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Investigating Doctors-Patients Interaction from a Sociolinguistic Perspective: The Case of Ahmed Medeghri Public Hospital of Ain Témouchent

An Extended Essay Submitted in Partial Fulfillment of the Requirement for the Degree of Master in Linguistics

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Dedications 1

In the name of Allah, the almighty god, I dedicate this work:

To my beloved mother for her endless love, support, encouragements and prayers

To my dearest father for supporting me to continue this research paper

To all my precious brothers and sisters for their concerns

To my friends and colleagues, mostly Chahinez BEN AHMED DAHOU for

her motivative and supportive words and pieces of advice

Thank you all for your unconditioned love, support, and sacrifices

May Allah bless you

Ms. Souâd BAILICH

Dedications 2

In the name of Allah, the almighty, I dedicate this thesis:

To my supportive family including:

My lovely parents:

To the apple of my eye

My sweet mother for her unconditional love

To my idol in this life

My father for his continuous support

To all my beloved siblings including:

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To my favourite adorable cousin Amina ZIADI

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thank you Asmaâ for being such an inspiration to me most of the time

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Abstract

In health sector, a good medical care depends primary on health providers who are concerned with making the most efficient health treatment for their patients. Yet, it depends on the effectiveness of communication. It is the prominent criterion for achieving a successful medication, maintaining and improving their health as well as reaching a high satisfaction for both the therapists and the patients. Indeed, Doctor-Patient communication is, essentially, an important issue that should be valued and given much more importance and interest so that doctors can establish a good relationship with their patients and avoid any type of confusion, misconception, misleading, or misunderstanding. However, a poor D-P communication can have serious consequences upon the health outcomes, especially to the laymen who experience a big misunderstanding due to their doctors' use of medical jargon. The present research focuses principally on D-P communication at Ahmed Medeghri Public Hospital of Ain Témouchent. It examines language use in the Algerian healthcare settings. It also sheds light on the behaviour of doctors who tend to use French language in everyday medical encounters. In addition, it seeks to observe the linguistic profile of the patients including their level of proficiency towards French language as well as their level of health literacy in order to check their ability of understanding the medical jargon. Hence, this research work also aims at discovering the communication barriers that may lead to poor communication. Thus, this research inquiry makes its investigation based on two research instruments of data collection namely the questionnaire and the interview. After collecting and analysing the needed data and testing the hypotheses; the study finds out that the patients' lack of health literacy, the use of French language and mostly, the medical jargon constitutes a barrier to effective communication in the Algerian healthcare settings which accordingly affects D-P relationships.

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Key to Abbreviations and Acronyms

D-P Communication: Doctor-Patient Communication

CS: Code Switching

CA: Classical Arabic

MSA: Modern Standard Arabic

AA: Algerian Arabic

General Introduction

General Introduction

General Introduction

The Algerian healthcare sector seems to be well equipped with several advanced materials and technologies which are used for treating, diagnosing, and bettering the patients' healthcare quality. Yet, the role of communication in D-P relationship cannot be neglected where; both parties do rely on each other for the exact diagnosis of the disease. It is evident that if the language shared by both patients and physicians is not the same, the results are likely to be unsatisfactory for both of them. Thus, neither patients can fully explain their pain and concerns, nor doctors can reach their desired medical goals and treatments.

Language, both in its written and spoken forms, remains the most substantial component for the effectiveness of communication. It is an indispensable tool that patients and doctors use for the intelligibility of the shared information; this explains the reasons for which the field of language, within medical settings, has gained much interest from numerous researchers of distinct fields and disciplines. Moreover, several researches have shown that the use of this medical jargon may constitute difficulties in the interaction between both patients and physicians. Accordingly, it seems that the awareness towards the importance of language in the medical context is considerably increasing nowadays. As a result, any interaction between a service seeker and a health provider needs a mutual linguistic behaviour. Yet, the interference of any other unintelligible foreign language is likely to break the communication process and cause misunderstanding, frustration, and lack of trust in D-P relationship.

The use of language enables both doctors and patients to get access to useful information concerning the patient's health conditions where he/she can fully express his/her pains and concerns towards his/her illness. It also enables doctors to give a better diagnosis by identifying the kind of disease patients are complaining about, and more importantly, it allows them to discuss their medical decisions and treatments along with their patients. However, if any linguistic problem is encountered during medical examinations and the transmitted message is badly altered, both doctors and patients are likely to have some issues affecting their relationship.

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The importance of language in such disciplines as medicine is a critical point which should be pointed out. The intelligibility of language goes along with the correct choices of words to use in order to help the doctors to get access to the needed information and to the exact diagnosis of the patients' diseases. Nonetheless, language deficiencies are found especially in bilingual communities where, the interference of two languages is highly marked within their linguistic behavior. Yet, doctors are likely to face some difficulties in translating certain terms when interviewing their patients who are not in acquaintance with their meanings. Among the barriers that are affecting healthcare services are: the use of unintelligible language, lack of health literacy among patients, and mostly the doctors' use of certain medical jargon during medical examinations.

In Algeria, both doctors and students of medicine receive their training in the French language which is the language of all scientific disciplines. As a consequence, doctors become highly affected by its use. It seems hard for them to keep their speech free from French and those medical words with their patients, especially if patients have low educational level and weak health literacy. The result is that patients may neither be able to understand their doctors nor to discuss their view points and instructions concerning their healthcare conditions.

Since our interest is on the Algerian healthcare settings, most of our research work is conducted at Ahmed Medeghri Public Hospital of Ain Témouchent so that we can accomplish our field work. In this study, our primary concern is to examine the Doctors-Patients interaction and to highlight the language used during the medical examinations focusing on whether they do understand each other or not. In addition, we want to discover the communication barriers that may lead to any misunderstanding in D-P relationship and to what extent may these barriers affect the quality of healthcare outcomes.

In order to give the discussed topic issue a specific direction, the research questions are formulated as follows:

General Introduction

1-Which language is mostly used between doctors and patients during the physical examinations?

2-What causes poor communication between therapists and patients?

3-To what extent does poor communication affect patients and healthcare quality in general?

The above research questions have allowed the formulation of the following hypotheses:

1-Algerian Arabic is considered as the most prominent and used variety during medical examination. Yet, French is also used a lot and cannot be neglected.

2-French and medical jargon are barriers leading to poor communication between therapists and patients.

3-Most of the time, poor communication in D-P interactions leads to a misunderstanding between the interlocutors and may cause frustration, a lack of trust among patients which may result in a poor healthcare quality.

For testing these hypotheses and providing exact answers to the already mentioned research questions, two distinct research instruments are used for conducting such investigation. A questionnaire is attributed to the patients of Ahmed Medeghri Public Hospital of Ain Témouchent along with an interview targeting its doctors so that we can reveal language use in healthcare settings

Accordingly, the current extended essay is designed for having three chapters; each one is designed for serving its own purpose for the study:

The first chapter represents the theoretical part of the study where, several notions and concepts are identified. It also gives a review of the literature in which certain researches are mentioned concerning some aspects in the D-P communication. Moreover, it provides a clear review on the sociolinguistic situation in both Algeria and Ain Témouchent in particular.

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The second chapter is designed for the research design and the methodological aspect of the study along with the methods undertaken for data collection; in addition, it establishes the motives and objectives behind this study. It also provides a clear description on the selected case study along with the sample population and the research instruments used for collecting the data.

The third and the last chapter deals with the analysis of the gathered data where the patients' questionnaire is analysed quantitatively and the doctors' interview is analysed qualitatively. Furthermore, it provides both an interpretation and a discussion of the main findings and a set of suggestions and recommendations for further research studies.

Chapter One: Literature Review

1.1. Introduction

Communication is what makes people connected to each other. It is found in all aspects of human life that life would seem to be quasi-impossible if communication has no longer existed. The present chapter is designed to review the related literature in the area of sociolinguistics. Based on previous researches, this work aims at defining notions and concepts related to language, communication and how it has been processed, but most importantly, the focus is made on D-P communication. It also seeks to examine the possible barriers behind communication disruption between therapists and patients.

1.2. Language as a means of communication

Language is a code that represents the human system of communication, it is a powerful tool that makes people interact with each other and share information. Since its early days, language, both in its written and spoken form, remained the most substantial tool for expressing people's thoughts, feelings, beliefs, emotions, desires and experiences. Language has been extensively defined by different scholars for the past years; each one described it according to what he believes or what he experienced. In this context, Okon Essien (2016) defines language as:

A system of structural arbitrary vocal symbols by means of which human beings make meaning and communicate and interact with each other in a given community. Put more simply, language is a system of rules and principles in which sound, structure and meaning are integrated for communication. (p. 16)

According to him, language is seen as a system, that is, it follows certain rules and principles but most importantly he focuses on it as an ordered system and not any random one. Moreover, the produced vocal or spoken symbols should carry a meaning if not it would have no sense, just noises. Through time language remained the most significant tool used by individuals in order to express or communicate whatever they want.

The term "communication" is a Latin originated word which comes from "communicare" which means "to make common" Weekley, (1967, p. 338) or "to share". Communication is the process of sharing our ideas, thoughts and feelings with

other people and having those ideas, thoughts and feelings understood by the people we are talking with¹. In his writing, DeVito (1986, p. 61) describes communication as “the process or act of transmitting a message from a sender to a receiver, through a channel and with the interference of noise.” Further details are given to this definition, saying that the transmitted message is intentional and carries a meaning for change. In the light of DeVito’s definition, four components of communication are taken into consideration as Ted Slater mentioned in his essay “*A Definition and Model for Communication*”. To begin with, communication as a process is a continuous and a dynamic activity, in this context DeVito noted that “communication is referred to as a process to emphasize that it is always changing, always in motion” (p. 239). Moreover, the conveyed message can be either a sign or a symbol. The latter refers to the common natural phenomenon, while the former refers to the conventional agreement between people towards certain symbols. Furthermore, the message is being transmitted through an acoustic or a visual channel, in other words, the channel takes place when two people interact with each other or within an online conversation and so on. Another related definition is provided by Julia Wood (2004). According to her communication is “a systemic process in which individuals interact with and through symbols to create and interpret meanings.” Wood’s words are strongly supporting what DeVito mentioned previously in the sense that communication is regarded as a dynamic process that always keeps changing; it is also characterized as a systemic activity in which two parts are integrated within communication, and based on symbols.

The process of communication includes three elements sender, message and receiver, as long as these elements are available, and the transmitted message is understandable by the receiver in exactly the same way as it was intended, then effective communication takes place, otherwise, both the sender and the receiver would encounter problems in decoding the message. However, communication by means of language may be referred to either linguistic communication (verbal) based upon words and sentences, or non-linguistic (non-verbal) in which there is a variety of

¹<https://www.cls.utk.edu/week1-lesson7> (accessed on 28/01/2019).

ways that allow people express their feelings differently by using gestures or body language.

1.2.1. Verbal communication

Verbal communication typically occurs when the delivered message, or the exchanged information and ideas are expressed through spoken oral language; or written one. It all depends on the kind of communication individuals are engaged in. In other words, this type of communication is further divided into two types, oral communication and written communication.

In oral communication both the sender (encoder) and the receiver (decoder) use spoken words which includes speaking and listening and it takes part in face-to-face conversations; speech and public speaking; voice telephonic conversations; business meetings; conferences; interviews; classroom lectures and oral presentations. Generally, this type of communication is considered as an immediate process, wherein the verbal messages are sent very quickly and the received feedback is almost promptly. On the other hand, written communication describes any type of exchanging information, thoughts and ideas which makes use of written words and sentences. In this type the message is transmitted mainly via tools such as letters; e-mails, reports; essays, texts and questionnaires. Written communication requires a good mastery of language in which accuracy is of the paramount importance since the sender has sufficient time to write. Unlike oral communication, the immediate feedback is not always possible in written communication.

1.2.2. Non-verbal communication

The term non-verbal communication refers to a process when the sender and the recipient communicate without using any word. In which actions speak instead of words in a way that works the speaker's intended meaning by using signs or symbols. Human beings tend to express their feelings (happiness, sadness, amusement, excitement, anger, or fear) non-verbally more than verbally through laughing, smiling, crying, or shrieking, according to (Porter, 1969) "non-verbal communication is used to transmit one's feelings, attitude, and overall message." Communication through body

language is highly used among individuals as (Clock, 2000) states “people speak using their vocal chords, but they converse using their entire bodies.” Other ways are used in this type are facial expressions, eye contact, hand and arm gestures to interpret the true meaning since they are powerful to express an emotion towards a particular behaviour.

In fact, physical communication is the most common form of non-verbal communication because it involves bodily movements used during social interactions. In this context, (Phutela, D. 2015) notes that “when verbal communication conflicts with non-verbal clues, people will utilize the non-verbal clues to interpret the true meaning”.

1.2.3. Effective communication

Communication is considered as being effective only when there is a shared meaning, in other words, the transmitted message should be the same as the received one, and that both the sender and the receiver should have a mutual understanding when sharing their ideas in order to have a successful communication. Effective communication is more than just sharing knowledge, in fact, it is much more than that, it is about understanding the intended meaning behind the information. As far as the message is being conveyed, listening is also needed in a way that the meaning can be fully obtained and understood. Providing an exact definition of effective communication can encompass certain points that are highly needed. Nonetheless, the language used should be understandable for both parties and that the intended message is well received. Furthermore, communication is effective only when feedback is provided, in other words, feedback is a sign of mutual understanding between people engaged in a conversation. Effective communication is referred to any communication that is free from any barriers which may constitute misunderstanding among individuals.

Dell Hymes (1974) proposed a theoretical framework called the SPEAKING model. According to him, to understand a speech situation, other aspects are included rather than just linguistic ones, such as the situation of the communication,

participants' profile. To have a better analysis of speech situations, and a more in-depth analysis, Hymes proposed the SPEAKING acronym as follow:

S - Setting and scene - the physical circumstances where and when a speech situation takes place while the scene is the psychological aspect of the conversation.

P – Participants - refer to the information about the participants, to put it differently, their socio-cultural background.

E - Ends (goals) - those are the actual goals and purposes of the speech act that the participant wants to accomplish in a particular event.

