satisfaction and compliance with care by using suitable empathic communication skills.

We also noted that 24% of the participants do not address patients’ personal concerns in oncology consultations, because the latter are devoted to the disease management only, which means that they adopt a disease-centered approach, which is similar to the finding of Swaminath (2007), who mentioned that some doctors still consider delivering medical care more valuable than the human-side and doctor-patient relationship; these findings eminently explain why only 47% of our respondent adopt the disease-centered approach, in which communication is only about the cancer management (including: treatment and side effects,

hospital paperwork, future disease management modalities, medical record... etc.). This approach should be shifted towards a more empathic and humanistic one, such as the one adopted by the 53% of our oncologists, and that is based on mutual understanding, communicating about patients' personal (non-cancer) related issues, and expressing empathy to achieve higher satisfaction with care, a better psychological status, as well as a better involvement in the cancer management process.

Earlier in this study's findings, all the respondents confirmed that cancer patients always come to oncology visits with companions, which has several advantages, including facilitating communication between the patients and the healthcare teams; in this regard, it happens that some patients do not speak Arabic and use a different Moroccan dialect, and then the companions are the ones who ensure the translation task as claimed by 76% of the respondents; on the one hand, translating and being the intermediate between the patient and the oncologist highly facilitates communication, but on the other hand, it might happen that this translation – especially once carried out by very close family members- is not 'faithful', either intentionally (when they want to hide some serious news from the patient), or unintentionally (due to their lack of translation skills related to that specific dialect/language).

Moreover, the oncologists noted four main barriers to effective doctor-patient communication, which are (in the descendent order of importance): workload, time shortage and socio-cultural diversity, and the lack of communication skills at last. Actually, the workload in healthcare settings was always recognized as a communication obstacle from doctors' perspectives, so did our participants, which relates to several studies, for instance, that of Sun & Rau (2017) that examined the barriers of improving physician-patient communication, and its results noted four main barriers, including workload as a major one; the burden of work in hospitals put too much stress on healthcare professionals, which pushes them to adopt the disease-centered approach, and try to make consultations as concise as

possible to deal with the most important aspects of disease management (data gathering, on-spot body inspection, and discussing treatment protocols), and then there is no place for patient education, building partnership or good relationship with patients, or even discussing social-concerns with them.

The next barrier claimed by our respondents was time shortage, and it is closely connected to the first one (workload), since ‘a lot of work’ means ‘a lot of patients to manage’, and this requires shorter appointments for each patient to minimize the waiting time and to ensure the consultations program of the day; Sabherwal et al. (2015) acknowledged the importance of dedicating enough time for patients during consultations, claiming that longer appointments allow doctors to explain the necessary information for patients about the disease management as a whole, and the patients would also have the opportunity to ask more questions and express their concerns. The third communication obstacle noted by the oncologists was the socio-cultural diversity; indeed, Morocco is a culturally rich country, and due to the geographical location of the city of Fez, the oncology hospital under study receives patients from different neighboring regions, with different cultural backgrounds, and thus the differences in the spoken language highly cause communication ineffectiveness; hence, patients might have different ways of expressing their needs and interpreting doctors’ talk, and then this diversity should be acknowledged by healthcare professionals.

Besides, patients’ literacy is another significant issue as well, and it was noted earlier in this study that this factor affects patients’ perception of the disease, as well as their comprehension of the different medical recommendations; in this sense, Sun & Rau (2017) provided the example of: symptoms’ description, stating that some patients tend to tell a whole story because of their inability to describe one specific symptom, and then they get interrupted by the doctor who next asks a more specific question to make the task easier for them; since in our context cancer is the disease being dealt with, patients’ literacy influences a

lot their involvement in the management of this illness that requires close attention to details and therapeutic recommendations that ‘make or break’ the whole care process.

The fourth barrier stated by our participants was the lack of communication skills, and obviously, this one was underestimated by the oncologists (only 26.3%); in fact, a significant number of studies noted this particular communication obstacle as one of the most influencing factors, and the low awareness of this factor is a bit concerning, being similar to the findings of Sun & Rau (2017), who demonstrated that although the few communication classes the doctors have received in their basic medical training, such skills are learned through daily practice, and others are innate and cannot be taught; indeed, it was stated in the literature review part that doctors are not often born with innate communication skills, but the latter can be learned and practiced along the carrier (from the early years in medical schools until the specialty practice), and there are always communication workshops that are occasionally organized and in which doctors can enroll if they have the intention to. Nevertheless, if such workshops are set on the regular as part of the medical training in hospitals or medical schools, the enrollment would be mandatory and then beneficial, and this suggestion of teaching ‘physician-patient communication’ was cited in a lot of surveys, including one by Sabherwal et al. (2015), and therefore the suitable communication knowledge will definitely make the doctor-patient communication more effective, which - again - would lead to a better doctor-patient relationship and a good disease management, as well as a satisfaction with care by both patients and their doctors.

As a matter of fact, questions constitute a large part of the doctor-patient communication, and they are mainly used by oncologists in medical history’ taking, detecting side effects, and assessing patients’ concerns. Mainly, the disease-centered approach adopts the typical interview format, which means a set of questions the patient should answer, and these questions are mostly close-ended; however, the patient-centered approach adopts often

the normal conversation model, where questions/answers, suggestions, and ideas are shared between the two parties to achieve a mutual understanding, and a better interpersonal relationship; in our context, all our participants indicated that they allow questions' exchange with their patients during consultations for several reasons (as cited in the *Results chapter*), essentially because the patients have the right to know anything related to their disease management. Moreover, the amount of information asked by the patients differs from one to another, depending on some patient-related elements like the physical, psychological, and literacy status, as well as other doctor-related elements, mainly the information giving process that turned out to influence the questioning frequencies of patients (Ong et al., 1995).

V.1.2 Qualitative results:

V.1.2.1 Audio recordings:

The audio recordings allowed us to classify the physician-patient communication obstacles into two major classes: patient-related barriers, and physician-related barriers, and each class has its sub-categories as well. In fact, the patient-related class was the more interesting, since it highlighted a various aspects, and within which four categories were determined: cancer literacy, health literacy, socio-economic and linguistic barriers, and the patients' status at last; concerning the first (cancer literacy), the examples from the taped-recordings showed that the patients had several concerns related to the side effects of the treatment being used; it is normal that such symptoms look so alarming for normal people, or even cancer patients, still, if the latter were well informed, they would have dealt with those symptoms with less stress.

Besides, false cancer knowledge was involved as well, and among the common misconceptions that were depicted in the recordings, the two major ones were: 1- 'No matter what the physical condition of a patient is, the sooner the treatment begins, the quicker cancer will disappear', and 2- 'The efficiency of the cancer treatment needs to be quick and

noticeable for both patients and their family members; such false conceptions make the patients likely to become dissatisfied with the oncologist's interaction, since anything communicated to them, other than what they have in mind, sounds not logical and even alarming or hiding something serious about the case. Apparently, most people assume that the purpose of cancer treatment is to cure, but sometimes its goal is only to improve the quality of patients' lives and to reduce pain.

As far as health literacy is concerned, this second category of patient-related barriers is closely connected to the previous one but in a more general way. In some situations, the patients –as well as their companions - showed very poor health knowledge, as it is the case for the ones who thought that the oncology appointment is about answering the doctor's questions and showing the different tests' results, without the need for the patient's presence (due to his/her poor physical condition), and the results of the study proved that 'the substitutes' (generally a patient's close family member) faced several communication problems due to: the literacy level, inability to remember the medical data and to transmit them accurately to the oncologist, as well as the inaccuracy in the symptoms' description process that requires a minute attention to details and that should be ideally illustrated by the patients themselves; all these cited factors caused the communication breakdown.

The third class represents the socio-economic communication barriers, and the two main sub-categories were illiteracy and language. As cited earlier in the literature review (*page:73*), illiteracy affects almost the 3rd of the Moroccans and this was demonstrated in different encounters within the fieldwork of this study; for instance, a lot of patients' responses were made of "*I do not know*" when asked about some basic things like age, name of the treating doctor, the name of the medication being used, or some specific dates, and others referred to the medication by its price or color, or had very poor knowledge about their past medical record. Hence, all these factors did sometimes make communication ineffective

and also made the task harder for the oncologists since they had to repeat over and over and reformulate the questions, to achieve good disease management and to avoid misinterpretations of medical information by the patients and their family members.

When it comes to poverty, a significant number of the recorded consultations demonstrated that the patients' feedback was about their financial status and not the medical prescription/recommendation they were given, proving that their focus - while communicating with their doctor – was rather on the financial inability to perform the tests regardless their importance in the cancer treatment process, and not on the information they were receiving during the visit. When it comes to the family environment, it was shown earlier how a patient's family member plays an important role in facilitating communication to improve the care; however, some cases witnessed the extreme opposite when patients came to different consultations with different companions, or when the patient got used to come with one specific patient during the whole 'illness journey' in the hospital, and when that specific companion was absent for whatever reason, the patient could not cooperate or answer simple questions about his/her case; hence, the fact of fully depending on one companion to take care of the whole cancer management, including communicating on behalf of the patient, seemed ineffective.

Besides, language was another major communication barrier in this study, and some patients had issues in illness representation, which made them poorly cope with their doctors, and this took the format of ambiguous answers, contradictory arguments, lack of precision about the description of symptoms, and this is due to their confusion and lack of the suitable vocabulary to refer to body parts and provide the precise signs and feelings they wanted to express.

Also, this research highlighted the importance of feedback in the doctor-patient communication, and sometimes the patients' feedback was very poor, or even inexistent, and this took two aspects: either the patient remained silent, or s/he answered with a different question or an affirmative statement that was not related to the doctor's at all. As far as silence is concerned, it could mean that the receiver is comfortable with things as they are, but when it comes to patients with low socio-economic level, silence could mean that they did not get the message at all, or they did but could not formulate a suitable reaction to it, and this shows that – in the context of this study – silence was a poor form of feedback. The second aspect of patients' feedback that was noticed in the study is replying to a doctor's question/statement by another one, and this often creates a state of ambiguity because it is hard to tell if the patient received the message, fully understood it and then s/he asked for something else, or the patient was not listening at all, and s/he was waiting for the doctor to finish talking so s/he could take the speech turn, and such poor feedback can get unnoticed by the doctors in some cases and thus lead to multiple communication gaps. The last patient-related barrier is related to the patients' status; certainly, a person's condition highly influences his/her communication, and in this study, few cancer patients that were seen in the consultations presented either a poor physical or psychological status, or sometimes both, then miscommunication occurred. On the one hand, some patients presented: hearing issues, speaking difficulties (called: dysphonia), and partial memory loss, which failed the verbal interaction and the doctors had to try over and over and the task was time and effort-consuming. On the other hand, other patients were simply not satisfied with their health outcomes, which made them a little depressed and not willing to talk much or to get involved in cancer conversations with their doctors, using short answers and not asking for further information or questions about their status; also, others were obsessed (and this was the case for the ones who have been treated for a relatively long period), and that made them

excessively worried about any random symptom (even if it had nothing to do with cancer) and afraid that cancer would spread somewhere else anytime; this type of patients was opinionated and hard to convince and made communication harder, by sticking to their beliefs and ignoring the medical instructions.

Moreover, some hopeless patients who attended consultations had a combination of poor physical, psychological, and even social status, and luckily they were accompanied by a family member, which significantly helped the oncologists to make the interaction as effective as possible.