A - Act sequence - it reflects the actual form and content of what is said and also how these words are related to the topic at hand.

K - Key - refers to the tone, manner or spirit in which a speech act is made, or a particular message is transmitted. The key may also be referred to by certain gestures, behaviours, etc.

I - Instrumentalities - refer to the choice of a particular channel, whether the actual form of speech is oral or written when communicating, and also refer to the dual shape for speech apply such as language, dialect, or register.

N - Norms of interaction and interpretation - refer to the social rules governing the participants' behaviours and the way how these behaviours may be considered by a person who does not share them.

G - Genre - refers to expensively demarcated types of words, for instance, proverbs, riddles, prayers and so on. These are done differently than the usual speech.

1.2.4. Models of communication

In order to better understand the human communication process, there are a variety of models and concepts which are provided with various theorists to give an explanation for the field of communication. De Saussure model of communication is one of the first models; the Shannon-Weaver model is the most popular one.

De Saussure' model of the speech circuit

The circular communication model or what has been termed the model of the speech circuit was proposed by Ferdinand De Saussure in *Course in General Linguistics* (1916), his circuit requires at least two individuals interacting within a conversation, otherwise, the circuit would not function at all. There are two basic considerations in Saussure's circuit, the first one states that communication is a linear transmission i.e. the speaker is supposed to be active, while the listener is passive, to put it simply, the sender transmits a message to a receiver who is supposed only to show some sort of comprehension to the sender's intended meaning, this is from one hand. On the other hand, or the second one indicates that the participants, both the speaker and the listener, are simultaneously active within the communication process, in other terms, the listener's role here is not just to listen but he/she may also answer or at the least display a few reaction. On the basis of the two previous assumptions, two processes are outlined within this framework; phonation and audition diagramed as follow:

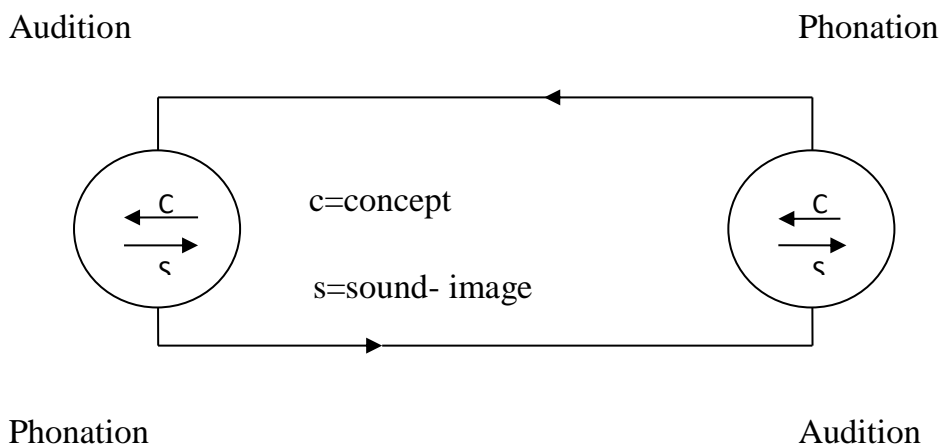


Figure 1.1: Saussure's abstract model of the speech circuit²

Shannon-Weaver model

In their article "A Mathematical Theory of Communication" The American mathematician Claude Shannon and the American scientist Warren Weaver developed a mathematical theory in 1949, which is commonly designed to

²https://www.researchgate.net/publication/299692546_Human_communication_from_the_Semiotic_Perspective (accessed on 03/02/2019).

enhance technical communication. This theory is known as a transmission model of communication, and it is called “Shannon-Weaver model of communication”. This model is basically formed to describe the process of communication between the sender and the receiver. This model is considered as the most well-known and influential model of communication because it aims at developing a quick and efficient way of the transmission of the information at some stage in the system of communication.

The theory has provided the rising area of communication with a mathematical dimension and a scientific basis. For Shannon, “the fundamental problem of communication is reproducing at one point either exactly or approximately a message selected at another point” (Shannon & Weaver, 1949, p. 3). More specifically, messages often have significance; that is, they refer to or correlate with certain physical or conceptual entities according to some system. The key to the concept of Shannon is that messages are prominent from a collection of viable messages. According to this model, communication occurs when a message is sent and received, however, this process is affected by other factors such as noise which it interrupts the flow of communication. Shannon-Weaver model of communication encompasses different elements sender, encoder, message, channel, decoder, receiver, noise, and feedback.

Sender (information source) is the communicator of the message, more precisely, the person who is supposed to send the message and select a particular channel.

Encoder (transmitter) encoding is the manner in which this message is transformed into signals, for instance sound waves. This is completed through the sender while transmitting the message.

Message is the information which is being communicated from the sender to the receiver.

Channel is a medium by which a message is conveyed to its intended audience.

Decoder (receiver) decoding is the interpretation of the message performed by means of the receiver. Once the receiver gets the message, he or she must decode it by translating the signals into message with a purpose to be able to comprehend it.

Receiver (destination) is the person who receives the message from the sender. The former is supposed to offer feedback and remarks to the latter, with the intention to ensure that the message has obtained correctly, however, the feedback should be provided according to the message.

Noise refers to the omission and disruption of information, it occurs when the receiver is prevented from receiving the message. In another words, when the message is being transmitted via a channel can be interrupted by external noise. This in turn, may lead to get incorrect message to the receiver. For this reason, feedback from the recipient is essential if the message is not received correctly. In addition, the noise may also influence the receiver's deciphering of the message.

Feed back this last component occurs when the receiver requests the sender to elaborate what he has previously said. Feedback is crucial in order to make certain that the message is properly received. In other words, feedback is of a paramount importance in communication, to be able to recognize whether or not the recipient has understood the message within the identical terms as supposed by the sender and whether he accepts that message or not.

Consequently, the sender encodes a message and conveys it to the receiver through a channel, there may be material noise through that channel which could intervene with the reception of the message. After the message passes through the channel, the receiver decodes it with a purpose to apprehend it, as it is shown in the diagram beneath.

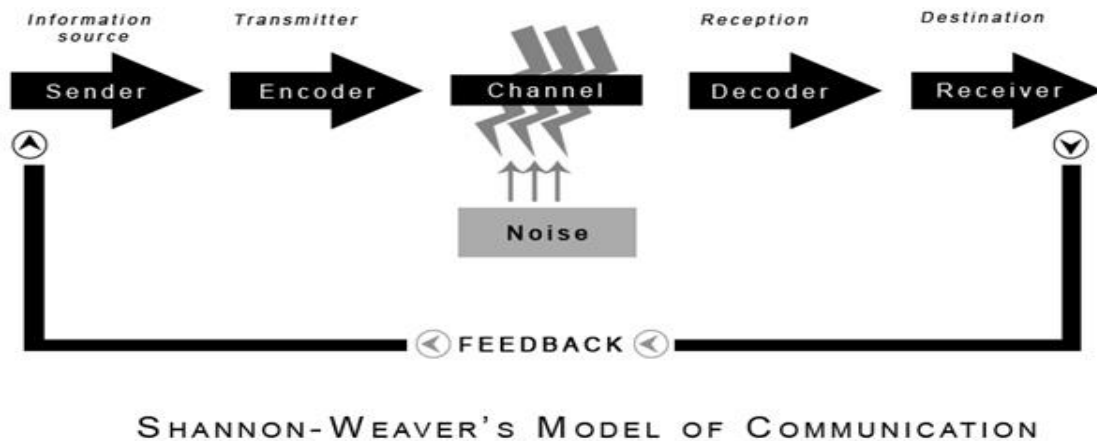


Figure 1.2: Shannon and Weaver's model of communication³

To conclude, linear model of Communication, founded by Shannon and Weaver (1949), sees communication as a one-way process in which the sender is the only person who sends messages and the receiver does not supply any feedback or reaction.

1.3. Sociolinguistics and language variation

One of the developing sub-fields and disciplines of linguistics is sociolinguistics. It is regarded as a completely wide area of language study, in which it is able to be used to explain specific methods of analysing and studying language within a particular speech community. As it is commonly known, linguistics is the scientific study of language, sociolinguistics, on the other hand, is the scientific study of the relationships between language and society. One of the famous sociolinguistic concepts that should be considered is language variation.

1.3.1. Language variation

During the past few years, the field of linguistics has shown much of interest towards the study of language variation in which the latter has focused on providing important things about languages and how do they change over time, in this context, Sapir was the first who said "Everyone knows that language is variable"(Sapir, 1921, p. 147). However; with the emergence of sociolinguistics a half century ago, language

³ <https://communicationinlibraries.wordpress.com/2013/12/07/shannon-weaver-model-of-communication/>(accessed on 01/02/2019).

variation became one of the most fruitful research ground in the field of sociolinguistic inquiry rather than just an aspect in linguistic description, “it was not until the advent of sociolinguistics a half-century ago that the admission of language variation became more than a footnote to linguistic description.”(Walt Wolfram, 2006, p. 1). Today, language variation is making outstanding contributions, as William Labov observes, to the fundamental problems in linguistic theory (Labov1966, 2001).

The core of language variation is to study how languages vary in response to different linguistic or social factors, including age, gender, social class, ethnicity, education etc., and how do these factors influence the speech of individuals, to put it simply, its main interest is to study how speakers attempt to use specific linguistic varieties in different situations to meet certain purposes of communication.

In sociolinguistics, language variety is used to refer to any language form used within speech communities, linguists in particular use language variety, or variety in itself as a technical term that indicates what is known as dialect, register, jargon and style. Wardhaugh states that “all languages exhibit internal variation, that is, each language exists in a number of varieties and is in one sense the sum of those varieties” (2006, p. 25). Although it seems difficult to define the concept of variety, it may be still taken into account in sociolinguistic research. According to Hudson, a variety of language is “a set of linguistic items with similar distribution.”(1996, p. 22), this means that these linguistic items are used among individuals and shared between groups of community “since all the linguistic items concerned have similar social distribution”. Hudson and Ferguson agreed on defining variety in terms of “linguistic items” or “human speech patterns” which are uniquely associated with some external factors like geographical area, social factors and so on.

Some of the linguistic varieties are highly noticed when people come to interact with others, in fact it can provide much more information about individuals’ background, the most frequent ones in this context are known to be the individual’s accent, dialect, regional dialect and so forth. However, there are other varieties that constitute what we assume to be the most common barriers in communication

healthcare settings, among these, register and jargon, because they are associated with the professional settings and that not all of the people are accustomed to know them.

1.3.1.1. Register

Language as a medium of human communication can be used in a variety of forms; these varieties of language can be in the form of either dialects or registers. Since the differences of dialects are associated with the user's social and regional background, registers are associated with the different contexts of use, in other words, registers are generally associated with a particular social groups within specific professional settings.

From a sociolinguistic perspective, register is one of the complicating factors concerning the study of language variation; this is due to the association of the linguistic items within separated occupational or professional settings. According to Agha (2006, p. 24) a register is seen as “a linguistic repertoire that is associated, culture-internally, with particular social practices and with persons who engage in such practices.” another apparent feature of register is that it gathers people sharing the same occupation under similar properties, as Ferguson says “people participating in recurrent communication situations tend to develop similar vocabularies, similar features of intonation, and characteristics bits of syntax and phonology that they use in these situations”(1994, p. 20) the kind of variety highlighted here is what is referred to as register. It is evident that one person can control a variety of registers; being a therapist, archeologist, a physician and so on, each register defines the individual's identity and how he/she seeks to present him or herself in a given community.

1.3.1.2. Jargon

Another type of language variation is jargon. It is a widespread idea that every specialty, profession, and occupation has its own unique terms and set of words, and uses specific slang known as ‘jargon’ (Fromkin, Hyams and Rodman 2007, p. 470) which is another variety of language.

As any other linguistic term has many definitions, Jargon on the other side has several definitions but the most common one would be the use of a particular vocabulary and specialized terminology by a specific group of people which associated with certain field of work; in which those group members share a common interests as Spolsky (1998, p. 33) states “ jargon is a variation concerning the special variety especially marked by a special set of vocabulary (technical terminology) associated with a profession or occupation or other defined social group and forming part in a group variety.”

Jargon has also been defined by (Merriam Webster) as being “the technical terminology or characteristic idiom of a special activity or group.” To put it simply, a particular group of people or organization use a specialized vocabulary related to their domains. The American Heritage Dictionary defines jargon as, "the language, especially the vocabulary, peculiar to a particular trade, profession, or group medical jargon" and also "language that is characterized by uncommon or pretentious vocabulary and convoluted syntax and is often vague in meaning." Many specialists of a particular vocation tend to use jargon frequently in their work which is only understood by them as a way for more effective communication and sharing information quickly.

The use of jargon is very important so that it will make us distinguish between different scopes of work, for instance the language of doctors, engineers, lawyers, linguists, and so many others. Jack and Schmidt (2002, p. 278) define jargon as spoken or written words and expressions used by a group of people who belong to a particular trade, profession, or any other group bound together by mutual interests, for example; the jargon of law, medical jargon. Jargon can be useful to convey the exact and correct meaning among a particular group of people who share the same position of job, in order to facilitate the way of communication between them which is one of the functions of jargon.

Medical jargon in particular, includes numerous scientific technical terms since the medical field is full of cryptic jargon. As an illustration to the first form of medical

jargon that the therapists tend to use; is the word such as diagnosis; which is the identification of a person's disease or illness by examining the symptoms.

1.4. Language choice

Generally, people all over the world can speak using only one language, due to certain factors and circumstances, an oversized number of speakers, multilingual speakers, are able to communicate using more than one language. When those speakers are involved within a conversation, or put in different situations, a decision has to be taken about which languages to use and that fit the actual situation or domain, in this context, it is evident that there are certain factors influencing the speaker's choice of a specific language. From a linguistic viewpoint, this linguistic phenomenon is named language choice.