The second class of doctor-patient communication obstacles in oncology was the physician-related barriers, and it consisted of five sub-types: choice of expressions, lack of specificity, poor feedback, silence, and code-switching. Expressions are powerful in verbal communication and can sometimes be perceived by the receiver in a different way than the sender's (which caused pragmatic failures); in this sense, the tape-recordings of our study marked the use of the expression "*What is the problem?*" (Arabic transliteration: "*shnw almshkl?*"), being a common phrase for a lot of doctors attending the follow-up appointments to initiate conversations, and it does not always imply the presence of 'a problem' to be solved; commonly, the expression means: "*What is the purpose of the visit?*", and its true meaning can be grasped only the patients who have been managed for a relatively long period in the oncology hospital and thus became familiar with the setting, while others (newly enrolled in cancer management programs) can get confused and scared once they hear the word 'problem'. Another expression is: "*You/We need to...*", and it shows the immediacy and importance of performing the necessary examinations being a routine of any cancer treatment, and here also, it could not be well interpreted by all the patients, since in a few times, patients considered it as a bad emergency that occurred (relapse, inefficiency of a treatment, complication ... etc.); therefore, it is preferable for doctors to use the cited expressions

followed by a small explanation that clarifies the purpose of the prescription and prevents any misinterpretation by the patient/companion.

The second sub-category related to the lack of specificity in the language used during the consultations, and this occurred when oncologists were asked about the diet and some aspects of the treatment and they answered using some general statements that lack essential details; indeed, any detail about the patients' health condition affects their compliance with care, and hence these details should be given in a very understandable language that suits their knowledge level, and that adopts a middle ground between too many generalities and very specific overwhelming information; for instance, to give insight about the diet cancer patients should follow, they should be told to eat more fruits and vegetables, to prefer 'white' meat over 'red' meat and to even take meatless meals few times a week, to limit sugary food...etc.; this short example (is not the perfect diet plan to adopt, since it remains the task of a nutritionist) summarizes the major points to take into consideration and would leave no place for misunderstandings by the patients.

Next, we found that poor feedback from the oncologists was noticed in very few conversations, and the only form it took was 'silence' instead of responding to the claims of the patients (and companions); the latter could not tell if the oncologist was silent to think about something very important to reply with, or if s/he heard what was said in the first place, or even if s/he ever understood the patient's question or claim.

The fourth category relates to its previous, but considering silence responsible for communication gaps (it lasted on average between 2 and 10 min in the recordings); surely, feedback and silence increased the stress level of patients and even pushed them to ask if there was something wrong. Then, the fifth one was code-switching; French is indeed the training language in Moroccan medical schools, as well as the healthcare delivery procedures

in the CHU Hassan II of Fez (appointments, sheets, different prescriptions...etc.), and it is also the language adopted in different medical record management software, as well as during the multidisciplinary meetings; hence, this fact sometimes leads to a code-switching that is unintentional but that is, unfortunately, a communication obstacle for the illiterate patients.

V.1.2.2 Passive observation and socio-linguistic analysis:

In this research, passive observation was an added-value within the qualitative method of data collection, and it allowed highlighting some sociolinguistic characteristics that distinguish the doctor-patient communication in oncology; then, they were divided into two segments: the potential determinants of language variation, and the sociolinguistic aspects of this type of communication.

Surely, the number of participants affected communication in the recorded consultations, especially the turn-taking process, because the process in which one doctor is talking to one patient is different from the one in which s/he is addressing a group of people; in this multi-party encounter, also called 'triadic medical communication', the feedback of receivers is immediate and they interact with the speaker (oncologist) on the spot. This fact can be considered as an advantage because a multitude of feedback – although time and effort consuming – is very beneficial to check the accurate transmission and interpretation of the health messages conveyed to the patients; besides, companions are often in close relationships with the patients and then they help them assimilate information in a very simplified manner. Nevertheless, family members sometimes express some off-topic concerns and questions and waste a good amount of time dedicated to the consultations.

Also, the verbal interaction in oncology consultations (despite the ultimate goal of managing cancer) aims at seeking information, persuading, and expressing concerns; information seeking (by oncologists) is the basis of an accurate knowledge of the patients' medical record to adapt the cancer treatment and specify the care for each of them. Also, these

patients seek a lot of information for a better quality of life and an active involvement in their own treatment, the reason why they ask a lot of questions about the treatment, the diet, causes of cancer, symptoms...etc. The second aim of the verbal interaction is persuasion, which seemed to be a hard task that is extremely related to the psychological status and literacy level; oncologists have to use a meticulous language to transmit clearly – yet effectively – plausible ideas to encourage the patients adopt a healthy lifestyle and stick with the different therapeutic protocols they have to undergo, because, in different situations in our fieldwork, it was realized that patients did not understand correctly the medical instructions (wrong dosage of an oral medication, missing consultations appointments, or adopting false nutritional habits), which shows how important is to transmit clear health messages to make patients collaborate correctly and then ensure a good cancer care.

Concerning the third aim of communication in oncology, it deals with expressing needs and concerns (by the patients); cancer patients are psychologically fragile and they often tell anything that worries them to their doctors, and also here, the task is not easy because sometimes they cannot express themselves clearly (e.g. while describing symptoms), or when they are not concise and start narrating and confusing cancer-related issues with other personal concerns. When it comes to the last determinant of language variation, the visits took place in the consultation rooms of the oncology hospital, and this setting is characterized by being formal and witnessing some physical noises; it is considered formal because it is a professional setting, where participants in speech are the healthcare providers (oncologists) and the care seekers (the patients). As far as the physical noises are concerned, they were various and noticeably caused communication disturbance, either by the sounds of phones ringing, interruptions by other patients or healthcare professionals entering the offices or by the different external noises that any hospital might witness.

Moreover, given the fact that the verbal interaction in a medical consultation takes the form of an interview, with a possible switch of turns between interviewer and interviewee in terms of questions' asking, the speech turns adopted: a self-selection mode (by the patient to raise an issue that is not susceptible to be discussed), or the turn comes during a pause that marks the opportunity for the other interlocutor to provide an answer or comment on what was said to him/her. In addition, one can say that the format pattern of a routine consultation is a set of specific questions about the length of the treatment, the presence of side effects or abnormal signs, the complementary testing to be done, and the date of the next follow-up session. However, oncologists use also open-ended questions if the situation requires it, either to get a better explanation of a topic or just to socialize and decrease the stress of patients.

The medical jargon can be considered as the healthcare professionals' second language: it allows them to share information and save time, but it can create confusion for patients and their companions; it was cited (on *page: 180*) that medical communication witnesses a combination of 'two voices': the everyday jargon and the medical one, and this was proved in this research using the qualitative method; also, the unintentional use of French was noticeable in several recordings, as well as some specific terms related to oncology, and this caused some ambiguities especially for low literate patients. Likewise, the code-switching can be intentional as well, and this when doctors encounter patients (or companions) with a good literacy level, which was witnessed in very few consultations; still, the regular jargon was the dominant one, using Moroccan Arabic and converting some medical terms into more simple ones.

V.2 General conclusion:

This conclusion is a reminder about the research aims and methodology, and it is also a summary of the main findings and limitations of the study. Additionally, implications and suggestions for future researchers in the field under study are noted. This work was an attempt

to study the doctor-patient communication in oncology settings, and it adopted triangulation to increase the validity and accuracy of the findings, to combine the advantages of both approaches (quantitative and qualitative) to make research more reliable, and to credibly answer the research questions and to refute or corroborate its hypotheses; the quantitative approach used semi-structured questionnaires as instruments for data collection, which targeted the doctors of the oncology hospital of the CHU Hassan II of Fez over one month, while the qualitative approach made use of the audio recording of the outpatient follow-up consultations over eight months (a process within which passive observation was incorporated as well).

Indeed, the empirical results showed that the majority of oncologists did not receive a communication skills training, proving that there is a lack of such pieces of training in Morocco, either at the level of medical schools or as a part of the continuous training of the practicing doctors; yet, the latest reform of the education system in Morocco witnessed the implementation of health communication courses at the level of medical schools (See Appendix section). Also, the findings demonstrated that the psychological support is not given the attention it deserves, and it was demonstrated later in this study how significantly the psychological state influences communication, as well as cancer management in general. By combining both research methods, it was deduced that the presence of the patients' companions affects both positively and negatively the doctor-patient communication process, and thus the whole course of the medical visits, since the communicative roles of those companions varied from 'speaking on behalf of the patients' to 'encouraging them to cooperate and express themselves'. When it comes to the approaches used in the doctor-patient communication in cancer care settings, the study presented that the patient-centered approach and the disease-centered one were both adopted, with a slight predominance of the disease-centered approach; still, communication was often bi-directional and both parties

could exchange information and questions during the consultations. Plus, one cannot deny how big was the impact of the socio-economic level of patients on communication, especially the literacy and health literacy levels, and this was noticed through the difficulties the patients found while dealing with medical prescriptions, medical terminology, some general non-Arabic words, and other aspects, and all these elements made communication harder and the consultations time-consuming for oncologists, and also led sometimes to a poor compliance with the treatment protocols by the patients.

All research studies have limitations, and we should acknowledge that the current research was not an exception. The first limitation is related to the sample size since the study targeted the oncologists of the oncology hospital of the CHU Hassan II of Fez, which made the sample relatively small for better generalizability. The second one has to do with the fieldwork circumstances; the physical noises during the recording process, because sometimes – and due to workload and lack of consultations rooms – the medical visits took place in offices where two attending doctors were simultaneously checking two different patients; hence, the tape-recordings were noisy and this made the transcription process a bit harder for the researcher, and even the patients themselves did not feel at ease to communicate freely with their doctors once there were other patients in the same room; besides, the research was conducted in a limited period, which allowed performing a limited number of focus-group recordings. Concerning the third limitation, most of the recorded consultations were routine follow-up sessions, and thus very few witnessed serious news announcement; regular oncology consultations - for patients with a relatively stable health condition – witnessed less verbal interaction and more about checking the testing results and updating the medical records on the computer.

Regardless of the cited limitations, it is strongly believed that the findings of this study will have several implications, and the guidelines presented in this conclusion would shed

light on the concept of health communication to raise awareness among the health policy stakeholders, as well as healthcare professionals in general (and oncologists in particular); also, cancer patients themselves and their family members can make use of the given recommendations to optimize their communication and to determine their communicative roles in the verbal interactions during the consultations. Additionally, the present study can be a good starting platform to analyze deeply the issue of doctor-patient communication in oncology, and these further suggestions would be useful for future researches in the field: 1)- Surveys and interviews should include both patients and doctors, and extensive focus groups will allow gaining insight about the perspective of both parties and to gather relevant data about the topic; 2)- for an enhanced generalizability of the findings, such a study can involve the other oncology hospitals of the other CHU's of Morocco, in order to compare the results and to come up with conclusions that are representative and applicable at the national level; it would be very interesting to conduct a similar research in private oncology clinics, where patients are considered more like 'customers' (than patients) and this would definitely involve a different type of communication; 3)- for an advanced analysis of the verbal interaction, audio taping remains the most effective once associated with a suitable analysis system' (such as the Roter Interaction Analysis System (RIAS), being the most widely used medical interaction analysis system), and the choice of the consultation room must be very minute to avoid the physical noises; 4)- aside from regular follow-up visits, a deep study of communication with cancer patients could deal with the critical consultations designated to serious news discussion/disclosure (cancer diagnosis announcement, relapse, end of life care ...etc.), since this type of encounters requires key communication skills and approaches to make the interaction more effective and empathic, and to achieve mainly a satisfaction with care and better health outcomes.