Accordingly, language choice is about selecting words, phrases, and sentences from another different language within the linguistic repertoire of the speakers. Gumperz (1964) uses the term "linguistic repertoire" to describe the range of styles which an individual needs to fulfill all his/her communicative needs in the most appropriate way. In other words, the speaker's choice of any variety for a specific situation is not done randomly, but it is part of his/her communicative competence. Therefore, the choice is said to be governed by the social aspects where the speech act takes place. Moreover, David (2006) argues that language choice is triggered by factors such as social status, gender, educational attainment, ethnicity, age, occupation, rural and urban origin, speakers, topic, place, media and formality of the situation. These findings are supported by Fasold (1990). This indicates that people's linguistic choices are made for various purposes, which means that the chosen words, styles, registers, or the language in itself are due to the communication needs and the situation or the domain where the speaker finds him/herself.

1.4.1. Code switching

Another widely used variety of language in bilingual communities that has been appeared due to the language contact, and it is a result of bilingualism and multilingualism as well is code switching; this sociolinguistic phenomenon occurs

mainly at the level of speaking and conversation. Hoffman (1991, p. 110) describes this phenomenon as “the alternate use of two languages or linguistic varieties within the same utterance or during the same conversation.” It is the use of more than one code, language, dialect, or language variety within the same sentence during conversation as Romaine (1992, p. 110) states that CS is “the use of more than one language, variety, or style by a speaker within an utterance or discourse, or between different interlocutors or situations.” In the same context, (Meyerhoff 2006, p. 116) describes it as a phenomenon of moving between distinct varieties. Gumperz (1982, p. 59) defines what he calls conversational code switching as “the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems. Meyerhoff (2006, p. 116) “Code switching in its most specific sense, the alternation between varieties, or codes, across sentences or clause boundaries. Often used as a cover term including code mixing as well.”

Speakers from different social groups have the tendency to code switch in their daily interaction, they borrow some lexical items from another language and then they switch between their native language and that language. In other words, they shift from one code to another interchangeably. In this context, Myers Scotton (1998, p. 91) says that “when the speakers are sufficiently bilingual to produce monolingual utterances in either of the language, although they may speak one language better than the other, the product is called code switching.” In addition, she (1993) developed an idea of “unmarked” and “marked” choices of CS which she calls “the markedness model”, the unmarked choices are expected for social interaction and do not produce any special effect, in which the speaker switches at a time when it is normal to do so. However, the marked choices express a special intention; they are unusual and unexpected.

Code switching takes place primarily in bilingual and multilingual groups in their way of communication, because they are able to express different ideas by alternating more than one language during their exchanging for particular reasons, and depending mainly on the discussed topic. Moreover, CS is divided into three different types according to Poplack (1980) depending on the position of the code switched

items in a sentence or utterance, namely extra-sentential, inter-sentential, and intra-sentential code switching.

- Extra-sentential CS also known as tag switching is the insertion of a tag or a phrase from one language into an utterance which is completely in another language.
- Inter-sentential CS in this type the switch occurs at a clause or sentence boundaries, in which one clause or sentence is in one language while the following clause or sentence is in another language.
- Intra-sentential CS is considered as the most complex type among the other types Poplack (1980); the switch occurs from one language variety to another within clause, sentence, and even word boundaries.

Van Dulm (2007, p. 9) analyzes two perspectives of CS; grammatical perspective and sociolinguistic perspective. The first perspective refers to the structural levels of code switching in terms of syntax and morphology, while the second perspective is interested in the role of social factors and their effect on the appearance of CS particularly context and speaker. Van Dulm (2007) states that the grammatical perspective of CS encompasses the three categories (extra-sentential, inter-sentential, and intra-sentential) which has been proposed by Poplack (1980). On the other hand, the sociolinguistic perspective of CS includes situational and metaphorical code switching Blom and Gumperz (1972).

1.5. Language of medicine

Language as a means of communication can serve plenty of functions, it can educate, inform, yet it can confuse, and mislead. Due to its development throughout the years, language has pervaded all the aspects and domains of life particularly the field of medicine which is a huge science that covers technical and clinical studies. Medical language has emerged to impose itself in the discipline of linguistics and sociolinguistics in particular; in which it develops various medical terms and concepts known as jargon. The majority of medical terms are derived from Greek and Latin wherein some names of diseases are taken from these ancient languages; since the

Greeks were the first who found the field of medicine as a separate discipline in the ancient age. Medical language can be simply described as a medium by which medical professionals communicate between each other within a particular medical group. Moreover, Language of medicine bases on using medical terminology which is considered as the language of healthcare industry. Furthermore, it is the occupational register of doctors, in which it facilitates the process of communication among them, yet it is highly vague to those who are outside the medical community i.e. non-specialized audience such as patients. Medical language is purely about the specialized vocabulary that the therapists use with their patients during medical encounters. However, several studies have shown that patients misunderstand the medical jargon since they are not fully aware of the exact meaning of these terms. Hadlow and Pitts (1991) and Kirkmayer (1988) find that patients and physicians have different understanding of the medical terms. In other words, when the physician diagnoses the patient, he may use some medical words that seem complicated for the patient and not clearly understood from his or her part. In this context, other scholars have commented on one particular feature of medical language. McCullough (1989) and Mintz (1992) view medical language as an abstract discourse about disease and organs and emphasize its distancing function, an artifact of its commitment to objectivity.

1.6. Doctor-Patient communication

During the academic years of doctors, the emphasis is on the study of human bodies; how to diagnose their patients, what appropriate medicine can be given, and so on. All of these are taken into consideration within the doctors' training. However, the main concern taught in here is how to deal with the patients and their complaints neglecting the importance of communication between the therapists and their patients. The D-P communication is based upon the exchange of information between the two parties in which the doctor's role here is not to impose him or herself upon their patients, but rather to establish a normal conversation based on what the patient has to say.

Accordingly, numerous studies have shown that doctors are not always good communicators; a common finding is that doctors often tended to be authoritarian or

even patronizing when dealing with patients (Gregory V. G. O'Dowd, 2004, p. 39). Nonetheless, one of the patients 'rights is to be part of their medical care and to be provided by the maximum of information from the part of their doctors. The D-P relationships are based upon effective communication; that is, good communication can improve healthcare conditions and help the physician to extract the maximum of information from his or her patients; so any doctor with a good mastery of communication skills can reach satisfactory results with his patients, to put simply, based on what the patient has to say, the doctor can diagnose better and can give the appropriate treatment to him or her.

Communication between doctors and patients is essential in the healthcare process, in which it does not only focus on understanding the physical indications of the patients, but rather on understanding what goes beyond that. Good communication skills can bring about trust and empathy to doctors and their patients which may lead to good satisfaction and positive feelings about the patient's health status.

1.7 Communication barriers

Communication is the process of sharing and exchanging information from one person to another, it plays a considerable role in developing relationships among individuals. It is also considered to be a successful process when the sender knows how to transfer the message to the receiver, and the receiver in return fully understands the intended meaning. However, there are cases where the message is not well-received as the sender intends. To put in another way, there are some barriers and obstacles that can occur during this exchange in which they prevent the message to be properly received, therefore; the process of communication may fail and the communicators face difficulties in understanding each other especially when the message is misinterpreted.

Communication barriers are elements that impede the flow of information and block the effectiveness of the communication. There are different types of barriers that limit the communication to be effective, to mention few physical barriers, linguistic barriers, and semantic barriers.

1.7.1. Physical barriers

Physical barriers are the external environmental conditions that act as a barriers and hinder the transmission of the message from the sender to the receiver, including noise which is considered as the major barrier of communication, it refers to any disruption that occurs during the communication and it interrupts the message to be correctly sent, consequently the receiver cannot reach it in a clear manner, and effective communication is not well established. For instance, in terms of oral communication like poor telephone connections may disturb the message to be conveyed, or in terms of written communication such as incorrect typing while writing an e-mail or a letter.

1.7.2. Linguistic barriers

Language as a tool of communication can cause a fundamental barrier when the communication takes place among people who do not speak the same language, or within the same language but from different linguistic backgrounds i.e. individuals from different regions use language differently, more specifically, the use of dialects varies from one region to another, and the meaning of some words differ. Language barrier also occurs when the speakers do not have the same level of ability of language.

1.7.3. Semantic barriers

Semantics is the study of meaning of the word. In any language a single word has a multiple meanings and interpretations for different people, from this point we can notice that the various meanings of a word can confuse both sender and the receiver and create a misunderstanding while encoding and decoding the message.

In addition, the use of jargon is also causing a barrier to effective communication, in other words, when a particular group of people uses technical words or specialized terminology with others who do not belong to the same community in which the meaning of that word is unclear and ambiguous, consequently the message is not fully understood.

1.8. The sociolinguistic situation in Algeria

Throughout history, the Arab Maghreb, Algeria specifically, had been always a shelter for many cultures and civilizations, this situation was not a question of sympathy. As a matter of fact, Algeria had fallen under the control of many invaders and from different regions that left their marks along with the history of Algeria. Since Algeria was considered as a colony in its early days, Algerians were in contact with various foreign populations; this contact is highly noticed within the linguistic profile of Algerians who were influenced by the foreigners' language in their every day speech.

Centuries ago, Algeria had passed through several historical events which lead to the sociolinguistic situation of today's Algerian community, in fact, the Algerian speech community is seen as to be a complex and a diverse one at the same time in which; several dialects and varieties of languages are widely spoken across the land involving Classical Arabic, Modern Standard Arabic, Algerian Arabic, French and Berber.

As it was stated before, some of the historical events are considered to be responsible for the linguistic changes in Algeria. Considering its geographical location, Algeria is situated in the north of Africa and bordered by the Mediterranean Sea from the north. Because of its strategic location, a lot of invaders had conquered Algeria for centuries like Turkey and Spain, but the longest and influential period is when it had fallen under the control of the Arabs for nine centuries. In spite of coming late; the French had colonized Algeria from 1830-1962 which had the greatest impact in Algeria's history. At that time, the French government had followed a very strict policy of imposing the French language upon the Arabic in schools and administrations. In this context, Taleb Ibrahimi (2000) states that:

It was the only language among the other languages which lasted and influenced the users. It has gained a particular statue in the Algerian society. The French language which was imposed on the Algerian by

fire and blood, constituted a fundamental element in the French policy of depriving people from their identity and the deculturation. (p. 66)⁴

Accordingly, their primary goal was to deprive the Algerians from their identity since language and culture are to be inseparable.

After the long term of the French colonization that lasted more than a century, Algeria got its independence on July 5th, 1962. Certain procedures were taken into account by the ministry amongst the declaration of Arabic, Classical Arabic, as the official language in all of the domains and yet, the French language as a foreign one, in addition to Berber (Tamazight spoken by the native inhabitants) which is also spoken. In October 2001, the government admitted Berber as a national language and not as an official one.

1.8.1. Arabic and its varieties

The Arabic language is widely common by people around the globe. In fact, it is ranked as the 5th among the languages of the world. Furthermore, it belongs to the Semitic subgroup of Afro-Asiatic languages with a number of approximately 422 million native and non-native speakers. Middle East countries as well as the North of Africa declared Arabic as their official language. However, Arabic is not used in one distinct form, actually, here in Algeria; three varieties are worth mentioning including: CA, MSA, and Colloquial Language known as AA.

1.9. The sociolinguistic situation in Ain Témouchent

Since our case study takes part in Ain Témouchent; it is worth to mention some lines about the geo linguistic background of this town in order to analyze its sociolinguistic variation and study its dialect. In fact, the town of Ain Témouchent resulting from the administrative division of 1984 is situated in the north western of Algeria and located at the crossroads of three large cities namely Oran, Sidi Belabbes, and Tlemcen. Actually, Ain Témouchent is bounded on the north by an 80 km coastal strip; and it is composed of eight daïras and twenty eight communes. With an area of

⁴ Cited in: Belhadj, F. Z. (2017). *Sociolinguistic Variation and its Effect on Algerian Arabic: The Case of Ain Témouchent Dialect*. Master Thesis. Belhadj Bouchaib University centre of Ain Témouchent. Algeria.

1.9.1. The dialect of Ain Témouchent

It is noteworthy that each region in Algeria differs slightly from one another in terms of dialect; and this is the case of Ain Témouchent which has its own linguistic variety. Ain Témouchent dialect is known as a distinct spoken variety of MSA and AA. To put it simply; language forms in Ain Témouchent community is a mixture of mainly Arabic and some borrowed French and Spanish words known as loan words because of the long period of colonialism that it had witnessed in the past centuries by the Turkish, Spanish, and French invasions which were particularly existed in this town. Therefore, those historical events and linguistic amendments that occurred in Ain Témouchent have led to the birth of Tmouchenti dialect. However, it has gone through several changes especially in terms of three linguistic levels namely phonology, morphology, and lexis in which these different characteristics are used in conversations on a daily basis and they have no written form.

1.10. Conclusion

The purpose of this research review is to elaborate the importance of language as a means of communication in our everyday lives, and the major role that communication plays in every aspect of human life. This chapter mainly dealt with the main concepts related to language and sociolinguistics in particular, in which it examined the different use of language from one individual to another because of several factors. It also identified some notions of the process of communication in order to show how Doctors-Patients communication works since our research study is based on D-P interaction. It aimed at explaining how the use of language influences the effectiveness of communication due to various barriers, especially in healthcare settings where the investigation of D-P takes place. The next chapter will deal with the research methodology and data collection.

Chapter Two: **Research Methodology and Data Collection**

2.1. Introduction

The current chapter represents the second section of our research work; it consists of the research methodology used to carry out this investigation and to find reliable answers to our research questions and hypotheses. It also gives a clear description of the case study which is the patients of Ahmed Medeghri Public Hospital of Ain Témouchent in Algeria along with its doctors. In order to collect data, two main research tools, namely the questionnaire designed for the patients and the interview for doctors were used.

2.2. Motivation for research

Language as a means of communication is highly required for both individuals and community life in which it would be much harder to express, share or interact with others without using it. Generally, the use of language is not confined to one specific field or discipline. In fact, every society, vocation or field of discipline uses its own language or has its own jargon which speakers use in the course of their work. The field of medicine is well known in having its own register that distinguishes it from other disciplines; in this context, numerous researchers have tackled language and medicine in their studies. Moreover, several researches have shown that the use of this medical jargon may constitute difficulties in interaction for both patients and physicians as well.

In Algeria, both doctors and students of medicine receive their training in the French language which is the language of all scientific disciplines. As a consequence, doctors become highly affected by using French in their linguistic behaviour, and even when diagnosing their patients. Since our interest is on the Algerian healthcare settings, most of our research work is conducted at Ahmed Medeghri Public Hospital of Ain Témouchent so that we can accomplish our field work. Actually, in this study our primary concern is to examine Doctors-Patients communication; whether they do understand each other or not, but most importantly, we want to discover the communication barriers behind any misunderstanding in D-P relationship.

2.3. Limitations

Conducting any research study is not a simple task as many people think but it rather requires a lot of efforts and it pushes the researcher to include many important details in order to present a well-balanced comprehensive description of his/her work. However, it is probable that this work may encounter several types of limitations, which are a part of any scientific research.

Our research work faced some certain limitations. Since our case study site takes place in Ahmed Medeghri Public Hospital, we were obliged to have an authorization in order to be allowed to enter the hospital and do our research work there. So, we needed an administrative paper from the English department signed by the headmaster of the university that proves we are researchers; however, we did not have this opportunity. Besides we were in a very hard and complex period due to some political issues that were happening in Algeria. All the Algerian territory has witnessed such a tremendous popular movement that started on the 22nd of February 2019, for the sake of changing the whole political system. Consequently, most of the Algerian institutions went on strike and universities in particular where various troubles happened.

Though we did not have the authorisation document, we could enter the hospital and question our targeted participants. In addition, we were obliged to explain the aim of our questionnaire to each patient so that we could convince him/her to answer the questions.

When started doing our field work, we have tried to make sure of having equality in numbers between men and women so that we can get a rich and reliable data that overpasses any sort of deception or biasness. Hence, fifty informants were selected and divided into two categories 25 males and 25 females. However, this division was not done randomly, as it was not easy to accomplish. When distributing our questionnaire, more females were available in the waiting rooms; we have noticed that females are outnumbered than men. So, we have faced some difficulties in having the required number of males' questionnaire; the reason for which we spent much time with males' questionnaire than with that of females. Moreover, not all the selected

participants agreed to fill in it; some of them did not understand the aim of the questionnaire and they did not know the reasons behind doing it; since they are not fully aware of our field of study. In fact, these patients were anxious and did not feel at ease while filling in the questionnaire that is why they avoided us by claiming that they were busy. Furthermore, concerning the second question of the questionnaire, we tried to appeal the most suitable participants in order to analyse their way of communication with their doctors, and see whether age matters when it comes to the use of the French language during the medical examination. However, some participants did not take it seriously in which these patients did not agree to choose the right option that describes their age, and this is one of the limitations that we have faced in this question. As a result, we were obliged to select other participants and re-explain our aim. We also attempted to persuade them that the answers should not be biased so that we could have valuable and reasonable data and authentic information that fit our study; for that reason we took too much time to do so. Another area of limitations that should be mentioned is the one that concerns the interview. This one was conducted with ten (10) doctors from Ahmed Medeghri Public Hospital; it was a pre-planned and well-arranged interview where we met the therapists face to face, with the intention to share their experience. However, some of the doctors were not available because they were busy working in the medical office and others were involved inside the surgery room. Yet, these limitations have not impacted or devalued our findings.

2.4. Research design and methodology

Generally, a research design and a research methodology are two overlapped concepts especially for the ascendant researchers; this is why an explanation must be provided to avoid any kind of confusion. Since the two concepts are commonly associated with the term research, it is first preferable to mention few lines on what a research really means.

Research is a cover term to an activity made in order to find out things that a person is not aware of in a systematic way. Academically speaking, a research is about investigating something that no one has ever known it before, it is more likely a further

expansion to the human common knowledge. According to Saunders, Lewis and Thornhill (2009, p. 5), a research is defined as being “something that people undertake in order to find out things in a systematic way, thereby increasing their knowledge”. From this point, it is proved that a research is a processed plan made to reach new facts and findings about the phenomenon under investigation, and that it follows certain steps and procedures starting by selecting a research area, formulating a research problem, collecting the data and analyzing them to reach the final results of the work, it is more like giving a particular design to your work.

Research design refers to a plan that is made when conducting the study. McMillan and Schumacher (2001, p. 166) view it as “a plan for selecting subjects, research sites, and data collection procedures to answer the research question(s)”. According to them, the purpose of having a research design is to maintain the credibility of the obtained results. Concerning the research design, different types are available to suit any kind of a research work. Determining which type to adopt depends on both the nature and the aims of the research work. In addition, each type has its own methods of data collection and analysis.

Similarly, and according to Schwardt (2007, p. 195), a research is “a theory of how an inquiry should proceed”. Accordingly, and in order to explain the kind of the problem which is investigated, the researcher has to formulate a testable hypotheses in an appropriate way for investigation, follow certain procedures, and finally choose the most suitable methods for data collection.

2.4.1. The qualitative research

Researchers from distinct disciplines are required to be sure about which method to adopt when undertaking a research study. One of the two basic methods that are used in studying the individual and the social world is the qualitative research. According to Shank (2002, p. 5) the qualitative research is “a form of systematic empirical inquiry into meaning”. This definition implies that the qualitative research is a planned method based upon rules that are stated by the qualitative research community council. Moreover, Shank expanded his definition saying that this method

is empirical in nature in which it is attached to the field of experience. Furthermore, it also aims at helping the researchers to know in which way people can have benefits of their experiences. Denzin and Lincoln (2005) state that:

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that makes the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them. (p. 3)

According to them, the qualitative researchers are the observers of the phenomena being investigated and that their study is based upon the people's experience. Nevertheless, they also attempt to define the qualitative research focusing on data collection's process.

The purpose of the qualitative research is to enable the researcher to get accessed and immersed within the culture or the situation of his/her informants; in addition, it also gives him/her the opportunity to interact directly with the members of his/her study. This indicates that following the qualitative approach, the researcher is considered to be an effective instrument for collecting the data, in which he/she is acquired to do his/her field work and observe the phenomena or any sort of behaviour where it takes its natural settings, and yet the obtained results may be different relying upon the researcher him/herself and how he/she conducts his/her research. Furthermore, the qualitative research, and unlike the quantitative one which is designed only for statistical or empirical findings that can be measured and verified, advocates a better understanding towards the overall conditions of human behaviour.

All in all, the qualitative research methods typically involve the use of participants' observations, documents analysis, interviews, open ended questions in questionnaires and so forth; all are undertaken by the researcher so that he/she can understand the social phenomenon under investigation. Therefore, the use of these

methods can provide the researcher with a variety of information that cannot be quantified but rather analyzed so that the researcher can understand the context of the research problem.

2.4.2. The quantitative research

Undertaking any research study does not take place randomly, it rather requires to select an appropriate method since choosing a method is one of the most important step that should the researcher do in his/her research. It is also based on different methods; one of these methods is the quantitative research.

The quantitative research is a structured and a systematic way of gathering information obtained from different sources; it deals with data collection through structured techniques and tools including questionnaires, surveys, and so forth. In fact quantitative approach deals with numbers, statistics, and measurements in which it uses only mathematical models and materials for the analysis. In addition, it provides numerical results of the investigation depending on a particular phenomenon. Quantitative research is also used to answer questions on relationships within measurable variables with an intention to explain, predict, and control the phenomenon being studied. In this respect Burns & Grove (1987) describe quantitative research as "... a formal, objective, systematic process in which numerical data are utilized to obtain information about the world" and "a research method which is used to describe and test relationships and to examine cause-and-effect relationships". On the other hand, Tavakol and Sanders (2014) state that quantitative studies are interested in "investigating how and why phenomena vary". To sum up, quantitative research tries to investigate about the variables of a specific phenomenon which it can be an attitude, an opinion, an action, behaviour, and so on, in a way that enables the researcher to understand the manner and find the reasons why such phenomenon varies.

Some researchers prefer using quantitative methods not only to find answers to the kind of questions that deal with statistical and mathematical data, but also to acquire reliable data for a particular inquiry through numerical evidence as well as to check its validity and reliability which is usually crucial. Another reason that makes

the researchers select this method is that it reaches objective conclusions unlike the qualitative approach which reaches subjective ones.

2.5. The case study

The research setting refers to the place where the study takes place as well as where the data are collected. In our study, the data are collected at Ahmed Medeghri public hospital of Ain Témouchent. But before starting describing our research setting, it is worth mentioning some lines to give a brief outlook about the city of Ain Témouchent.

Ain Témouchent is a city in the western of Algeria. It is located between the cities of Oran, Tlemcen and Sidi Bel Abbes. Its area is about 2,377 km². It is limited to the East by the city of Oran, Southeast by the city of Sidi Bel Abbes, Southwest by that of Tlemcen, and Northwest by the Mediterranean Sea which borders on a distance of about 80 km.

Historically speaking, Ain Témouchent has been occupied for more than 15.000 years by different foreign settlers and invaders including France and Spain. The recent history of Ain Témouchent is incredibly rich because it hosted many important figures of the Algerian revolution war. For this reason, various public institutions in Ain Témouchent take their names from different revolutionists. One of these institutions is the Public Hospital Ahmed Medeghri where our case study takes place.

Our research was conducted at Ahmed Medeghri hospital of Ain Témouchent. The hospital Ahmed Medeghri is a public institution with an administrative character and characterized by legal personality and moral autonomy and finances. The name of this hospital was taken from the Algerian politician Ahmed Medeghri who participated in the Algerian revolution. This great man was born on July 23rd, 1934 in Oran and died on December 10th, 1974 in Algiers. He was originally from Saida, and he was among the first territorial divisions post-independence. Concerning the date of origin and location of Ahmed Medeghri public hospital; it was built during the colonial period in 1934 on an area of 6000 m². It consists of 14 departments and it contains 504 orderly beds and 344 technical beds. It is also surrounded by pleasant green trees that

provide the patient complete psychological comfort and relief. Besides it receives patients from Ain Témouchent and its neighboring municipalities. Ahmed Medeghri Public Hospital has a variety of functions, first of all is to ensure the integrated and sequential health needs of the population. Another function is to organize, program, and distribute the necessary hospitalization, diagnosis, and medical rehabilitation. After that is to apply and implement the national health programs. And finally is to ensure health protection and control of social ills. Furthermore, the main importance of this public hospital institution is the prevention and basic treatment, diagnosis of the disease, and thermal therapy. Additionally, tests for general medicine and specialty medicine. Indeed, it tries to achieve treatment equality among all the population.

In fact, the choice of this hospital as a research setting for doing our fieldwork was for many reasons. Firstly, it is an ancient hospital that had been built along time ago. Secondly, there are so many doctors from various specialties with whom we were so excited to do the interview. Similarly, we were so happy to find a multitude of patients who helped us in filling in the questionnaire.

2.6. Data collection methodology

In investigating the D-P interaction, a number of research questions and hypotheses were predetermined, and in order to test their validity, our sample participants, as a valid part in our field work, are targeted to different methods of data collection which may allow us to confirm or reject the research hypotheses.

Data collection is quite a mandatory step when conducting any type of research. Hence, it is very common in all the research areas. It is a very significant aspect of any research work. It refers to the information gathered from the participants or the respondents of the study, and that the obtained information is used to preserve the research's integrity, in other words, to provide a reliable findings or results to the research questions. Basically, data can be collected from either a primary source which indicates the information gathered for the first time, or from a secondary source which indicates that the information has been already collected by other researchers or departments. However, the obtained data can vary according to the methods of

collection, the research objectives, and to the discipline as well; it can be either a quantitative data collection method or a qualitative one. O’Leary (2004, p. 150) states that: “Collecting reliable data is a hard task, and it is worth remembering that one method is not inherently better than another. This is why whatever data collection method to be used would depend upon the research goals, advantages, as to the disadvantages of each method”.

According to what is stated before, there is no method that is better than the other one, and whatever a research method is, the selection depends on the research aims and objectives.

In the current study, we have relied on two main methods when doing our field work; our participants are assigned with two distinct instruments, the questionnaire in which we have designed it for the patients, actually more than 50 copies were printed and distributed to our sample. The second instrument is the interview where we are going to address the doctors.

2.7. Description of the sample

LoBiondo-Wood and Haber (1998, p. 250) describe a sample as a portion or a subset of the research population selected to participate in a study representing the research population. On the other hand, Polit and Hungler (1999, p. 43, 232) define the notion of population in research work as the totality of all subjects or data that comply with a set of specifications, consisting of group of people included in the study in which the research results can be generalized.

This part of research is mainly based on the study of D-P interaction. The sample that we have chosen to represent the population for our study comprises doctors and patients from Ahmed Medeghri Public Hospital of Ain Témouchent. It is also concerned with analyzing the way doctors communicate with their patients and whether they use the French language or only Algerian Arabic. More specifically; this study aims at testing the patients’ knowledge about the French language since most of the Algerian doctors tend to use it during the medical examination, and how they deal with their patients when it comes to the process of communication, especially those

patients who do not speak French very well and find difficulties in understanding their doctors.

Our objective is to investigate how communication is going between doctors and patients and to find out the healthcare communication barriers. From one side, the sample population is being concerned are people of different age and gender (males and females) in which they are given a variety of questions in a form of a questionnaire. In addition, the total number of the participants is 50 patients. From the other side, the other sampling is doctors from the same hospital yet they are questioned in a different way in a form of an interview.

2.7.1. The participants

Generally, most of the people involved in this study are the inhabitants of Ain Témouchent and from other adjoined districts and municipalities, more specifically, the visitors or the patients of the Public Hospital Ahmed Medeghri of Ain Témouchent.

The sample participants who took part in our investigation includes 50 participants aged from 15 to more than 55 years old arranged and stratified as it is shown in the table 2.1:

Table 2.1. *The sample population*

Age Group	Male	Female	Total
15-25	8	9	17
25-35	5	3	8
35-45	4	4	8
45-55	5	3	8
More than 55	3	6	9
Total	25	25	50

The questionnaire was administered to fifty patients as it was mentioned earlier, and the majority of them agreed on taking part in our investigation in which they

found interesting to tackle such topics, but some people refused to do such matter, a woman and 8 men because they were afraid of us and did not believe that this study is for our master degree but rather for something else. Nevertheless, some questionnaires were filled by us since 2 old women are illiterate. So, we asked them orally and filled their questionnaires. In addition, we have also filled other 3 questionnaires for 3 men and explained to them as well.