After all, the present study certainly answered the research questions, confirmed two hypotheses and refuted the third one, and also met the research aims that were formulated at the very beginning of the research process.

V.3 Recommendations:

This research allowed formulating a set of recommendations for effective doctor-patient communication in oncology (and healthcare settings in general), and this will concern three parties involved in the process: health policymakers, the oncologists, and the cancer patients themselves.

V.3.1 Health policymakers:

Public health policies are the core of an effective healthcare system; stakeholders in the field can act upon some axes involved in healthcare communication:

V.3.1.1 Communication training:

Morocco is trying to stay updated about the newest medical advancements, and in this sense, some casual pieces of trainings are organized in favor of oncologists to present the latest discoveries in oncology (in terms of diagnosis modalities, treatment, rare types of cancer...etc.). However, no attention seems to be given to communication in cancer care, although it is as important as the treatment of cancer itself. As seen in the results of this study, very few oncologists received communication training, simply because it was their own initiative to get enrolled in, and not because it was implemented by the hospitals they are working in. Thus, health policymakers should implement continuous-training programs that deal specifically with effective communication with cancer patients; these programs could be introduced as part of the oncology residency program, which would make the physicians familiar with the concept and improve their communication skills, to be combined with medical expertise, all to provide a better cancer management, as well as a good satisfaction

with care for patients. Also, it is to mention that communication courses are nowadays being implemented in medical schools as well, to be part of the basic medical knowledge of future doctors.

V.3.1.2 Health education campaigns:

Health education campaigns should be introduced in Moroccan media, to target a large audience within the context of health education and prevention; short movies, cartoons, or comic commercials could be used to implicitly transmit the basic health messages (about: healthy diets, the symptoms and precautions of major diseases (diabetes, high blood pressure, and renal failure), benefits of breastfeeding... etc.), and more specifically the cancer education messages; indeed, some sensibilization campaigns are displayed on Moroccan TV and radio stations, but they remain occasional, not consistent, and they target only some specific cancers (Mostly: breast and ovarian cancers). In a best-case scenario, cancer education campaigns should be periodical and tackle all the most frequent cancers in Morocco (Breast, cervix uteri, thyroid, and ovarian cancer for women, and for men: lymphomas, lung, prostate, and larynx cancers). Foremost, before even tackling these types and the related symptoms and treatments, each stereotype about cancer should be clarified or refuted, to stop amplifying the disease and to raise awareness within the Moroccan society. Moreover, it would be a great idea to organize some TV shows that host real-life cancer patients who fought cancer (also called: cancer warriors, or: cancer survivors) to talk about their own experiences with the disease, in order to motivate and to spread hope for people who are struggling with that illness still.

V.3.1.3 Psychological assistance for cancer patients:

This suggestion was amongst the participants' to achieve effective communication, and a detailed comment was given to it in the analysis chapter, then the only thing to add here is the necessity of a permanent presence of a psychologist in the consultation rooms, and it

would also be better if s/he gets a training in oncology to become more familiar with the setting. For cancer patients, psychological support is as mandatory as the treatment itself, something that should be given the attention it deserves by the decision-makers in the health sector.

V.3.1.4 Improving the working conditions:

Same here, this one was from the suggestions provided by the participants; it was discussed as well, and here, the broad lines are:

- Increasing the number of oncologists;
- Providing individual offices;
- Reducing the workload (to dedicate more time for patients).

V.3.1.5 Communication materials design:

Brochures or written consents are mandatory in cancer communication, and then they should be written in a patient-friendly manner, using simple sentences and pictures for clarification, and avoiding any medical jargon that may cause minimal misapprehension.

V.3.2 Oncologists:

V.3.2.1 Language of communication:

Since the medium of the doctor-patient communication is mainly the verbal language, the latter should be well adapted to suit the patients' needs and backgrounds; therefore, oncologists should use simple and effective language while talking to their patients, which involves:

- Taking into consideration their literacy level, as well as their physical status;

- Using the everyday' language instead of the medical jargon: patients and family members should understand any acronym or scientific term to contribute affectively to patients' care;
- Avoiding code-switching;
- Being specific when asking questions and giving recommendations: by avoiding any generalization and broad terms, and providing the precise – yet detailed – information possible;
- Asking for feedback at the end of the consultations to check the patients' understanding.

V.3.2.2 Serious news disclosure:

Several models were provided by different sources, such as the one in the literature review chapter; hence, there is no need for repetition in this section. However, the main points to be considered by oncologists in a serious news delivery consultation are:

- Providing a private and calm office for this particular appointment;
- Gathering the necessary information to be conveyed to the patient;
- Managing for a psychologist to be present if the news is considered to be 'bad' or 'life-changing'; if not, at least a close family member should be there for support;
- After welcoming the patient and assessing the amount of information s/he has and s/he wants to know, the oncologist might disclose the intended news briefly and simply, without overwhelming the patient with details;
- Showing empathy, and acknowledging the patient's reaction, and this step is the one that highly requires the intervention of the psychologist;
- Providing the necessary recommendations and future therapeutic plans;
- Asking for feedback, clarifying ambiguities, and concluding the session.

V.3.2.3 Enhancing the doctor-patient relationship:

This concept was also dealt with numerous times in this research; the idea to retain is that: the doctor-patient relationship should not be purely professional, where the patient is seeking the disease management, and the latter gets ensured by the oncologist (disease-centered care), but a more humanistic model should be adopted in which not only the healthcare needs of patients are addressed, but also affection and empathy are to be displayed, since the psychological and emotional support has an impact on patients' quality of life, and it is essential for a better recovery; enhancing this relationship will create a psychologically safe atmosphere, in which the patients will surely be at ease and encouraged to ask more questions and to clarify any misinformation.

V.3.2.4 The role of oncologists in cancer health literacy:

Among the different sources of cancer information discussed earlier, oncologists have a major role in patients' education and awareness, because patients mostly attend 'ambulatory care' for cancer cure, and thus they stay in permanent touch with the oncologists; then, the latter must help patients acquire the necessary simple - yet understandable – knowledge for self-care. Also, oncologists are considered to be credible sources of cancer information, being the ones who have experience in the field, and who can be selective in providing specific (or customized) information for specific patients.

V.3.3 Patients:

V.3.3.1 The necessity to come accompanied (if possible) to oncology appointments:

In cancer care, patients should better be accompanied, preferably by a close family member, since the latter is on constant contact with the patient and would help him/her to follow the medical recommendations, and would also provide accurate information about the patient's health record during medical visits. It is true that some patients, although with

cancer, can handle the task themselves (either they overcame the illness' peak, or simply they have least aggressive forms of cancer that were diagnosed earlier and thus had minor impact in the health status), yet, the presence of a companion has several benefits, namely: psychological assistance, transportation, and of course: contributing to the communication process. Also, if their intellectual and physical condition allows it, patients can take notes of anything they might forget, and they can even ask their oncologists for some additional sources of cancer information (magazines or websites) to enrich their knowledge about the topic.

V.3.3.2 Recommendations for patients' family members:

- Among the different roles companions can play, the most useful ones that enhance patient's autonomy and contribute to effective communication are: 1) - reporting their own observations about the patient's experience, or preferably 2) - encouraging the patient to express his/her statement to the doctor;
- Companions should not answer the doctors' questions without inviting the patient to get involved, as long as the physical condition allows him/her to.

V.3.3.3 Use of plain language:

In medical visits, patients should adopt an understandable language, either to answer the doctors' questions or to express their worries or symptoms. In this regard, a patient must be specific, and for example once asked a 'when question', s/he should give a precise date and not a time interval (i.e. Between June and August, in the summer...etc.); also, if asked about a medication, it is better to reply by a specific commercial name, and not with a price or color, and this misunderstanding – as stated earlier - could be solved by only bringing the packaging, or just by the written prescription itself.

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APPENDIX

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28 AVR 2015

Note

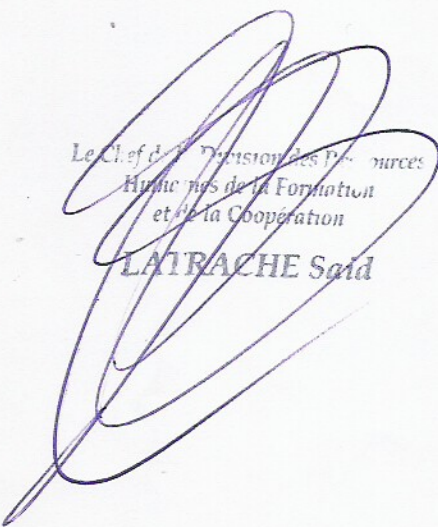
Mr **OUBRY OMAR**, IDE de 2^{ème} Grade en fonction au Centre Hospitalier Hassan II, inscrit au Centre d'Etudes Doctorales de la Faculté de Lettres et Sciences Humaines de Fès, est autorisé à accéder à l'information au niveau des Services Hospitaliers relevant de l'Hôpital d'Oncologie, et ce, dans le cadre de la préparation d'une thèse sous le thème: achieving a better quality communication with cancer patients, the oncology department of the CHU Hassan II as a case study.

Dès réception de la présente note, l'intéressé doit se présenter à Mr le Directeur de l'Hôpital d'Oncologie pour toute instruction utile quant à cette enquête.

Fès le 27/04/2015

Ampliations :

- Mr le Secrétaire Général par intérim du CHH II.
- Mr le Directeur de l'Hôpital d'Oncologie
- Intéressé.
- Archives.
- Bureau d'ordre.



Le Chef de Division des Ressources
Humaines de la Formation
et de la Coopération
LAIRACHE Saïd

التزام :

نحن الموقعون أسفله ،مصابون بمرض السرطان ونتلقى العلاج في مستشفى الأنكوجيا بالمركز الاستشفائي الجامعي الحسن الثاني.

نلتزم بموافقتنا علي المشاركة في البحث الميداني الذي يجريه الطالب عمر أوبري، وذلك في اطار تحضيره لأطروحة الدكتوراه التي تتمحور حول موضوع التواصل مع مرضي السرطان ، ونقبل كذلك بملئه الاستثمارات لنا وكذا تسجيله للحوار الذي يدور بيننا وبين أطبائنا المعالجين خلال جلساتنا الطبية.

الرقم	الاسم و النسب	رقم البطاقة الوطنية	(IP) رقم التسجيل بالمستشفى	الإمضاء
1				

The **article 31** of the second title (Title II) of The Moroccan Code of Medical Ethics states that:

Un pronostic grave peut légitimement être dissimulé au malade. Un pronostic fatal ne doit lui être révélé qu'avec la plus grande circonspection: mais il doit l'être généralement à la famille. Le malade peut interdire cette révélation ou désigner les tiers auxquels elle doit être faite (Code de déontologie des médecins, 2005, p.7).

Definitions of 'healthcare communication':

Once asked about the definition of healthcare communication, our participants provided the definitions below.

French definitions

- Respondent N°2: “c’est expliquer d’une manière simplifiée l’état de santé du patient, ainsi que son pronostic”;
- Respondent N°3 : « Utilisation des stratégies de communication (interpersonnelles, corporelles, et médicales) visant à informer le patient » ;
- Respondent N°4 : « dialogue entre soignant et soigné » ;
- Respondent N°5 : « liens établis entre le personnel de santé et malades, ou entre toutes les structures de santé » ;
- Respondent N°6 : « la communication entre le patient et le personnel de santé » ;
- Respondent N°7 : « expliquer au malade tout ce qui concerne sa maladie et son traitement » ;
- Respondent N°9 : « Discuter avec le patient et pousser l’interrogatoire en conservant son état général » ;
- Respondents N° 10-11-14 : « c’est le discours médecin-malade » ;
- Respondent N°12 : « Recevoir et donner des informations » ;

Definitions of 'healthcare communication':

- Respondent N°13 : « la communication entre le malade et le personnel de santé » ;
- Respondent N°15 : « Manière de communiquer dans un hôpital, soit entre médecin-malade, soit entre le personnel médical et paramédical » ;
- Respondent N°16 : Pouvoir expliquer au patient son état de santé, en prenant en compte de différents aspects : psycho-social et physique » ;
- Respondent N°18 : « Communication avec le malade en terme de sa maladie, le déroulement du traitement, et le suivi des complications » ;
- Respondents N°19-22 : « La communication médecin-malade au sein d'un établissement de santé » ;
- Respondent N°20-30 : « le langage entre le médecin traitant et le malade » ;
- Respondent N°23 : « la façon de donner de l'information à un patient et aux accompagnants ».
- Respondent N°26 : « La relation existante entre le médecin et le patient et qui se base sur l'interrogatoire mutuel » ;
- Respondent N°27 : « Ecouter le patient et lui transmettre des informations claires sur sa maladie » ;
- Respondent N°28 : « Ecouter, informer, compassion » ;
- Respondent N°29 : « Expliquer, informer, entendre » ;

Definitions of 'healthcare communication':

- Respondent N°32 : « Comment communiquer la pathologie et annoncer la maladie au patient et sa famille » ;
- Respondent N°34 : « C'est la base de la mise en confiance du patient, dès l'admission jusqu'à la fin de son traitement » ;
- Respondent N°38 : « Manière de communiquer avec les patients sur leur pathologies ».

English definitions :

- **Respondent N°2** : “To explain, in a simplified way, the health condition of the patient, as well as his/her prognosis”;
- **Respondent N°3** : “The use of communication strategies (interpersonal, corporal, and medical) aiming at informing the patient”;
- **Respondent N°4** : “The dialogue between the care provider and the patient”;
- **Respondent N°5** : “The established connections between the healthcare provider and the patients, or between all the healthcare structures”;
- **Respondent N°6** : “The communication between the patient and the care provider”;
- **Respondent N°7** : “To explain to the patient everything related to his/her disease and its treatment”;

Definitions of 'healthcare communication':

- **Respondents N° 10-11-14** : “It is the physician-patient discourse”;
- **Respondent N°12** : “To receive and provide information”;
- **Respondent N°13** : “The communication between the patient and healthcare professional”;
- **Respondent N°15** : “The way of communicating in a hospital, either between the doctor and the patient, or between the medical staff and nurses”;
- **Respondent N°16** : “To be able to explain to the patient his/her health status, taking into account different aspects : psycho-social and physical”;
- **Respondent N°18** : “Communication with the patient concerning his/her disease, the treatment process, and the follow-up of complications” ;
- **Respondents N°19-22** : “The doctor-patient communication in a healthcare facility”;
- **Respondents N°20-30** : “The language between the attending physician and the patient”;
- **Respondent N°23** : “The way of giving information to a patient and his/her companion(s)” ;

Definitions of 'healthcare communication':

- **Respondent N°26** : “The existing relationship between the doctor and the patient, which is based on mutual questioning”;
- **Respondent N°27** : “To listen to the patient and to give him/her clear information about his/her disease” ;
- **Respondent N°28** : “To listen, to inform, compassion (to be compassionate)” ;
- **Respondent N°29** : “To explain, to inform, to hear”;
- **Respondent N°32** : “How to communicate the pathology and to announce the disease to the patient and his/her family”;
- **Respondent N°34** : “It is the basis of building trust with the patient, from the admission to the end of the treatment”;
- **Respondent N°38**: “The way of communicating with patients about their diseases”.

TRANSCRIPTIONS OF THE RECORDINGS:

I- Patient-related barriers:

1- Health/Cancer illiteracy:

N°	Q/A	Doctor	Patient	Comment
1	Q		<i>"I have period disorder as well"</i>	The patient is not informed about the side effects of chemotherapy, that is why she had many concerns that are considered -in her case- as normal
	A	<i>"No worries, it's all related to the oral chemotherapy you're taking"</i>		
2	Q	(Talking to the family) <i>"I'm going to prescribe some pain killers and some vitamins for him ... he's too weak and cannot take (resist to) chemotherapy"</i>		Health illiteracy
	A		<i>"Vitamins? In food or what?"</i>	
3	Q	<i>"What's wrong?"</i>		Cancer illiteracy: Any side effect of chemo, or the severity/progression of cancer is often associated with the uselessness of the treatment.... (which was wrong in this case)
	A		<i>"I have 'a liquid in my abdomen' (she means: ascites), and I do not feel well...it looks like the chemo sessions I have taken were useless"</i>	
4	Q	<i>"Madam, you'll have only one chemo session to go; maybe we are doing it today"</i>		In the concept of oncology, some patients and family members think that lots of chemo sessions mean either the disease is getting more serious, or mean more chances to fight cancer.
	A		(Companion) <i>"Is there anything serious?"</i>	
			(The patient's brother) <i>"Please prescribe to us"</i>	False cancer information: the patient

5	Q		<i>what is necessary so she can start chemo as soon as possible</i>	and her brother both think that the sooner chemo starts, the quicker the cancer will disappear, which is not the case her, and her disease (melanoma) is a very complex one.
	A	<i>“Well as you know, your sister has a complicated cancer due to metastases, and chemo will not fully eradicate the disease, it will however make her feel better”</i>		
6	Q	<i>“So, here are the prescriptions for oral chemo and the next blood tests”</i>		Low cancer information/literacy: tests are prescribed to assess the status of the disease, not only when things get worse, and this patient thought the same way, but the doctor clarified the situation for her.
	A		<i>“Blood tests again? Why? Is there anything wrong?”</i>	
	Q	<i>“Nothing to worry about, just some routine testing for your next appointment in three months”</i>		
7	Q	<i>“The tests are good in general, except some low levels of sodium and potassium. I’ll prescribe a syrup for potassium, and for the sodium, you’ll have to add some extra salt in the food you take”</i>		The patient doesn’t listen carefully: the doctor is talking about specific components of blood, and she is talking about blood in general (Low health literacy, and no interference of the patient’s daughter who was present as well)
	A		<i>“Yes... I know I have an anemia... they already transfused me with two units”</i>	
8	Q	<i>“Why did he miss a lot of chemo sessions?”</i>		Very low health literacy: they think that chemo is urgent when the patient is very ill, not knowing that in this case, he/she will not be able to resist
	A		(Daughter replied) <i>“He was still smoking ... now he stopped so we came to</i>	

			<i>see you ... he is feeling so sick...</i>	chemotherapy.
	Q	<i>“Well ... you spent six months for no reason... you should be treated when you are feeling well, not when you get too sick”</i>		
	A		(Daughter replied <i>“He was still smoking so...”</i>	
9	Q	(Doctor to the patient’s sister) <i>“The truth is ... the metastases reached the spine, which caused paralysis. Besides, his body can’t resist chemo; he might immediately pass away during the session”</i>		Most patients’ main concern is starting chemotherapy, as it will eradicate the disease once and for all. However, very ill patients – as stated by the oncologist – might die immediately if they get chemo to which they cannot resist. In addition, the sister hid a life-changing news: paralysis, and the patient surely thinks that this paralysis is just temporary and will recover once he begins chemo, which explains why he insists too much on it (Poor health literacy /serious news delivery) .
	A		(Patient to his sister) <i>“what did he say? When can I start chemo?”</i> (Sister) <i>“Nothing, you have to take the vitamins he prescribed to you, it will make you feel better”</i>	
10	Q		<i>“I can’t wait to begin chemo”</i>	As the previous situations, patients’ main concern is to start chemo; cancer/health literacy
	A	<i>“I will have to see you in one week with these tests done, to evaluate your health status and decide about when to start it”.</i>		
			<i>“Please, I have a question: I work in</i>	The patient asked a very pertinent question, to

11	Q		<i>farming, and I use chemical products, so should I stop working or just work normally?"</i>	contribute effectively to his health management; he was reassured as well about his concern about the cause of his cancer and the information he had was corrected. (Health literacy)
	A	<i>"For the time being you are under treatment, you should stay away from that and work in something else, once you are cured we will decide".</i>		
	Q		<i>"So you think that those chemical products were the cause of cancer?"</i>	
	A	<i>"No, but that makes you predisposed".</i>		
12	Q		(The wife of the patient) <i>"I came to show you the tests' results; he couldn't come because he's very tired, he has diarrhea and he feels something like fever or pain in his abdomen ... I don't really know"</i>	When it comes to symptoms, especially in cancer care, they should never be described by someone other than the patient, at least it is another healthcare personnel. Since they are the basis of the treatment, and any mis-description of symptoms could harm a patient's life. (Health literacy)
	A	<i>"The results are good for now; he should continue the treatment we gave him last time. Then, we will see him during his first chemo session"</i>		
13	Q		<i>"Please doctor, do not prescribe any oral medication for me, I have had enough and my stomach hurts a lot"</i>	Health illiteracy
	A	<i>"Do not worry, I will give you a gastric medication for that"</i>		
	Q		<i>"Doctor, what do you think of my tests"</i>	Correcting the cancer information the patient

14			<i>results?"</i>	has: chemotherapy cannot be stopped suddenly, even if the tests seem good (Health Literacy)
	A	<i>"They are all good "</i>		
	Q		<i>"So I will stop (injectable) chemotherapy?"</i>	
	A	<i>"No, but she will be taking an oral one, which is good"</i>		
15	Q		<i>"I feel some tingling in my arm after chemo sessions"</i>	Cancer education: Correcting the false information, and calming fears.
	A	<i>"This is normal sir, this is just a side-effect"</i>		
	Q		<i>"I'm afraid this might continue even when I start taking the hormonal treatment"</i>	
	A	<i>"No sir, hormonal treatment will cause none of the symptoms of the injectable chemotherapy"</i>		
16	Q		<i>"Sometimes when I get exposed to the heat, my eyes hurt a bit"</i>	The patient has very low knowledge about the disease (cancer), and she relates any physical disorder to side effects of chemo (Poor health literacy) .
	A	<i>"You do not need to worry about this"</i>		
	Q		<i>"Also, I got surgery on the back bone years ago, no problem with that?"</i>	
	A	<i>"Yes, no problem"</i>		
			<i>"I did an abdominal ultrasound, and it showed gallstones, and this happened right after I started chemo"</i>	
		<i>"This has nothing to do with chemo, you can get surgery later on for that, it is not urgent"</i>		
		<i>"Do I have to do tests</i>	Health/cancer illiteracy:	