2.8. The research instruments

Choosing an instrument for data collection in carrying out any research is of the paramount importance because it is one of the most important components of a research design in which it allows us to collect information that we need about our study objects. In fact, a research instrument has been defined by several scholars as a tool for collecting data. In our case we have chosen two different research instruments that work well our topic in order to reach the aim of our research work in which they will help us collect data and gather information that concern our theme. One of the instruments is the questionnaire which is set to seek quantitative data in which this tool will be devoted for the patients while the other tool which is the interview is set to provide qualitative data and it will be devoted for the doctors. Additionally, these instruments will explain our findings and results more fully since they are considered as the most convenient tools for gathering and collecting data.

2.8.1. The patients' questionnaire

Technically, this procedure is known to be called as the questionnaire. It is a very popular instrument for gathering information in the field of academic researches, more specifically, in the field of social science researches in which the questions are mainly about the participants' experience, perceptions and behaviours and yet with respect to the topic at hand. The questionnaires are defined by Brown (2001, p. 6) as "any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers." This definition has made clear that the questionnaire

comes in a written form; more so, the informants are required either to select one of the given choices or to answer the questions freely with no qualifications.

Our primary source of data was gathered through the use of the questionnaire which is designed for the patients of the same hospital. It is a very significant tool for gathering a huge amount of information in a very short period of time, but most importantly, it can provide the researcher with both quantitative and qualitative data at the same time. To this end, the questionnaire is composed of two sections, the first section is designed to elicit the social and the linguistic profile of the informants in which we have given them close-ended questions where they can answer only with yes or no, and that they can choose the answer from the selected multiple choices. In the second section, we have also given them another type of questions, open-ended questions, where they can express themselves freely and provide us with their opinions about the overall use of language in the healthcare settings.

With the advantage of using the questionnaire, we have obtained an unidentified data because we did not ask our respondents to reveal their identity which made them feel at ease to express themselves naturally. Since the status of English is not as much familiar as the Arabic or the French language in the Algerian society, and that our respondents are of distinct ages and educational backgrounds, our questionnaire is written in MSA so that it could be understandable and easy to be filled.

2.8.2. The doctors' interview

The second instrument that we have selected in our research is the interview because it is regarded as an effective instrument in order to gather relevant information that works our purpose of the research. According to Ary (2010), the interview is one of the most commonly used and fundamental tool for obtaining qualitative data, and it is used to collect the data from people's opinions, beliefs, and feelings about situations in their own words. It is a data collection technique wherein participants are asked different types of questions in a verbal way about their experiences and most importantly depending on the phenomenon being studied.

In this part of our research study, the interview will be devoted for the second type of the participants who are doctors from Ahmed Medeghri Hospital. Our interview was conducted with 10 doctors who participated in this study by giving them 7 questions as they are supposed to answer, with regard to their experiences in health sector and medical field, the challenges which they face with their patients concerning communication, and their opinions about our investigation. In fact, this instrument was selected in order to have more authentic data and it also involves social interaction. Furthermore, one of the interview's types is used in this study, namely the structured interview. This type mainly consists of a particular series of pre-determined questions. To put it simply, the questions are planned and prepared in advance by the interviewer in which all the interviewees answer the same questions and in the same order and similarly there is an interaction between the researcher and the respondents. One of the advantages that permit us to choose this type is that it will be easy for us to analyse and compare their answers and evaluate them in the right way so that we can check the validity of our data.

As it was mentioned earlier that we translated the questionnaire from English into Arabic for the patients, we did the same thing with the interview in which we asked the doctors questions in Arabic because they are not able to understand English as well to simplify matters for them. The questions that were posed to them are as follow:

- 1-Which language do you use with your patients? Is it the same you use with your colleagues at work? If not, why?
- 2-As we know, all the Algerian doctors tend to mix French with Arabic during medical examination. You as a doctor, why do you do so?
- 3-Do your patients understand you when you code switch? All the time i.e; in all cases?
- 4-Do you answer your patients when requesting for further explanations? Using French or 'Edaridja'? Why?

5-Do you face any problem when communicating with your patients? Could you state some of the difficulties, please?

6-Are all your patients able to understand medical jargon?

7-Since you have been taught in French, do you find difficulties in translating some words, a medical words, to Arabic? Could you give us some examples, please?

2.9. Conclusion

This chapter dealt with the research methodology of the study including the research design, the sample population, and data collection instruments. It represented the way we gathered the information needed for our study. The purpose of this chapter was to give a short description of the sample population of our research who are doctors and patients from Ahmed Medeghri Public Hospital. In addition, it shedded light on explaining the research instruments that we chose to collect the data which are two research methods including the questionnaire and the interview. The former is designed for the patients while the latter is designed for the doctors. It also aimed at giving a brief overview about Ahmed Medeghri public hospital of Ain Témouchent where our case study takes place. The following chapter will cover the data analysis and interpretations.

Chapter Three:

Data Analysis and Interpretation

3.1. Introduction

The main concern of this research work is to investigate D-P interaction and to discover the communication barriers in healthcare settings. Therefore, the current chapter is made to meet the goals and the objectives of our research study, in other words, it represents the practical part where we are able to reach concrete and satisfactory results about the already mentioned research problem.

In addition, this chapter is designed to discuss and analyse the data gathered through the patients' questionnaire along with the doctors' interview. Therefore, it aims at providing valuable answers to the research questions and hypotheses mentioned within the general introduction of our thesis.

3.2. Data analysis

After collecting the appropriate required data here is the role of the analysis. By all means, this part of the chapter is predominantly related to data analysis of the research, wherein two selected instruments are analyzed, namely the questionnaire and the interview. The former was devoted to the patients while the latter was attributed for the doctors.

3.2.1. The patients' questionnaire analysis

The patients' questionnaire has been submitted to fifty (50) informants, divided equally into two categories; twenty five (25) males and twenty five (25) females. It includes twelve (12) questions which are categorized under two parts: the first part is devoted to the patients' personal information. It is also designed to elicit the social and the linguistic profile of the participants who have been given close-ended questions and have to answer only with 'yes' or 'no' i.e.; they have to choose the answer from the limited range of answers and the one they find appropriate. This section also involves eight (8) questions. Concerning the second part, it deals with another type of questions which are open-ended questions; informants can express themselves freely and provide us with their opinions about the overall use of language in the healthcare settings. It consists of four (4) different questions. And only two questions among

them shared both close-ended questions and open-ended ones; i.e. the respondents have to choose answers followed by a short explanation depending on the given question. Each question is analyzed as the following:

Part one: patients' linguistic profile

This part is designated to the questions that have a relationship with patients' linguistic profile in which they are asked about their level of education, their level and ability in French.

Question one: What is your gender?

This question is mainly designed to know the informants' age; who were fifty (50) persons sorted into two different categories. From the figure 3.3 beneath, it is shown that the first category represents 25 males with the ratio of (50%); while the second category displays 25 females with the percentage of (50%).

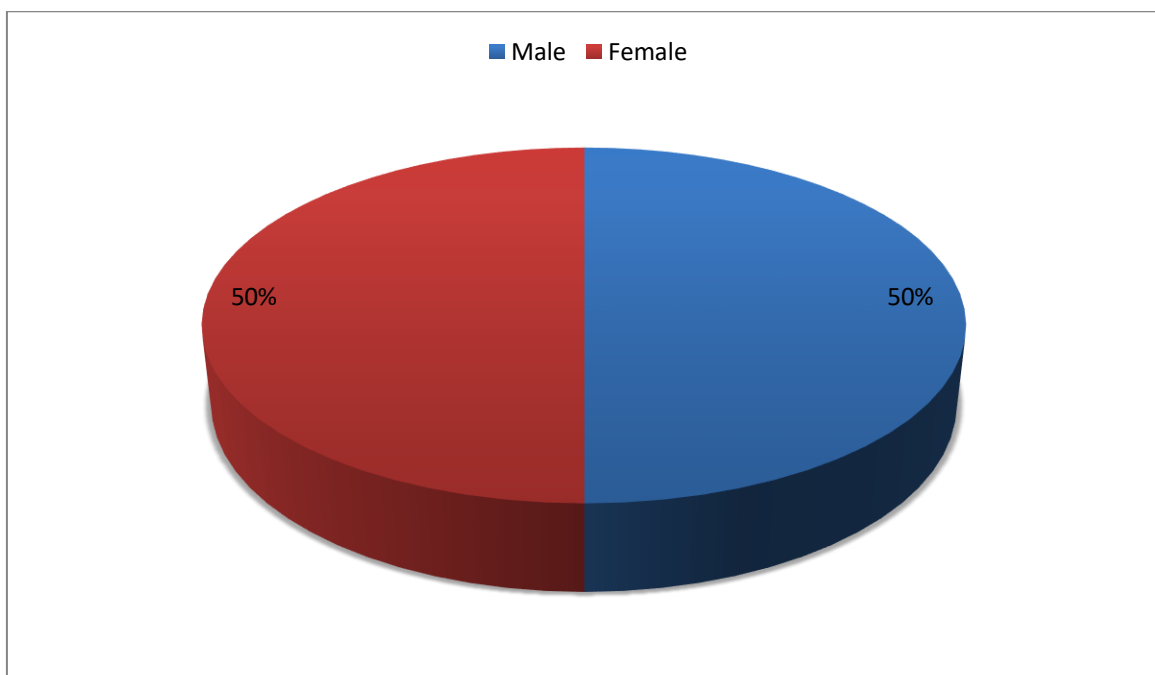


Figure 3.3: Patients' compilation

Question two: What is your age group?

The second question of this questionnaire intends to introduce the informants' age in which they were given different grouped age options to choose. The results

from the figure.3.4 below reveal that 13 participants with the largest percentage (26%) are aged more than 55, 12 patients (24%) are aged grouped between 45-55. Next, 11 informants who aged between 35-45 have the ratio of (22%). Then, 8 patients who's their age group is between 25-35 have the percentage of 16%. And finally, the less number of the participants (6) who are aged between 15-25 have the least percentage.

Table 3.2: Patients' age

Age Group	N=50	%
15-25	6	12%
25-35	8	16%
35-45	11	22%
45-55	12	24%
More than 55	13	26%

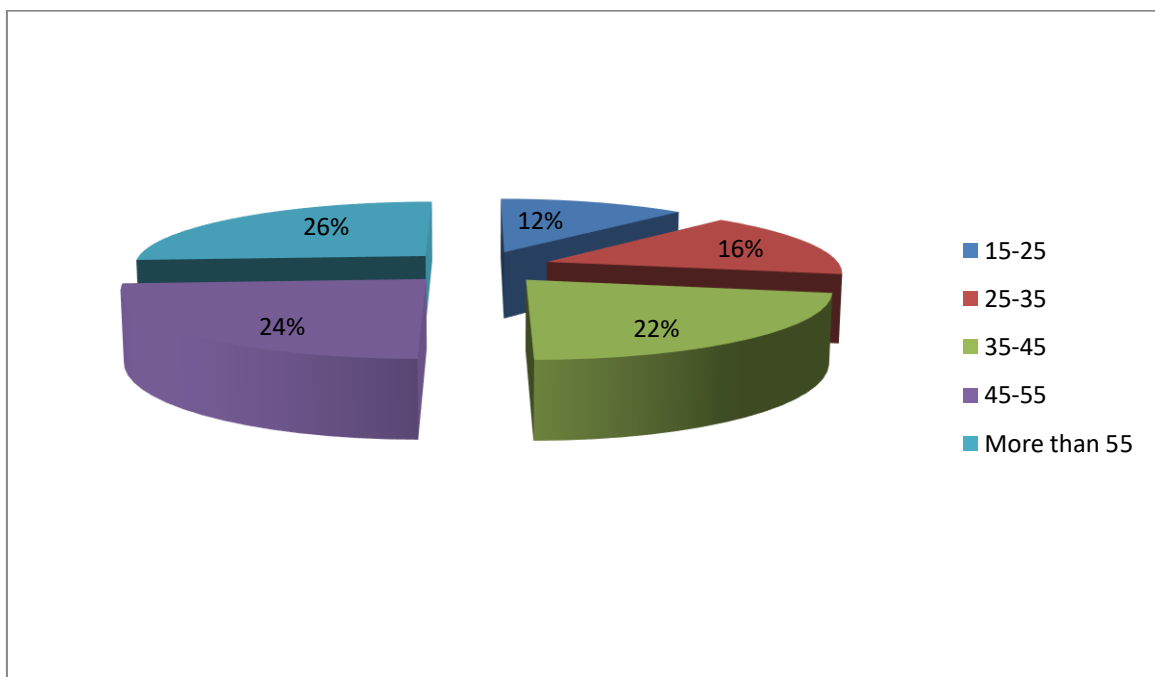


Figure 3.4: Patients' age

Question three: How would you determine your level of education?

This question seeks to discover patients' level of education in which they were given five multiple choice questions with the intention to know their educational level. The results in table below shows that the majority of the informants attend a certain level of education except two (2) of them. More specifically, two (2) patients with the

ratio of (4%) are illiterate; nine (9) of the participants answered that they have a primary level which indicates a percentage of (18%), twenty two (22) of the patients who represent (44%) have a middle school level , ten (10) of them with (20%) have a secondary school, while seven (7) of the respondents with the ratio of (14%) have a university educational level.

Table 3.3: *Patients’ level of education*

Level	N=50	%
Illiterate	2	4%
Primary School	9	18%
Middle School	22	44%
Secondary School	10	20%
University	7	14%

The figure beneath explains the detailed results.