17	Q		<i>regularly and bring the results in every consultation? Because I heard some women do tests in every check-up”</i>	the patient randomly heard that other cancer patients do tests regularly and related to them, which was wrong.
	A	<i>“No madam, this is not the case for you”</i>		
18	Q	<i>“Did you do the mammography?”</i>		A common misconception is: when one breast is removed, there is no need to examine or control the other (Low cancer literacy)
	A		<i>“No, why? I already removed the breast because of cancer... should I do it?”</i>	
19	Q		(Wife of a newly diagnosed patient) <i>“So, this cancer will spread nowhere else with radiation therapy?”</i>	Since the patient comes to an oncology setting, his wife thought automatically about an aggressive cancer that will spread; also, she assumed that it is very dangerous because they could not do surgery for him. Hence, the doctor explained and corrected the misconceptions she had (Cancer literacy).
	A	<i>“Let me correct this: your husband does not have cancer, he has a ‘benign tumor’, and its complexity lies in its location among the surrounding veins and the heart, that is why they could not operate him, so we started with chemo and now radiation as a second plan”</i>		
20	Q		<i>“Is it too bad if I do not get my period anymore?”</i>	Health illiteracy: the patient has no idea about what is ‘menopause’.
	A	<i>“No madam, this is not a problem, and you are already 47 or 48 years old, so this is normal”</i>		
	Q	<i>“It looks like his liver is too sick”</i>		The oncologist corrected the false information the patient’s son has, and also explained the reason why the patient could not
	A		(Patient’s son) <i>“We think that chemo is the cause, he took it for a</i>	

21			<i>while”</i>	undergo more chemo.
	Q	<i>“The disease is too complicated_due to the tumor, not the chemo...and he stopped taking it because a sick liver cannot resist”</i>		
22	Q		<i>“Don’t you think, doctor, that maybe an error in the chemo dose was the cause?”</i>	As in the previous case: reassuring the companion (the son) and explaining once again the situation.
	A	<i>“No absolutely not, the liver has a great role in the process of drug metabolism, since it is sick now, the chemo will have little- or sometimes – no effect”</i>		
23	Q		<i>“I thought it was a flu, I bought the meds and it did not work... then I thought it might kill her then I stopped it (thinking that chemo might a contraindication) ... the fever gets to 38°c sometimes”</i>	The daughter has little health information about the case, and self-medication is one aspect; she keeps repeating the same concern/symptoms (fever and pain) and does not listen to what the doctors is saying.
	A	<i>“Do not worry, 38°c does not have to concern you, and the results are normal for the time being... a simple inflammation of the throat can cause that, do not worry”</i>		
24	Q	<i>“How are you doing today?”</i>		An educative and independent patient, who knows really what brings him to the consultation, and knows the normal
			<i>« Fine; actually I have the CT scan’s result and the PSA’s as well... the</i>	

	A		<i>PSA level is too high... it's 38 and the last time it was only 22</i> " (Speaking in French from time to time)	level of the blood test too, and he even remembers the previous numbers (Education and health literacy).
25	Q	<i>"Do you still take your chemo pills?"</i>		The patient aware of the details of the treatment.
	A		<i>"Yes I do, and last time the doctor told me that if the tests are good I might stop taking them soon"</i>	

2- Socio-economic barriers :

a- Illiteracy

N°	Q/A	Doctor	Patient	Comment
26	Q	<i>"How old are you?"</i>		
	A		<i>"I do not know"</i>	
	Q	<i>"What did the dermatologist prescribe for those skin rashes?"</i>		
	A		<i>"I do not know, I take three pills a day"</i>	
	Q	<i>"Do you take any pain killers?"</i>		
	A		<i>"Yes I take something ... I do not know its name"</i> (she takes her purse and shows the medication to the doctor)	
27	Q	<i>"We will add two more chemotherapy sessions, and then we will do a CT scan to assess the disease status"</i>		The patient is distracted and doesn't listen carefully; he keeps narrating what happened in the last consultations with other doctors. Plus, his illiteracy is another issue: to refer to another oncologist, he used 'tall guy', and to refer to the secretary he mentioned 'the other girl'.
	A		<i>"I know ... I know... this is what a tall guy told me last time, the one who referred me to the other girl"</i>	

28	Q	<i>“Can you remember when our last appointment was?”</i>		No details about the dates of follow-up sessions.
	A		<i>“I think it was in Ramadan”</i>	
29	Q	<i>“I see on the computer that they prescribed a CT scan in the last appointment; do you have its result?”</i>		the patient is illiterate and passive, and her daughter – who is the one in charge – seems very confused: she answered <i>“No I don’t have it”</i> and not <i>“I don’t know if I have it”</i> , although she’s had it for the past three months; this could be justified either by emotional distress, or by the illiteracy that makes her unable to differentiate between the different papers she has.
	A		(Young daughter of the patient) <i>“No, they have not prescribed anything....”</i> . (She started looking in the files she had) <i>“Oh sorry, here is the prescription, I am so confused...I forgot about it”</i>	
30	Q	(Doctor addressing the companion) <i>“Does he (the patient) take any medication?”</i>		Illiteracy
	A		<i>“Yes... some red pills”</i>	
31	Q	<i>“What pain killers is he taking?”</i>		Illiteracy: the patient doesn’t know, and doesn’t even talk because he’s physically ill, and the companion cannot tell the medicines’ name, so the oncologist provided her with one of the solutions to manage such situation hereafter.
	A		(An adult female companion) <i>“The ones that cost 68 dirhams”</i>	
	Q	<i>“Madam next time, if you cannot recognize the name of any medicine, at least bring its package”</i>		
	A		<i>“Ok, I will”</i>	
32	Q		(The patient’s relative) <i>“Should we come on the appointment of chemo session the 21st of September?”</i>	Illiteracy: such a small mistake in the appointment’s date might make the patient miss his/her chemo session, which would affect negatively the health status.
	A	<i>“No, I said, and I wrote the 2nd of</i>		

		<i>September, and not the 21th</i> ”.		
33	Q	<i>“What medication did they prescribe to her yesterday?”</i>		Once again, patients and their relatives cannot often remember exactly the name of the medication, and then the easiest way is to keep the prescription (after buying the meds) to make the task easier for the doctor (Illiteracy)
	A		<i>“A powder that cost about 200 Dh”</i>	
	Q	<i>“I cannot recognize it; you should bring the prescription with you next time”</i>		
	A		<i>“Ok, I will”</i>	
34	Q	<i>“Ok madam, here are the prescriptions for both the CT scan and the blood tests for your husband”</i>		The patient’s wife is illiterate, so she is using simple tricks to differentiate between the different papers she’s got in hand.
	A		<i>“Ok, can you please mark this one (pointing to the first one) with a sign so I could recognize it?”</i>	
35	Q	<i>“What hormonal treatment are you taking?”</i>		Illiteracy
	A		<i>“I do not know its name ... I have a pill with me...here it is”</i>	
36	Q	<i>“Do you take any medication?”</i>		Illiteracy
	A		<i>Yes, here it is ...”</i>	
37	Q	<i>“How old are you?”</i>		Illiteracy
	A		<i>“I do not know, here is my identity card”</i>	
38	Q	<i>“Did you use the dental prosthesis?”</i>		The patient was told to get a prosthesis to prevent her teeth from falling out, being a normal side effect of any radiation on the head, but obviously she did not because she could not understand what has been said, and she did not even ask for explanation.
	A		<i>“No, they asked me to but I did not ... I did not understand what they said ... I am illiterate”</i>	
	Q	<i>“When did you do the</i>		A very broad answer.

39		<i>CT scan?"</i>		
	A		<i>"A long time ago!"</i>	
40	Q	(Talking to a patient with her daughter) <i>"Do you remember when you got surgery?"</i>		Each one provided a different date, none of them gave the precise answer.
	A		(Both talking at the same time) <i>"2011 I think 2012"</i>	
41	Q	<i>"So, here are the prescriptions for both the blood tests and the cardiac sonography"</i>		A way of facilitating the task for patients and families is to write in Arabic on each prescription, or putting symbols to differentiate between each one.
	A		<i>"Which one is which?"</i>	
	Q	<i>"I'll write in Arabic on the back of each prescription"</i>		
42	Q		(A patient's companion commenting) <i>"Illiteracy is a problem: we take papers (prescriptions) from one person to another without understanding what they are about".</i>	Both the companion and the patient acknowledge the importance of literacy to facilitate the cancer management and the different follow-up procedures (appointments, treatment prescriptions, tests' prescriptions ...)
	A	(Remaining silent)		
43	Q	<i>"Did you do the CT scan we asked for last time?"</i>		Illiteracy
	A		<i>"Euuh .. I did not .. I do not know, you can check in the file you have in hands ..."</i>	
44	Q	<i>"Do you have other diseases? Like: high blood pressure or diabetes?"</i>		Illiteracy
	A		(Remaining silent)	

b- Poverty

45	Q	<i>"We need these tests done as soon as possible"</i>		Low economic level
	A		<i>"I can't afford them"</i>	
46	Q	<i>"Madam, you need to do the cardiac ultrasound and the CT scan to check the status of the node you have"</i>		Low economic level
	A		<i>"How much does this cost?"</i>	

c- Social

47	Q	<i>"Sir, did you do the CT scan?"</i>		Generally, the patient's companion is often the one in charge and the one communicating with the physician the most, but in this case, the patient is very passive and comes with a different family member every time, and obviously those members do not communicate with each other concerning the details of the treatment.
	A		(The patient's daughter) <i>"I do not know, he is accompanied each time by a different person"</i>	
48	Q	<i>"Does he still take medication?"</i>		A kid should never come to oncology settings, because witnessing the suffering of seriously ill patients would psychologically traumatize him; plus, he will never be able to manage the details of a disease such as cancer, the proof is that he could not precisely name the pain killers.
	A		(The kid accompanying the patient) <i>"No, he used to take the green pills and now he stopped"</i> .	
49	Q	(talking to an old patient with prostate cancer) <i>"Do you have any referral letter?"</i>		He used to be accompanied during the consultations, and now when he came alone, he has no idea about his own medical files.

	A		<i>"No, all the papers I have are the ones my granddaughter has"</i>	
50	Q	<i>"Madam, do you remember when did you get surgery?"</i>		The patient's son is responsible of the cancer management, he replies and takes care of everything; here, there was an attempt to involve the patient in the conversation, but obviously she couldn't; given the answer she provided (after Ramadan, by which she meant July or August 2016).
	A		(the patient's son) <i>"No, she does not"</i>	
	Q	<i>"I know, I want her to get involved in the conversation"</i>		
	A		<i>"I think the surgery was after Ramadan"</i> (Replied the patient herself)	

d- Linguistic

N°	Q/A	Doctor	Patient	Comment
51	Q	<i>"Do you get any headaches?"</i>		No preciseness in the answers.
	A		<i>"Sometimes... but I feel good, and I vomit also..."</i>	
52	Q	<i>"Do you feel any pain?"</i> (Talking to a patient with breast cancer)		Linguistic barrier: the patient cannot describe properly the symptoms.
	A		<i>"Sometimes, when I lean, I feel something in my chest ... I do not know"</i>	
53	Q		<i>"I would like to thank you for the treatment you have been giving me, I was close to death and now I'm fine"</i>	The patient expressed satisfaction with care
	A	<i>"It is a pleasure to hear this"</i>		
54	Q	<i>"You are doing good now ... our next appointment will be in six months"</i>		For this woman, the treatment worked effectively in a relatively short period of time, so she claimed that what she
	A		<i>"That's great. I think they made a mistake, what I have is not cancer, I feel"</i>	

			<i>very well</i>	had was not a cancer, but another disease.
55	Q	<i>“So what is the matter?”</i>		The doctor talking to an educated couple, and the husband is the one who having an advanced cancer, whose treatment decision needs to be made by a multidisciplinary staff, and the doctor of the current consultation does not know if the decision has been made or not, because, and as claimed by the patient himself, every time a different oncologist attend the consultation, so communication might breakdown, and this explains the patient’s frustration.
	A		<i>“Doctor X told us last time that she will call and tell us about the treatment decision, but she did not”</i>	
	Q	<i>“Your case is very complicated, and we had to wait for a meeting to get our seniors’ decision about your treatment. I will call to see if there is anything new... I will be back”</i>		
	A		<i>“Please do; every consultation we see a different doctor who does not know the small details that occurred during the previous consultation ... ”</i>	
56	Q	<i>“So what’s the problem?”</i>		Although illiterate, this woman has a sharp memory; she also acknowledged the efforts of the oncologists and understands their working conditions that might cause such mistakes.
	A		<i>“They told me that I have done six chemo sessions, but I only got five”</i>	
	Q	<i>“Let me check ... you’re right madam, you missed the 6th because you had a pain in your chest”</i>		
	A		<i>“It is ok! It is normal to make such a small mistake... there is a high workload in this department”</i>	
57	Q	<i>“You also need a sunscreen to protect your skin once outside”</i>		One cannot distinguish if the patient acknowledged the advice, because she replied by another
	A		<i>“I feel a pain in my head and chest too”</i>	

				concern (symptom)
58	Q	<i>“You do not have to worry, these are just some side effects of chemotherapy”</i>		No feedback by the patient; maybe she acknowledged the reassurance of the doctor, maybe she did not.
	A		(Patient remained silent)	

3- Patient’s status :

a- Physical :

59	Q	<i>“Did you take Doliprane* yesterday?”</i>		The health status of the patient prevented her from replying herself to answer the doctor’s question.
	A		The patient had dysphonia and she can’t talk loudly, so she whispered to the accompanying woman, and the latter replied: <i>“Yes she did, she had fever last night”</i>	
60	Q	(Talking loudly to a deaf, old lady, non-accompanied) <i>“Madam, what is the problem?”</i>		Questions had to be repeated several times, very loudly, to make the patient hear; also, she was not accompanied by someone to make the communication task easier for everybody.
	A		<i>“I lost the results of my bone scan”</i>	
61	Q	<i>“Have you ever undergone any surgery?”</i>		Very old patient
	A		<i>“I do not remember”</i>	
62	Q	<i>“Sir, did you do the blood tests we asked for last time?”</i>		An old man, with prostate cancer, comes to the consultation, without any companion, and he has a partial memory loss due to his age; thus, communicating with him was really hard and sometimes ineffective.
	A		<i>“No, I did nothing”</i>	
	Q	<i>“Why? Last time I asked you to”</i>		

	A		<i>“I forgot!”</i>	
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b- Psychological :

63	Q		<i>“Doctor, I have headaches and I do not sleep well at night”</i>	Explanation of the whole situation, and reassuring the patient after noticing that the psychological status of the patient was not fully stable.
	A	<i>“Let me explain the situation: it is getting hot because of summer time, and you’re a bit stressed too... I’ll prescribe some pain killers for you, but still, you do not have to worry, you are almost treated”</i>		
64	Q	<i>(To a newly managed patient) “How are you? Fine?”</i>		Psychological distress from the very beginning: The patient already feeling depressed, she indirectly replied that she is not fine at all, and obviously she does not appreciate her presence in the oncology department at all.
	A		<i>“If I were fine, you would not have found me here!”</i>	
65	Q		<i>“I need a prescription to do an MRI, because I am afraid the disease spread to other parts of my body”</i>	This young lady under treatment of endometrial cancer is afraid of metastasis, she is even the one asking for an ‘unnecessary testing’ to calm her fear, and the oncologist explained this to her.
	A	<i>“Madam, listen carefully: the urinary symptoms are related to radiation, and the MRI will be useless in your case”</i>		
66	Q	<i>“So how do you feel today?”</i>		The prostate cancer patient is unsatisfied with the results so far.
	A		<i>“I feel no improvement... my status remains the same”</i>	

67	Q	<i>“When did you do the last CT scan?”</i>		Patient cannot concentrate, her psychological status is disordered , and she lets the husband in charge of her whole cancer management. Indeed, the oncologist told her that the presence of the husband should help but not substitute her.
	A		<i>“I do not know, but my husband does... I am afraid alone... I have kids and I do not want to leave them”</i>	
	Q	<i>“It is good to have your husband by your side, but still, you need to memorize some important things related to your treatment”</i>		
68	Q	(To the patient’s brother) <i>“We need to urgent blood tests and a cardiac sonography, to decide when she can start chemo”</i>		The patient is too physically and psychologically exhausted ... she just wants to get relieved and wishes death; the low economic level is major as well)
	A		(The patient herself) <i>“I cannot afford to pay ... I am too ill... I want to die I am in pain ...”</i>	
69	Q	(The oncologist to an accompanied patient) <i>“What medications are you taking now?”</i>		The ineffectiveness of the medications made the patient upset about the situation, so instead of answering the question, she criticized the effectiveness of the treatment. (Both the companion and the patient were talking at the same time, and none of them answered to the doctor’s question)
	A		(companion) <i>“I do not know, I will show them to you now”</i> . (Patient) <i>“These medicines seem useless”</i>	

c- Combination of many factors :

70	Q	<i>“Sir, what is the matter? Despite being physically ill, I have been noticing for a long time that you look depressed!”</i>		Physical, Psychological, social, and linguistic barriers, all in one case: Despite the difficulty of speaking, the answer of the patient was not as intended; also, after talking to the patient’s sister, it turned out that he was left by his wife when he got cancer, and this explains his poor psychological and social status, and all these factors influence negatively his communication with the healthcare providers he deals with.
	A		(Patient with an aphonia and using signs, whispering to his sister) <i>“I have allergies, and I cough a lot”.</i>	

II- Physician-related barriers:

1- Linguistic :

N°	Q/A	Doctor	Patient	Comment
71	Q	<i>“What is the problem?”</i>		The word ‘problem’ is not in good use here; for instance: <i>‘What concerns you?’</i> would have been better.
	A		<i>“I have skin rashes all over the body”</i>	
72	Q		(Patient asking about the diet) <i>“What should I eat?”</i>	This is a broad description of the diet: no precise food quantities were provided.
	A	<i>“You can take vegetables, fruits, and avoid the red meat”</i>		
73	Q	<i>“Who sent you here?”</i>		Alternatives for the doctor’s expression: <i>‘Who is your referring physician?’</i> Or <i>‘What is the purpose of the consultation?’</i>
	A		<i>“My referring doctor in Meknes sent me to continue the management of my cancer in this hospital, because I live in Fez”</i>	
	Q	<i>“You need to do these tests and the breast ultrasound”</i>		For instance, to calm the concern and to clarify more, <i>‘everything is fine now, we should do these tests in 6</i>
	A		<i>“Why? Is there anything</i>	

74			wrong?"	<i>months to check on your health status'</i> could have been used.
	Q	<i>"No it is just a medical routine for any breast cancer patient, it should be done every six months"</i>		
	A		<i>"Ok, thank you"</i>	
75	Q	<i>"Ok, what is the problem?"</i>		He meant: <i>'What is the motive of the consultation?'</i> or: <i>"Any abnormal symptoms?"</i>
	A		(The relative of the patient) <i>"She cannot eat, nor drink, and if she does, she vomits immediately"</i>	
76	Q		(The daughter) <i>"Her teeth hurt her a lot after radiation therapy"</i>	In an attempt to explain to the patient's companion, the doctor used <u>'that plastic thing'</u> to refer to the 'dental prosthesis' , and also used "product" referring to the Fluorine gel that should be used with the prosthesis to prevent the teeth from falling off; the use of those terms (even in French) was inappropriate in the context.
	A	(Talking to the patient's daughter) <i>"Did she get that plastic thing to put on her teeth?"</i>		
	Q		<i>"No I do not think so"</i>	
	A	<i>"Then she has to, and she must also use a 'product' that is rich in 'fluor' to protect her teeth"</i> (Product and Fluorine* were spelled in French).		
77	Q		<i>"Please, I need to know more about the diet I should adopt"</i>	Linguistic issue was a very broad one and a bit misleading; a dietician's opinion would have been better, but still, some detailed notions about the diet could have been told to the patient.
	A	<i>"Take whatever you want with moderation"</i>		
78	Q	<i>"Do you take shots?"</i>		The physician question was ambiguous for this patient; the term 'shots' was used to refer to hormone therapy, but the patient understood it in its general context since he is diabetic.
	A		<i>"Yes ... insulin!"</i>	
		(The doctor talking to a cavum cancer patient)		The use of that French word 'gouttière' to refer to the dental

79	Q	<i>“Madam, do you still put your ‘gouttière’ (dental prosthesis)?”</i>		prosthesis was not understood for the illiterate patient, but luckily her daughter could recognize it and corrected the information for her mother.
	A		<p>- (Patient) <i>“No, I never did!”</i></p> <p>- (Patient’s daughter) <i>“You did, she (the doctor) is talking about that thing in which you put that paste... (referring to the Fluorine paste) ”</i></p>	
80	Q		(A newly diagnosed patient) <i>“Will I be taking chemo sessions every day? Because I am wondering if I would be able to go to work ... I was fired from previous one because of my sickness”</i>	The patient is asking if he would be able to go to work, but the answer of his doctor was not detailed enough; it is true that the chemo session last for about 30 minutes and then the patient will be free for 3 weeks, however, the side effects of chemo (such as: pain and fatigue, nausea, vomiting ...), especially after the first session, will be very noticeable and would immediately prevent the young man from working.
	A	<i>“Actually No, you will be taking a 30 minute chemo session, and we will be seeing you 3 weeks later”</i>		
81	Q		<i>“My mom has fever and severe headaches... I am afraid it is because the chemo she is taking... I want to know the reason”</i>	The case is ambiguous... the silence of the doctor did even increase the daughter’s concern.
	A	(Silence)		
82	Q	<i>“How are you? You’re looking good, you gained weight, and you’re smiling...this is great”</i>		The oncologist knows well the patient since she first began her chemotherapy for a breast cancer, and now he noticed the difference and the effectiveness of the treatment, and he even acknowledged that to her, which made her reassured and relaxed; also, the
	A		<i>“Indeed, thank you for all you efforts”</i>	

				physician gained the patient's trust and the patient immediately expressed satisfaction with care.
83	Q	<i>"You had a severe tumor, and you have undergone many chemo sessions, and now I see very satisfying results! Cancer has a bad reputation, but with discipline and strength, you could fight it"</i>		The oncologist is using motivating words to acknowledge the patient's strength and to show his satisfaction with his collaboration in the treatment, and also here, the result showed up immediately.
	A		<i>"I did my best, and thank you for everything"</i>	
84	Q	<i>"So, you have a germ cell tumor... are you married? any kids?"</i>		Apparently, the patient does not know what real 'germ cell tumor' is, and especially the chemotherapy to treat it; since he is not qualified, the oncologist addressed the patient to the oncology department where they will call a psychologist as well as an oncology senior to explain better the situation for him, since the chemotherapy will make him infertile (The oncologist gave him a hint though when he asked about 'having kids')
	A		<i>"Yes I am, I have one daughter"</i>	
	Q	(After discussing the case with a senior) <i>"Well ... I will address you to the oncology department, and they will be managing you there"</i>		
	A		<i>"Ok, thank you"</i>	
85	Q		<i>"They told me last time that the disease did spread to the respiratory system, is that right?"</i>	The doctor did confirm the thoughts of the patient, and reassured him in the same time (avoiding much details), although he has a lung metastasis and still smokes despite the chemotherapy he is taking.
	A	<i>"Indeed, but it is stable now..."</i>		
	Q		<i>"Are the tests' results good?"</i>	Serious news announcement: before telling the patient's companion anything serious, the oncologist had to check the family relationship, since such
	A	<i>"First, are you from his family?"</i>		
	Q		<i>"Yes, he is my dad"</i>	