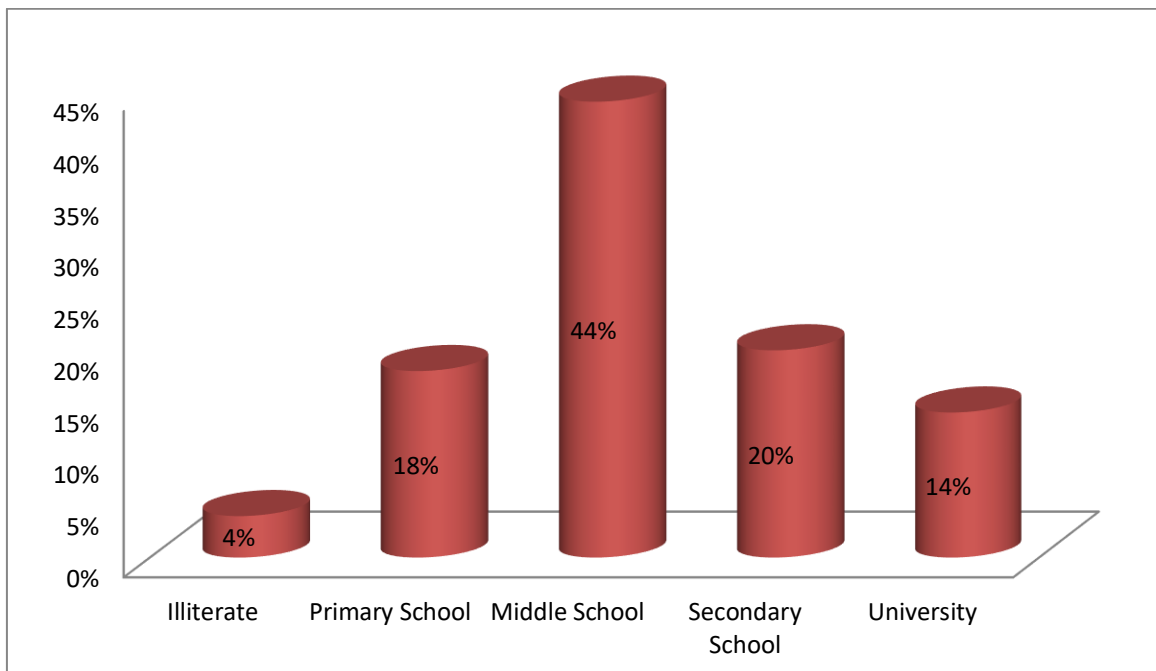


Figure 3.5: *Patients’ level of education*

Question four: Which language do you use in your everyday life?

This question mainly aims at knowing which language Algerian patients use in their daily lives. Particularly, in this question, our informants were given the choice to select more than one answer and they are free to choose the one that suits them among the four given options, whether they use MSA, AA, French, or Berber in their everyday language.

Table 3.4: *Patients' daily life language*

The Spoken Language	N=50	%
MSA	2	4%
AA	40	80%
French	8	16%
Berber	0	0%

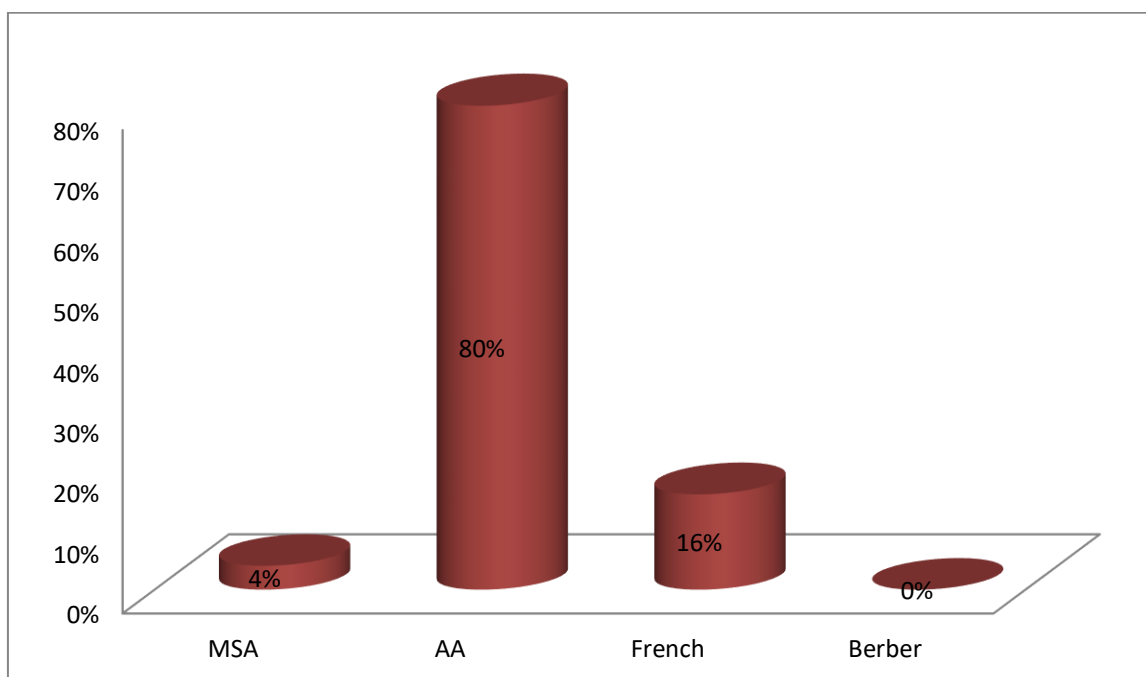


Figure 3.6: *Patients' daily life language*

The figure.3.6 indicates that the majority of participants with a ratio of (80%) use AA in their daily life language, while the minority of the sample population with a percentage of (16%) uses French in their everyday conversations since French cannot

be neglected in the Algerian community. While a very few of the participants (4%) use MSA. And none of them uses Berber in his/her daily life conversations.

Question five: How would you evaluate yourself understanding towards the French language?

In this question, we tried to find out whether the patients understand the French language and how would they evaluate their understanding towards this language. Therefore, patients are given different options: bad, average, good, and excellent.

Table 3.5: *Patients' self-understanding towards the French language*

Levels	N=50	%
Bad	7	14%
Average	27	54%
Good	13	26%
Excellent	3	6%

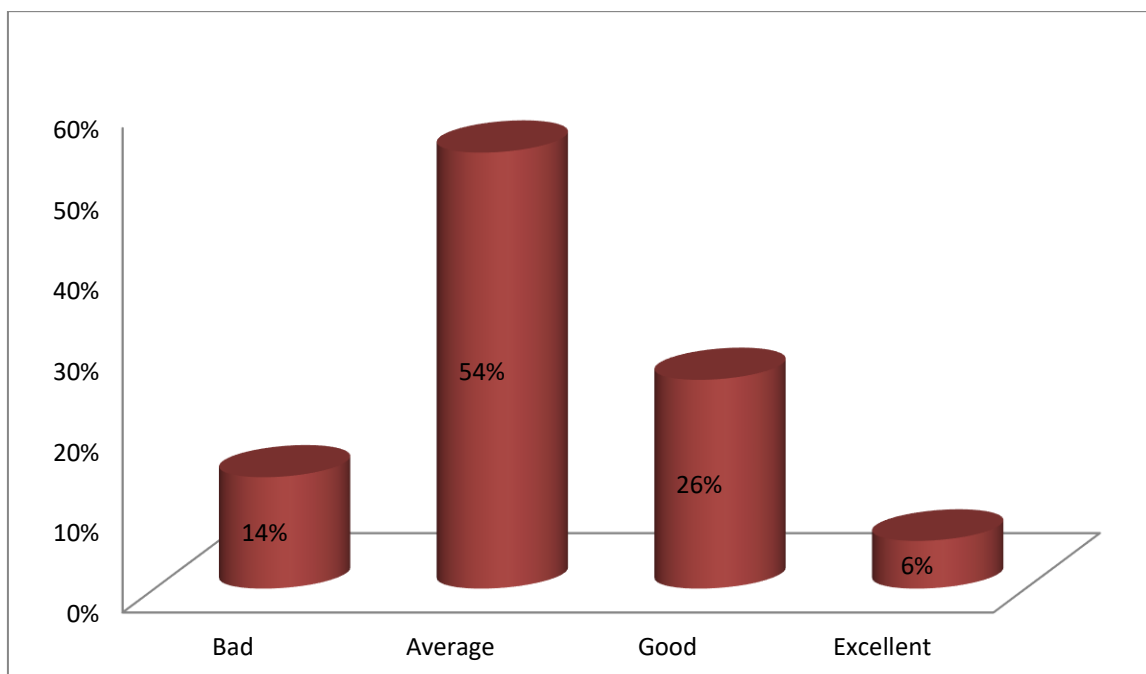


Figure 3.7: Patients' Self-Understanding towards the French Language

The results shown in the figure above reveal that more than half of the sample population (54%) has an average level of French understanding. 13 patients with a

percentage of (26%) have a good level of French understanding, whereas 7 of the participants who symbolize the rate of (14%) have a bad understanding of that language, and finally only 3 of the patients (6%) show that they have an excellent understanding towards French language.

Part two: The patients' use of language in healthcare settings

This part is dedicated to the questions that have a relationship with the patients' use of language in healthcare settings; in which they are asked a variety of questions including their level of health literacy, understanding their doctors, the language used by their doctors during the medical examination, as well as asking questions to their doctors.

Question six: How would you describe your level of health literacy?

This question was asked in order to know the level of health literacy among patients. To put it differently, the aim of this question is to figure out if the patients have the ability to obtain, read, understand, and use healthcare information and whether they can make appropriate health decisions and follow instructions for treatment. Hence, the results are clearly elaborated in the figure below in which they explain the percentages of each level. First of all, 26 participants (52%) claimed that they have an average level of knowledge about health. Next, 10 patients (20%) consider themselves good at health literacy. Then, only one (1) patient (2%) said that he has an excellent level concerning health literacy. And finally, 13 informants with a percentage of (26%) have a bad level of health literacy.

Table 3.6: *Patients' level of health literacy*

Levels	N=50	%
Bad	13	26%
Average	26	52%
Good	10	20%
Excellent	1	2%

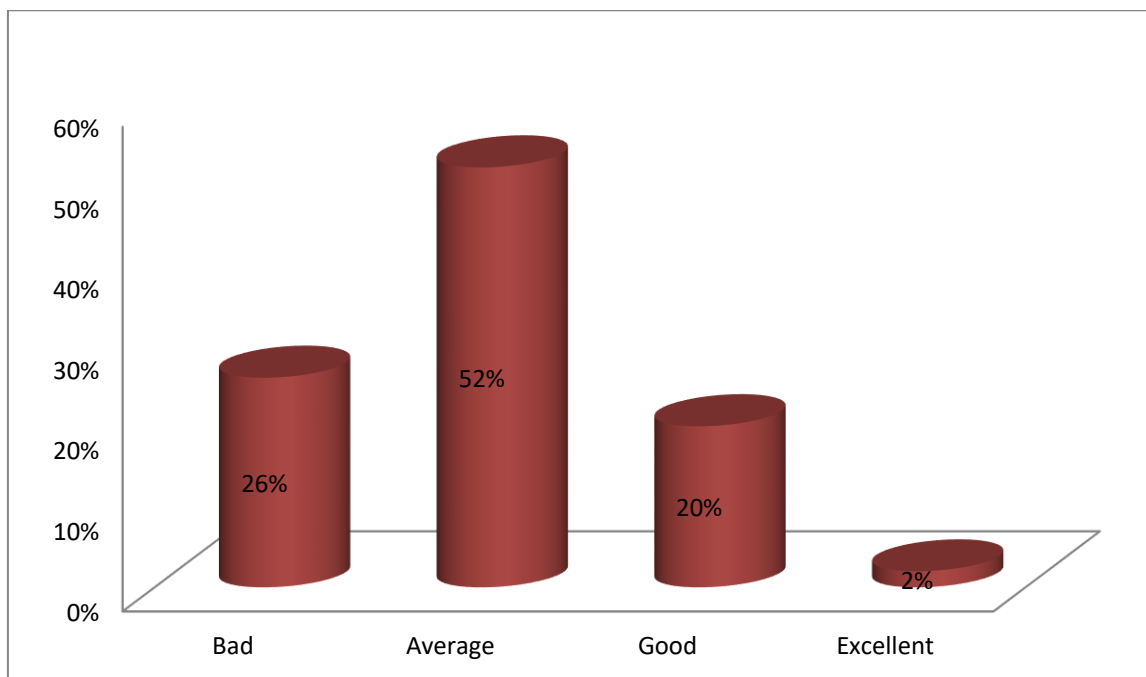


Figure 3.8 :Patients' level of health literacy

Question seven: Are you able to understand your doctor?

The aim behind asking this question is to check whether Algerian patients have the ability to understand their doctors or not. According to the data exposed in the figure 3.9, most of the patients (60%) answered by saying no, they are not able to understand their doctors by claiming that most of the therapists use some unclear French words and some medical terms which make them confused and do not get the correct meaning of what their doctors implying. Meanwhile, other participants (40%) asserts that they do understand their doctors by saying that not all of them use French language during the physical checkups.

Table 3.7 : Patients' Understanding of Their Doctors

Answers	N=50	%
Yes	20	40%
No	30	60%

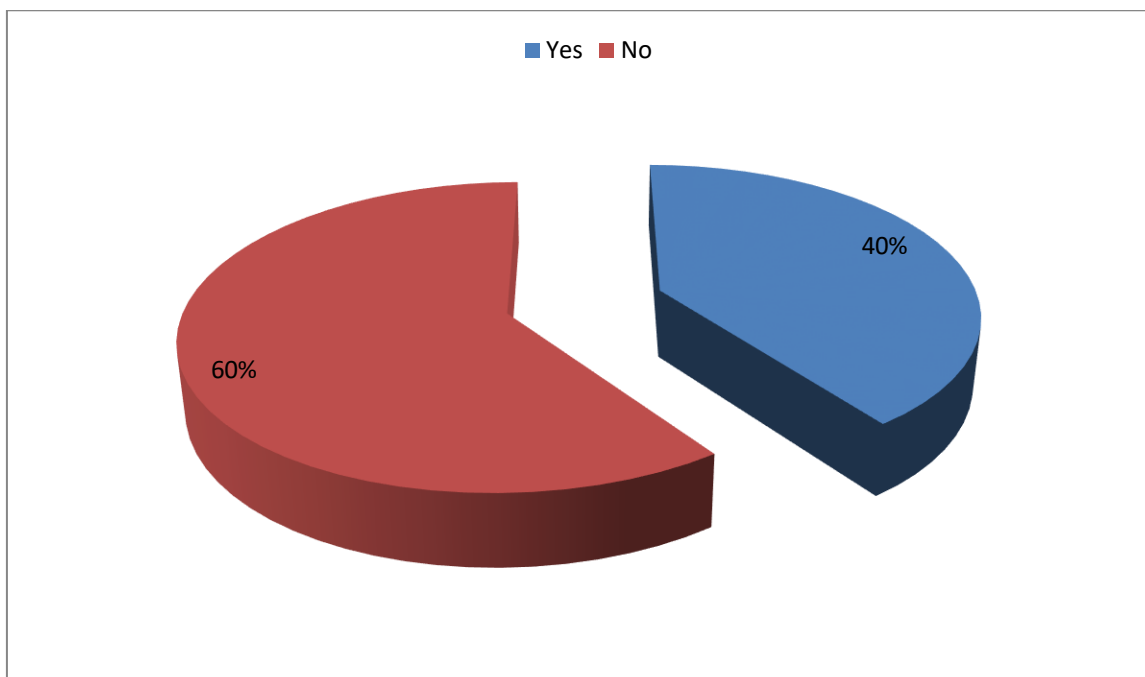


Figure 3.9: Patients' understanding of their doctors

Question eight: Which language do your doctors tend to use the most during the medical examination?

This question sheds light on knowing the patients' opinions about the language used by doctors in medical examination, and most importantly, which language do their doctors tend to use the most with them. The choices are varied between Arabic, French, or both. As it is mentioned in the following figure; results have shown that participants with a ratio of (18%) responded that their doctors use Arabic. Whereas, other respondents who represent a percentage of (16%) replied by saying their doctors use French during the medical examination. However, participants who answered "both Arabic and French" have the higher percentage (66%).

Table 3.8: *The language used by doctors in medical examination*

Languages	N=50	%
Arabic	9	18%
French	8	16%
Both	33	66%

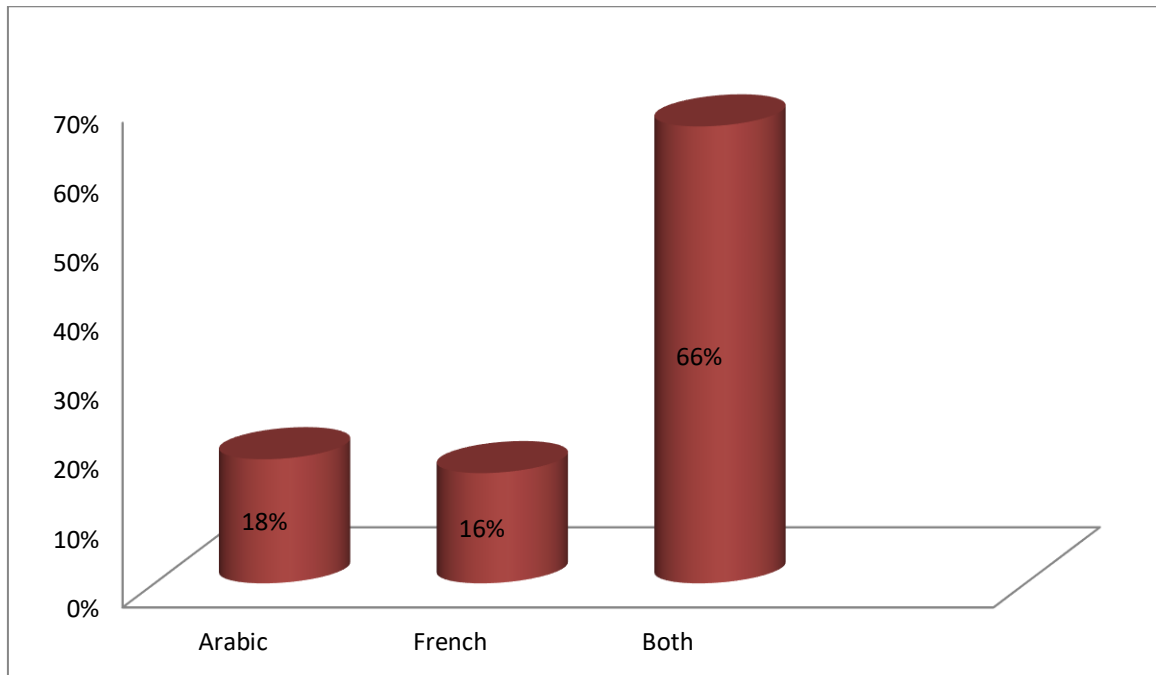


Figure 3.10: The language used by doctors in medical examination

Question nine: In your opinion, what are the reasons that make doctors use both Arabic and French during the medical examination?

Since doctors are likely to use both Arabic and French during medical encounters as it is shown in the precedent question, we aimed at asking the patients this question so that we can discover the reasons behind this linguistic behaviour. According to the patients, a variety of reasons were given in order to explain this mixture. In fact, the majority of the patients agreed on that the primary reason is that the two languages are of equal importance in Algeria. In other words, the field of medicine is taught in the French language rather than Arabic, and since they have been taught and trained in the French language, and that they are used to use French in their conversations, they find difficulties in not using it during their checkups. Secondly, others said that the reason why doctors switch between the two languages is because of the deficiency of finding the equivalent of some French words in Arabic, some illnesses or some medical words in general are in French as they do not have an equivalent in Arabic, for these reasons, doctors find themselves obliged to use French with their patients.

Question ten: Do you ask questions to your doctor?

This question aims at investigating if patients ask questions to their doctors or not. From the figure below, it is widely explicit that those who have a percentage of 90% answered by saying “yes”, they do ask their doctors questions that either concern their illnesses or to understand some unclear information. While those whose ratio is 10% answered no they do not ask questions to their doctors, they simply consider asking questions to their doctors is not quite necessary and it has no relevance with regard to their medical issue.

Table 3.9: *Questioning doctors*

Answers	N=50	%
Yes	45	90%
No	5	10%

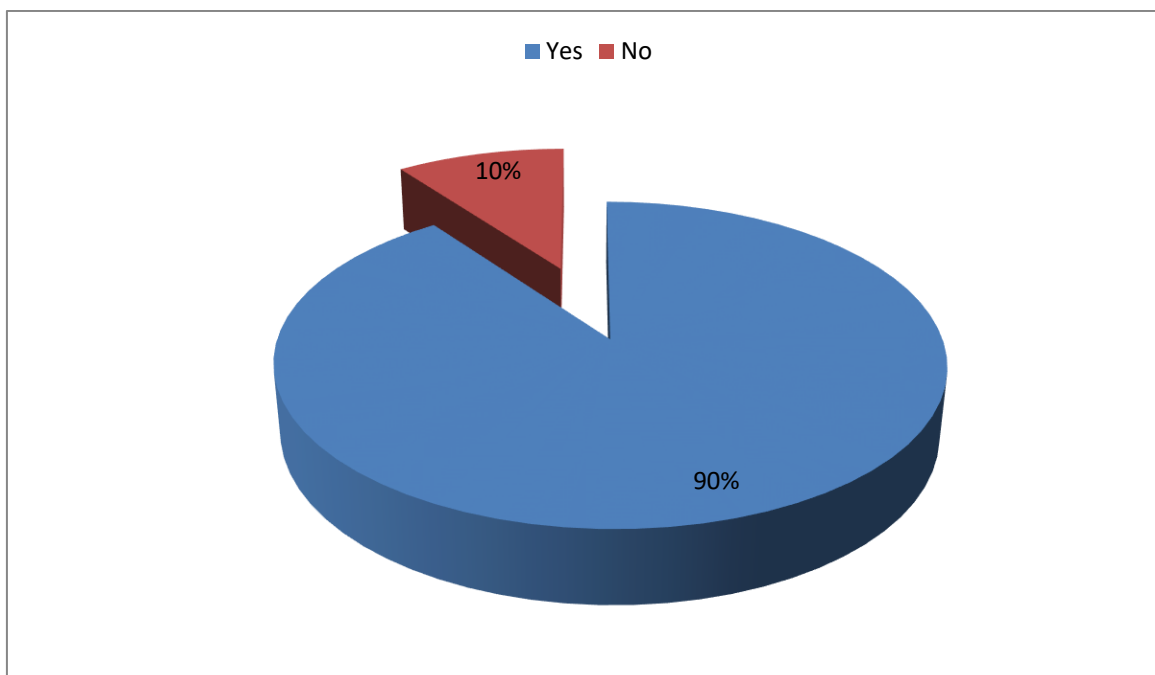


Figure 3.11: *Questioning doctors*

Question Eleven: Do you think that French and medical jargon can affect the communication process in doctors-patients relationship?

This question wishes to know the patients' opinions if using French and medical jargon can affect the communication process in D-P relationship. From the figure 3.12, it is clear that most of the patients (70%) said yes they think that French and medical jargon has an effect on the communication process and can influence the relationship between doctors and patients, in which they claim that the use of French and medical jargon leads to a poor communication and misunderstanding. On the other hand, the rest of the informants with a percentage of (30%) do not think that French and medical jargon can affect the communication process in D-P relationship.

Table 3.10: *The effect of French and medical jargon on D-P relationship*

Answers	N=50	%
Yes	35	70%
No	15	30%

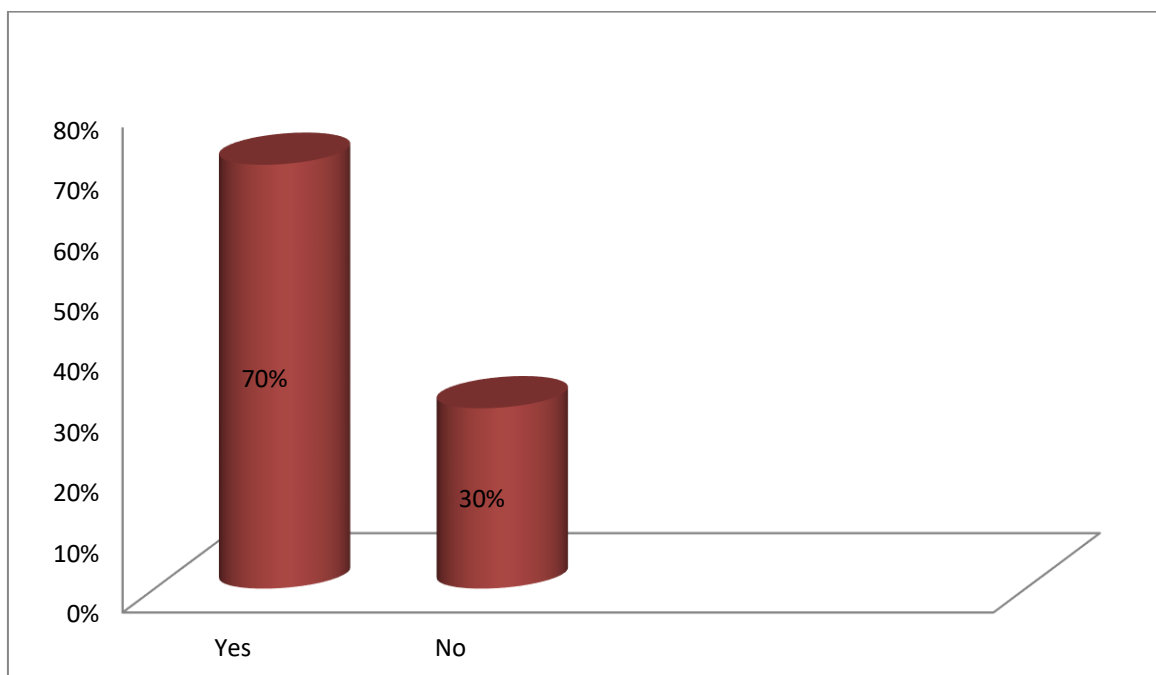


Figure 3.12: The effect of French and medical jargon on D-P relationship

3.2.2. The Doctors' interview analysis

In order to support or to reinforce the reliability of the obtained data from the questionnaire, another instrument was used so that we can get access to the needed information. A face to face interview was designed for a small number of doctors, this instrument was really effective and efficient. In spite of having a small number of participants, the interview has provided us with a rich and a huge amount of information so that we can find answers to the already mentioned research questions and hypotheses.

Since the doctors are of such an important part in our research study, it was necessary to include them when doing our field work. In fact, we have interviewed ten doctors where we provided them with a set of questions, actually seven questions, these questions were conducted in Arabic language as it was not recorded.

Each question is analysed independently as follow:

Question one: Which language do you use with your patients? Is it the same you use with your colleagues? If not, why?

The aim of this question is to highlight which language is mostly used by doctors in their work places. In fact, we have asked them whether the language used with their patients is the same one used with their colleagues or not.

The doctors who took part in our interview have confirmed that the language used with their patients is not the same as the one used with their colleagues. As a matter of fact, the majority of them said that they are likely to speak using French language with their colleagues and that it became a habit for them to use it since they have received their training in French. On the other hand, there is an agreement between the doctors; They all agree on the fact that they use Arabic when speaking with their patients. Yet, they said that Arabic is not used alone all of the time in which French always interferes within their speech. Hence, they said that French interference is inevitable and that it depends on the educational level of the patient where French can have more or less impact on Arabic.

Question two: As we know, all the Algerian doctors tend to mix French with Arabic during medical examination, you as a doctor, why do you do so?

Since the majority of doctors who have been interviewed stated that they are using both French and Arabic with their patients, it was necessary to pose such a question so that we can reveal the main reasons behind this linguistic behaviour.

Generally, the reasons given by the doctors are nearly the same. In fact they all agreed that this dual usage is due to the fact that they simply studied medicine in French and that they have been trained and formed only in French rather than any other language, yet, it became a habit for them to use it in their speech. Some said that even if they do not want to use French in their speech, they always find themselves obliged to do it for there are some words, medical words to be specific, that do not have an equivalent into Arabic. In fact, the Arabic language do not offer an equivalent term for some words especially those of treatments and illnesses.

Question three: Do your patients understand you when you code switch? All the time i.e; in all cases?