86	A	<i>“Ok, do you know his diagnosis?”</i>		news should be delivered to the closest ones (If not the patient himself). Also, she did try to assess how much the daughter knows to be selective about the announcement.
87	Q	<i>“Please, give me your phone number so I can contact you about the final treatment decision”</i>		To facilitate communication, especially with seriously ill patients, or the ones living very far from the hospital, phone calls are quite effective for communicating some of the treatment decisions.
	A		<i>“Thank you, here it is...”</i>	
89	Q		(A patient’s relative) <i>“They told us that his haemoglobin is low”</i>	Calming fears and reassuring the companion.
	A	<i>“It improved compared to the last time we’ve seen him”</i>		
90	Q		<i>“I have skin rashes in my body”</i>	Explaining and reassuring.
	A	<i>“The skin rashes are a good sign of responsiveness to the treatment”</i>		
91	Q	<i>“Where do you live? ”</i>		The purpose of the question was to socialize ; the doctor already knew where the patient lives, and still, wanted to break the two minute silence with that kind of simple questions.
	A		<i>“Just here ... in Fez”</i>	
92	Q	<i>“We need to do some kidneys and lever’ tests, in addition to a CT scan”</i>		Format of the question: it would have been better to say: <i>“The kidneys and lever are fine now, but they have to be checked out from time to time, so we’ll have to do tests to check”</i>
	A		<i>“What are the symptoms of a renal/kidney failure then?”</i>	

**Questionnaire destiné au personnel médical de l'hôpital
d'oncologie du CHU Hassan II Fès (y compris les services de
Radiothérapie et d'Oncologie).**

Dans le cadre de réalisation d'une thèse doctorale, à la Faculté des Lettres et des Sciences Humaines Fès-Saïss, intitulée : *Healthcare Communication in Morocco: A study of physician-patient communication in oncology (The Hospital University Center Hassan II as a case study)*, j'ai le plaisir de bien vouloir vous demander de remplir ce questionnaire qui vise le personnel médical de l'hôpital d'oncologie du CHU Hassan II de Fès, et qui serait primordial pour la partie pratique de la dite thèse.

Je tiens à vous informer que mon travail sur le terrain a reçu l'accord de la direction du CHU Hassan II, et que ces questionnaires seront purement anonymes, visant seulement à explorer d'avantage le processus de communication médecin-malade en oncologie.

Je vous remercie d'avance.

Omar OUBRY.

**Questionnaire destiné au personnel médical de l'hôpital d'oncologie du CHU
Hassan II Fès (y compris les services de Radiothérapie et d'Oncologie).**

1. Sexe : Homme 1 Femme 2

2. Date de naissance :/...../.....

3. Grade :

- Médecin interne 1
- Médecin résident 2
- Médecin spécialiste 3
- Professeur 4

4. Ancienneté dans le service: an(s) et mois.

5. Nombre moyen d'heures passées quotidiennement avec les patients cancéreux:

- 1 < à 3 heures. 2 3 à 6 heures. 3 > à 6 heures.

6. Qu'entendez-vous dire par « **Communication santé** » ?

.....
.....

7. Est-ce que vous avez reçu une formation en matière de '**Communication avec les patients**'
ou plus précisément : '**Communication avec les patients cancéreux**' ?

- 1 Oui 2 Non

8. Trouvez-vous les premières consultations pour le recrutement des nouveaux malades (pour
ouverture de dossier) assez difficiles ?

- 1 Oui 2 Non

8a *Si **Oui**, est-ce parce que :

- 1 Les malades cancéreux sont particuliers (émotionnellement fragiles) ;
- 2 C'est la consultation d'annonce du diagnostic et d'explication du pronostic, et où le
mot « cancer » pourra être prononcé ;
- 3 Déni de la maladie ;
- 4 Autres :

* A votre avis, c'est quoi la plus difficile d'entre elles (citées ci-dessus) et pourquoi?.....
.....

15. Est-ce que vous expliquez aux patients - en détails - les modalités de traitement de cancer dont ils vont bénéficier ?

1 Oui

2 Non

16. Le niveau socio-culturel des patients vous pose parfois un problème lors de communication ?

1 Oui

2 Non

18 a * Si oui, comment agissez-vous ?

1 Vous simplifiez l'information et vous l'adaptez à leur niveau ;

2 Vous restreignez la communication au strict nécessaire ;

3 Vous demandez la présence de quelqu'un de la famille qui est plus instruit pour faciliter la tâche ;

4 Vous avez recours à l'assistante sociale ;

5 Autre :

17. Quelle est approximativement la durée moyenne (en minutes) de votre consultation ?

• Avec un nouveau malade:

1 < à 15min **2** 15 à 30min **3** 30 à 60 min **4** >60min

• Avec un ancien malade:

1 < à 15min **2** 15 à 30min **3** 30 à 60 min **4** >60min

18. Permettez-vous l'échange de questions avec vos patients ?

1 Oui

2 Parfois

3 Non

* Si oui, pourquoi ? :

1 Etape très importante dans la PEC du cancer ;

2 Pour une bonne observance du TTT ;

3 Evaluer les informations pré-requises ;

4 Les patients cherchent des réponses pour se rassurer ;

5 Les patients ont droit aux informations sur la maladie : TTT, effets secondaires, pronostic ;

6 Pour gagner leur confiance ;

7 Pour les impliquer dans leur propre prise en charge.

19. Ça vous arrive parfois d'éviter de dévoiler aux patients quelques informations à propos de leur état de santé ?

1 Oui

2 Non

*** Si Oui, pourquoi ?**

- 1 Pour leur donner espoir/ les encourager à combattre la maladie ;
- 2 Pour éviter de les déstabiliser psychiquement/ prévenir la dépression ;
- 3 Quand l'état psychique du patient ne le permet pas (patient instable, fragile ...) ;
- 4 Quand certaines informations peuvent induire le patient à rejeter le TTT ;
- 5 A la demande de la famille.

20. A la fin des consultations, demandez-vous des feed-back auprès des patients ?

1 Oui

2 Non

*** Si Oui/Parfois, pourquoi ?**

- 1 Pour apprécier la qualité des soins/ la satisfaction du patient ;
- 2 Pour évaluer les connaissances des patients et les éclaircir si nécessaire ;
- 3 Pour évaluer vos compétences en communication.

21. Donnez-vous votre numéro de téléphone aux patients pour vous contacter ?

1 Oui

2 Non

*** SVP justifiez votre réponse :**

Si Oui	Si Non
<p>1 <input type="checkbox"/> Quand l'interaction permanente est nécessaire (patients nécessitant un suivi étroit)</p> <p>2 <input type="checkbox"/> Le patient cancéreux est particulier (psychologiquement faible)</p> <p>3 <input type="checkbox"/> Pour optimiser la communication avec les patients habitant loin et veulent des informations supplémentaires</p> <p>4 <input type="checkbox"/> Pour nous demander à propos de certaines décisions thérapeutiques importantes</p> <p>5 <input type="checkbox"/> Les patients ont parfois besoin d'une consultation via tel (ex : un simple traitement symptomatique d'un effet secondaire ...)</p>	<p>1 <input type="checkbox"/> C'est personnel / ça fait partie de la vie privée</p> <p>2 <input type="checkbox"/> Pour éviter les consultations via tél (qui ne sont pas bénéfiques)</p> <p>3 <input type="checkbox"/> Autre :</p>

22. Lors des consultations, essayez-vous parfois de traiter les sujets personnels du patient (sujets non liés au cancer, notamment : la famille, le travail, etc.) ?

1 Oui

2 Non

* SVP justifiez votre réponse :

Si Oui	Si Non
<p>1 <input type="checkbox"/> Le cancer concerne l'entourage familial et professionnel du patient</p> <p>2 <input type="checkbox"/> Pour créer de l'ambiance et gagner la confiance du malade</p> <p>3 <input type="checkbox"/> Vous laissez le patient s'exprimer pour adapter la PEC à ses besoins</p> <p>4 <input type="checkbox"/> Pour améliorer l'observance au traitement</p> <p>5 <input type="checkbox"/> Pour le réconforter et le soulager un peu</p> <p>6 <input type="checkbox"/> Pour savoir le retentissement de ces sujets sur l'état de santé</p>	<p>1 <input type="checkbox"/> Cela dépasse vos compétences</p> <p>2 <input type="checkbox"/> Vous évitez tout sujet n'est pas en relation avec la maladie</p> <p>3 <input type="checkbox"/> Le temps de la consultation ne le permet pas</p> <p>4 <input type="checkbox"/> Pour garder la relation professionnelle</p> <p>5 <input type="checkbox"/> Autre :</p>

23. Lors de vos discussions avec les patients, avez-vous une tendance à :

- 1 mieux les connaître (en tant qu' « individus » et pas « malades ») ? **Ou bien :**
- 2 garder la relation professionnelle et de se concentrer seulement sur la maladie (cancer) et son traitement ?

24. Pour les patients parlant un dialecte autre que la Darija Marocaine, est ce que c'est toujours la famille qui joue le rôle d'interprète ?

1 Oui

2 Non

* Si **Non**, c'est souvent :

- 1 Quelqu'un du personnel du service ;
- 2 Vous-même ;
- 3 Un autre patient/accompagnant/bénévole.

25. A votre avis, quels sont les obstacles à une bonne communication avec les patients cancéreux ?

- 1 Diversité socio-culturelle ;
- 2 Manque de temps ;
- 3 Charge du travail ;
- 4 Incompétence en matière de communication médecin-malade
- 5 Autres :

26. Quelles sont vos suggestions pour améliorer la qualité de communication avec les patients cancéreux au niveau de votre service, et ainsi améliorer la qualité de prise en charge et la relation avec ces patients ?

.....
.....
.....
.....

27. Autres remarques / ajouts que vous jugez utiles à propos du sujet:

.....
.....
.....
.....

Je vous remercie infiniment pour votre collaboration 😊

Questionnaire for the medical personnel of the Oncology Hospital

(Including the Oncology and Radiotherapy departments- CHU Hassan II of Fez).

1. Gender : Male 1 Female 2

2. Date of birth :/...../.....

3. Grade :

- Intern 1
- Resident 2
- Specialist 3
- Professor 4

4. Seniority in the department: months.

5. Number of hours spent with cancer patients on a daily basis:

1 < 3 hours.

2 3 to 6 hours.

3 > 6 hours.

6. What does the concept of « Health Communication » mean to you?

.....
.....

7. Have you ever received training in terms of '*Communication with patients*', or more precisely: '*Communication with cancer patients*'?

1 Yes

2 No

8. Do you find any challenges during the patients' first oncology consultations (Medical file opening sessions)?

1 Yes

2 No

8. a *If Yes, is it because :

1 cancer patients are special;

2 this is the session when some truths about the disease are revealed;

3 denial of the disease;

4 others:

.....

9. Generally :

- 1 Do you (oncologists) announce the diagnosis? **Or:**
- 2 the patients are already informed by another healthcare professional who had discovered the cancer: surgeon, gynecologist, radiologist...etc.)?

10. When you are talking to your patient and you use another term other than '**cancer**', what do you choose?

- 1 Malignant tumor?
- 2 Aggressive disease?
- 3 Chronic disease
- 4 Mass/node?
- 5 Neoplasia
- 6 "That disease"

11. To ensure the psychological support during the consultations :

- 1 are you sometimes accompanied by a psychologist, **or:**
- 2 you do it yourself?
- 3 Others:

12. In consultations, do the patients come accompanied by someone? (Family member, marriage partner, or a friend)?

- 1 Yes
- 2 No

13. Sometimes, the patient's family requests to withhold the diagnosis from him/her, and then they ask you so; how do you react in such a case?

- 1 you tell the truth to the patient anyway;
- 2 you respect the family's request;
- 3 you provide a general idea to the patient, and you avoid details;
- 4 Others :.....
.....

14. What are the most common types of '**bad/serious news**' that you announce to patients and their companions?

- 1 a very advanced cancer;
- 2 relapse;
- 3 terminal phase/palliative care and end of life;
- 4 ineffective treatment;
- 5 others :.....

15. Do you explain the details of the treatment modalities to the patients?

1 Yes

2 No

16. Does the socio-economic level pose a challenge while communicating with patients?

1 Yes

2 No

16. a * If Yes, how do you manage the situation?

1 you simplify the information;

2 you narrow the information to the bare minimum;

3 you ask for the presence of a relative to make the task easier;

4 you ask for the social worker's help;

17. What is the average duration of a consultation (in minutes)?

• With a newly diagnosed patient:

1 < 15min 2 15 to 30min 3 30 to 60 min 4 > 60min

• With a 'regular' patient:

1 < 15min 2 15 to 30min 3 30 to 60 min 4 >60min

18. Do you allow questions' exchange with your patients?

1 Yes

2 No

* If Yes, why? :

1 it is an important stage in the cancer management process;

2 to ensure a good adherence to the treatment;

3 to check the amount of cancer information they acquired;

4 the patients need answers to be reassured;

5 the patients have the right to be informed about the disease: treatment, side effects, or prognosis;

6 to gain the patients' trust;

7 to make the patients participate in their own treatment.

19. Do you ever hide information (related to cancer) from the patients?

1 Yes

2 No

* If Yes, why ?

1 to provide them with hope ;

2 to avoid disturbing their psychological status ;

3 when the psychological condition does not allow;

4 when some information can induce the rejection of the treatment;

5 at the request of the family.

20. At the end of consultations, do you ask for feedback?

1 Yes

2 No

*** If yes, why ?**

- 1 To evaluate the quality of care/ patient's satisfaction;
- 2 To assess the patients' knowledge;
- 3 To evaluate your own communication skills.

21. Do you give your personal phone number to your patients?

1 Yes

2 No

*** Please justify your answer :**

If Yes	If No
1 <input type="checkbox"/> When the permanent interaction is necessary	1 <input type="checkbox"/> It is personal (part of the private life)
2 <input type="checkbox"/> Cancer patients are 'special' (Emotionally fragile)	2 <input type="checkbox"/> To avoid phone consultations
3 <input type="checkbox"/> To optimize communication with the patients living far away, and who might need additional information	
4 <input type="checkbox"/> When the patients want to know about some therapeutic decisions	
5 <input type="checkbox"/> When the patients need a simple consultation (e.g. treatment of some minor side effects)	

22. During consultations, do you try to talk about patients' personal matters? (Family, work ... etc.)

1 Yes

2 No

* Please justify your answer :

If Yes	If No
<p>1 <input type="checkbox"/> Cancer affects both personal and professional environments of patients</p> <p>2 <input type="checkbox"/> To create a good atmosphere and gain the patients' trust</p> <p>3 <input type="checkbox"/> To let the patients express themselves and adapt the cancer management according to their needs</p> <p>4 <input type="checkbox"/> To improve their adherence to treatment</p> <p>5 <input type="checkbox"/> To comfort the patient</p> <p>6 <input type="checkbox"/> To be aware of the impact of those topics on the patient's health status</p>	<p>1 <input type="checkbox"/> This goes beyond the medical competence</p> <p>2 <input type="checkbox"/> To avoid anything not related to cancer management</p> <p>3 <input type="checkbox"/> Being short of time</p> <p>4 <input type="checkbox"/> To keep the physician-patient relationship professional</p>

23. While talking to your patients, do you :

- 1** Try to know them as 'individuals' and not just as 'patients', **or:**
- 2** You keep the relationship mainly professional (disease-centered)?

24. For the patients who are non-Arabic speakers, who insures the translation task?

- 1** Family member/companion
- 2** Someone else

25. In your opinion, what are the barriers to effective communication with cancer patients ?

- 1** Socio-cultural diversity;
- 2** Time-shortage;
- 3** Work load;
- 4** Lack of communication skills.

26. What are your suggestions to improve the quality of communication with cancer patients in the oncology departments of the Hospital University Center Hassan II of Fez?

.....

.....

27. Other remarks / additions about the topic under study:

.....

.....

.....

Thank you for your collaboration ☺

Activité de l'Oncologie Médicale - Prestation de l'Hôpital du jour

Répartition des cancers selon la localisation

	JANV	FEV	MARS	AVRIL	MAI	JUIN	JUILLET	AOUT	SEPT	OCT	NOV	DEC	TOTAL
Cancers Gynéco -mamma	40	62	66	62	83	79	46	69	53	77	67	69	773
Cancers Digestifs	35	27	29	27	32	24	33	44	37	29	25	27	369
Cancers Broncho-pulmon	7	12	15	9	16	13	12	18	10	10	13	10	145
Cancers ORL	11	12	9	10	15	14	8	10	11	4	9	10	123
Cancers Urologie	12	19	17	14	12	21	20	15	11	15	13	20	189
Sarcomes	6	3	2	3	1	3	7	13	7	6	3	4	58
Cancers Dermatologiques	1	3	1	0	3	3	2	0	0	1	1	0	15
Cancers de la Thyroïde	1	2	1	1	4	0	1	1	1	2	2	2	18
Primitif indéterminé	3	1	1	2	3	3	4	0	0	2	2	2	23
Autres	14	10	5	12	9	13	5	13	15	8	9	10	123
Total	130	151	146	140	178	173	138	183	145	154	144	154	1836

Nombre de cas de cancers enregistrés

SEXE	JANV	FEV	MARS	AVRIL	MAI	JUIN	JUILLET	AOUT	SEPT	OCT	NOV	DEC	TOTAL
HOMMES	55	51	62	57	57	75	54	75	61	58	66	63	734
FEMMES	75	100	84	83	121	98	84	108	84	96	78	91	1102
TOTAL	130	151	146	140	178	173	138	183	145	154	144	154	1836

Term	Arabic transliteration	Percentage
Malignant illness	مرض خبيث	31.6%
Aggressive (or bad) illness	مرض قبيح	28.9%
Chronic disease	مرض مزمن	7.9%
Mass/node	حُبُوبَة	28.9%
Neoplasia	ورم غير حميد	5.3%
'That disease' (word-for-word translation from Arabic)	دَاكُ الْمَرَضِ	18.4%

Table C: Terms used to refer to 'cancer'.

1^{ère} Année de Médecine

PROGRAMMATION DES HORAIRES Semaine du 09 au 14 mars

Année Universitaire 2019-2020

	08h30-09h30	09h30-10h30	10h30-11h30	11h30-12h30	14h30-15h30	15h30-16h30	16h30-17h30	17h30-18h30
Lundi 09	HISTOLOGIE I (CM)		EMBRYOLOGIE I (CM)		INTRODUCTION AU STAGE D'IMMERSION (ED)/G : C			
Mardi 10	HISTOLOGIE I (CM)		BIOPHYSIQUE (CM) PR. ISMAILI ALAOUI		INTRODUCTION AU STAGE D'IMMERSION (ED)/G : D			
Mercredi 11	EMBRYOLOGIE I (CM)		PSYCHO-SOCIOLOGIE (CM)					
Jeudi 12	ANATOMIE II (CM)		TECHNIQUES DE COMMUNICATION (CM)		HISTOIRE DE LA MEDECINE (CM) AMPHI 6			
Vendredi 13	ANATOMIE II (CM)		BIOPHYSIQUE (CM) PR. ISMAILI ALAOUI		EMBRYOLOGIE I (CM) AMPHI 6			
Samedi 14								

ENSEIGNANTS :

HISTOLOGIE/EMBRYOLOGIE I : PR. HARMOUCH T. & PR. SEKAL M.

BIOPHYSIQUE : PR. BOUJRAF S., PR. ISMAILI ALAOUI N., PR. ALAMI B.

PSYCHO-SOCIOLOGIE : PR. AALOUANE R., PR. ABABOU .M., PR. AARAB C., PR BOUT A.

ANATOMIE II : PR. CHAKOUR K., PR. MELLAS S., PR. EL KOUACHE M.

TECHNIQUES DE COMMUNICATION : PR. SBAI.A

INTRODUCTION AU STAGE D'IMMERSION : PR. OUMKHTAR.B

HISTOIRE DE LA MEDECINE : PR. BENJELLOUN .B

DEROULEMENT DES COURS :

Cours Magistraux -> AMPHI PR MOULAY HASSAN FARIH (5)
Enseignements Dirigés -> CENTRE DE SIMULATION (CELESTE)

b	=	ب	z	=	ز	f	=	ف
t	=	ت	s	=	س	q	=	ق
th	=	ث	sh	=	ش	k	=	ك
j	=	ج	ṣ	=	ص	l	=	ل
ḥ	=	ح	ḍ	=	ض	m	=	م
kh	=	خ	ṭ	=	ط	n	=	ن
d	=	د	ẓ	=	ظ	h	=	ه
dh	=	ذ	‘	=	ع	w	=	و
r	=	ر	gh	=	غ	y	=	ي

Short: a = اَ ; i = اِ ; u = اُ

Long: ā = آ ; ī = اِي ; ū = اُو

Diphthong: ay = اَي ; aw = اَو

مصلحة الأندكولوجيا الطبية




كاتب
المريض

Service d'Oncologie Médicale



Livret
du patient



SERVICE DE RADIOTHÉRAPIE
CHU HASSAN II FÈS



C
HASSAN II
U

المركز الإستشفائي الجامعي الحسن الثاني فاس
Centre Hospitalier et Universitaire Hassan II Fès

Les effets
secondaire de la
Radiothérapie

الآثار الجانبية للعلاج
بالأشعة