Henceforward, doctors are known to use two languages in their medical councils, so the aim of this question is to uncover the fact of whether the patients do understand their doctors when they code switch or not.

Accordingly, when we asked the patients about which language that their doctors are using with them, a higher agreement was on the fact that they do not rely only on Arabic or French in which the majority said that they are likely to use them both at once. Due to this fact, it was necessary to investigate about such a linguistic phenomenon and ask the doctors whether their patients do understand them when doing such a linguistic behaviour or not.

The answers varied between 'yes' and 'no'. Few said that their patients do understand them when they switch from Arabic to French, and that no problems are revealed due to this linguistic phenomenon. On the other hand, a lot of them said that most of the time, and in some cases, their patients can not really understand them well.

They said that only few people can understand them well because of their higher level of education but all in all, most of them are not able to understand especially the elders where doctors find difficulties in using simple words so that they can simplify things for this category.

Question four: do you answer your patients when requesting for further explanations? Using French or ‘Edaridja’? why?

This question aims to find out whether doctors offer answers to their patients or not, and the likelihood of using either French or “Edaridja”.

Previously, Patients have answered that during their medical examinations, they do pose questions to their doctors so that they get the maximum of information about their healthcare condition. Meanwhile, doctors on the other side are asked if they do provide answers or not. All of the interviewed doctors said “yes”, they do offer their patients with answers and, that they also provide them with further explanation too, and yet, which language to employ remains complex. Few said that they use “Edaridja” so that they simplify things for them and provide them with extra information, the remained others said that which language to use depends on the patients’ educational level, and yet, their choice can not be free of not using French in which they find themselves obliged to use it.

Question five: Do you face any problem when communicating with your patients? Could you state some of the difficulties, please?

The core of this study is to detect the communication problems in D-P relationship, and to state these barriers that may cause difficulties to the doctors.

The interviewed doctors have proclaimed that they do face difficulties when communicating with their patients, and since this is the case, they have been asked to state these difficulties that are constituting what is known as communication barriers. The first given problem is that the lack of medical culture and awareness, according to the doctors, the patients’ health literacy cannot enable them to fully understand what we say, in which they always ask them a lot of questions either to re-explain for them

what they mean or, for further explanation. Secondly, asking for further explanation is due to the use of French in which doctors said that whenever they use French in their discourse, it seems ambiguous for their patients, except the elites, it seems that patients' attitudes towards the French language do not qualify them to fully understand their doctors.

Question six: Are all your patients able to understand medical jargon?

Part of our research is based on discovering the communication barriers in healthcare settings, therefore, this question seeks to determine whether patients are familiar with the medical jargon and to check whether they can understand the meaning of words or not . At this point, and according to the doctors' answers, medical jargon can be definitely considered as a barrier because the majority of doctors have confirmed that when using some medical words in their speech, their patients always express their need for an explanation because they do not understand such terms, in this case, doctors' role here is to simplify the words, some said that they use gestures to make the message clearer and this method seems to be sometimes a hard task for the majority of doctors.

Question seven: Since you have been taught and trained in French, do you find any difficulties in translating some words, a medical words, to Arabic? Could you give us some examples, please?.

It is a remarkable fact that most of the time, the doctors' speech can not be free of the use of some medical words, and since they have been taught and trained in French, a part of their job is to offer their patients with an Arabic equivalent of these terms. Therefore, the aim of this question is to ask those doctors whether they do face difficulties in translating these terms or not, and accordingly, a set of examples about such terms that are untranslatable into Arabic are provided by the interviewed doctors.

Generally, most of the interviewed doctors claimed that they do face difficulties in translating such medical jargon, whenever they come across to using them, they always find themselves in either explaining them or providing an equivalent. However, this is not always the case for all of the medical jargon, where, according to the

doctors, there are some words that can not be translated and it is difficult to provide an equivalent for they do not have one. Therefore, they were asked to provide us with examples of such words which are shown in the following table (table 3.11)

Table 3.11: *The translated medical terms in English*

French medical words that do not have an equivalent in Arabic	Their translation in English
-Les oreillons	-The mumps disease
- Maladie coeliague	- Celiac disease
- Otospongiose	- Otosclerosis
- Cellulite Phlegmon	- Phlegmon Cellulite
- Pulpite	- Pulp disease
- érythème Polymorphe	Polymorphous erythema
- Pelade	- Alopecia
- Infarctus du myocarde	- myocardial infarction
- Otite	- Otitis

3.3. Discussion of the main findings

This part is mainly the central part and the core of the research work in which it presents the basis and the major findings of our research investigation. It also discusses the results of our inquiry.

After collecting and analysing the required data, this research study finds out that most of the doctors of Ahmed Medeghri Public Hospital of Ain Témouchent mix between AA and French language during the medical examination. In addition, they mostly tend to use French while making the diagnosis because most of the medical staff in the field of health sector uses French language including doctors in particular. When it comes to certain sorts of conversational exchanges, most of them deal with each other by using some words or expressions in French. This was expected in the first hypothesis where French cannot be neglected. Moreover, while exploring whether French and medical jargons are barriers leading to poor communication between

therapists and patients; it has been found out that the use of both French and medical jargons make the patients face difficulties in understanding their doctors, and that its use is what affects D-P relationship. From one hand, French constitutes a barrier for the majority of the patients because of the weak level of French understanding that each of the patient has, and also because they are accustomed to use AA in their daily life conversations. From another hand, medical jargons are the main reason that causes poor healthcare communication; since most of the patients are not fully aware with these medical jargons. Concerning this idea, patients stated that they do not have a good level of health literacy and medical knowledge i.e.; they are not able to understand particular medical words that the physicians frequently use. Equally important, another reason given by the patients indicates that the use of some medical terminology makes them confused and do not get the correct meaning of what their doctors are referring to. For all these reasons, they consider medical jargon as a significant barrier that prevents them from understanding their doctors.

The final analysis has been intentionally set up for the last hypothesis with the intention to check and test its validity and reliability. This proves that, most of the time, poor communication in D-P interaction leads to a misunderstanding between the interlocutors and may cause frustration, a lack of trust among patients which may result in a poor healthcare quality.

In order to interpret the main findings that concern this hypothesis, we tried to ask questions that have a tight relationship with it. Our research has found out that the major reason behind the misunderstanding between the interlocutors, namely the health providers and the patients, are due to the use of French language during the physical check-ups, since it is the most used variety among Algerian doctors. As a consequence, the misplaced use of the doctors' language with their patients in which language is not creatively used makes the patients feel frustrated because of their inability to communicate in French language and express themselves correctly. Under those circumstances, the lack of trust and confidence among patients is highly increased accordingly with a high dissatisfaction and deception about the healthcare quality.

3.4. Suggestions and recommendations

In the Algerian healthcare settings, the effectiveness of the communication process is tightly related to the establishment of a good D-P relationship where both parties can understand each other, and when they do not encounter any communication breakdowns. Yet, this assumption turned out to be inaccurate. The current study has shown that in the Algerian healthcare settings, both doctors and patients do face some difficulties during their medical examinations. Our investigation has revealed some of these communication barriers and to what extent they may affect the quality of healthcare.

In the light of what has been explored previously, and based on our investigation and the main findings, a set of suggestions and recommendations are put forward so that the D-P interaction can be ameliorated and bettered than before. Furthermore, this research has also provided us with certain insights that could be taken into consideration for further studies. Our suggestions are as follow:

- ❖ First, our research paper is designed for investigating the D-P interaction, and discovering the communication barriers in their relationship. Therefore, we believe that our findings can be taken as a source for strong future studies. An in-depth research can be conducted with the use of conversational analysis, it is based on the use of certain materials mainly the recordings and videotapes where researchers can explore more deeply the linguistic behaviour and the communication patterns in the Algerian healthcare settings.
- ❖ Our findings spotlighted the importance of communication and its role during physical examinations. It will draw the attention of health service researchers, physicians, and health administrators to reconsider integrating a communication skills course, or a language session concerning the medical curriculum, not only to the medical students' theoretical knowledge but also in training doctors for improving their communicative competence.
- ❖ The status of French is a critical point in the Algerian history. Although Arabic is declared to be the official language in Algeria, it seems to be marginalized by the French language. Moreover, the current research has shown that the French

language is constituting a barrier in D-P communication, and since our participants are of acceptable educational levels, Arabic is seen as the one that can bridge the gap. Hence, researchers might be interested in discovering the reasons, whether internal or external ones, behind implementing French, the language of the colonizer, instead of Arabic in all of our scientific domains, especially in the medical field.

- ❖ We hope from future researchers to go further in investigating on what basis Arabic is considered inappropriate for our medical and scientific branches, in other words, why French is taken as the language of all scientific fields, since it is the language of the colonizer. Furthermore, one might be interested in testing the possibility of replacing French by Arabic in all scientific domains, a comparative study might be useful for such an investigation.

3.5. Conclusion

To sum up, the current chapter dealt with the practical part of the whole study in which it made explicit how the data are collected and analysed through two different instruments, namely the questionnaire which was set up for the patients, and the interview which was structured to ask the doctors' opinions about D-P interaction. It is important to realize that the prime interest of this chapter is to explore about the major reasons that cause barriers of communication between the doctors and the patients.

All in all, this chapter endeavoured to supply reasonable and authentic answers of the previously asked research questions together with testing the validity of the expected hypotheses. It also aimed at giving clear explanations of the main findings of the research study in which, it showed how the results are interpreted.

General Conclusion

General Conclusion

General Conclusion

In the Algerian healthcare settings, many healthcare staff and professionals, doctors in particular, strive to provide full comfort and physical ease to patients or to anyone who needs a specific kind of help through which they try to supply them with various services for better diagnosis and treatment. However, this task cannot be fulfilled without noticing the role of communication which seems to be marginalized in the Algerian healthcare sector, notably the appropriate use of language which is of the paramount importance especially in D-P relationship. This latter depends essentially on the effective use of language between doctors and patients and the way they communicate and interact with each other during the medical examination in order to attain the required results and the appropriate diagnosis, and thus, patients can have a satisfactory outcomes and healthy treatment.

Since the Algerian society is a multilingual country, many Algerians code-switch and code-mix between AA and French in most of their communicative situations i.e. when exchanging conversations with each other. Thus, the use of French is widespread among Algerians due to the impact of French colonization in Algeria. Therefore, the majority of the modern disciplines as well as the academic domains and especially the scientific fields of study require a good level in French. For instance, in the field of medicine, doctors are taught in French, the reason for which most of the Algerian doctors are likely to use French during medical examinations.

It is so important to realize that the appropriate use of language plays a significant role in the development of the relationship between therapists and patients particularly in terms of communication and conversational exchanges during the health checkup. The doctor can inform and transmit the message to his/her patients through language which is a powerful tool that makes him/her express the needed information to the patients; especially when the language is used in a way that corresponds with the patients' linguistic level i.e. their knowledge about using and understanding French language appropriately. In this case, the message will be successfully transmitted. Doctors have to know how to deal with their patients taking into consideration their level of education and their proficiency in French in order to be able to choose the

General Conclusion

appropriate language suitable for the patients' understanding. Yet, the selected language can mislead and make a big misunderstanding between these interlocutors when it is misused. Indeed, the primary motivation that pushes us to get to work on this topic is to investigate about the D-P interaction from a sociolinguistic dimension. Besides, our research work intends to identify the patients' linguistic profile and the socio-linguistic background and to test their understanding of French language in order to know whether they fully understand their doctors or not. Moreover, the major aim of this thesis is to figure out the communication barriers that occur within the healthcare sector and mainly between the physicians and the patients. It also seeks to provide the reader with comprehensive details about the reasons behind these barriers that prevent both doctors and patients from understanding each other which may lead to poor communication and unsatisfactory expectations.

As a matter of fact, the study has been conducted at Ahmed Medeghri Public Hospital of Ain Témouchent where two selected research instruments are used in order to gather the required data and to obtain the desired answers that are in relation to the already-mentioned theme. The questionnaire was filled in by the patients, it intends to seek information from the same participants; the interview on the other hand which was answered by the doctors aims at gathering data from them with accordance to their experience in the field.

This dissertation tackles the study of the D-P interactions from a sociolinguistic perspective, it encompasses three chapters, and each chapter outlines a particular research scope. All the previous chapters attempted to cover the most important points that should be concerned with the theme. First of all, starting by the first chapter which deals with the literature review, it covers an overview of the whole topic including language in general and it sheds light on the concept of sociolinguistics in particular by dealing with its main scopes. Moreover, moving to the second chapter which covers the methodology and data collection instruments through which we collected the most important data that fit well our theme. Furthermore, ending up by the third chapter which tackles the data analysis of the selected research instruments namely the questionnaire and the interview, the former was devoted for the patients while the later

General Conclusion

was dedicated for the doctors. To put it simply, the final chapter takes a look at how the data are collected and analysed, it deals with the practical part of the whole work. Accordingly, it reveals the possible findings and results that go along with the research questions and hypotheses. It also seeks to explore the major reasons that cause barriers between the doctors and the patients. Furthermore, this work examines and investigates different types of communication and various sorts of conversational exchanges between doctors and patients at Ahmed Medeghri Public Hospital of Ain Témouchent. In fact, this study takes a sociolinguistic dimension which is a key component that is based on D-P communication.

Finally, the study found out that doctors of Ahmed Medeghri assert that they tend to use French during medical checkups because they cannot express their ideas appropriately in Arabic since they get used to speak in French inside and outside the healthcare settings. Besides, they make explicit that the use of medical jargon constitutes a barrier to effective communication in which they agree on the fact that they face some difficulties in finding the right equivalent in Arabic in order to explain a particular medical term.

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Appendices

Appendix A

The Patients' questionnaire

This questionnaire is designed for gathering information needed for the fulfillment of a master dissertation in Linguistics. These questions are given to the patients at Ahmed Medeghri Public Hospital of Ain Témouchent in order to investigate how communication is going between doctors and patients and to find out the healthcare communication barriers.

1. Gender

Male

Female

2. Age group

15-25

25-35

35-45

45-55

More than 55

3. Level of education

Illiterate

Primary school

Middle school

Secondary school

University

4. Which language do you use in your everyday life?

MSA

AA

French

Berber

5. How would you evaluate yourself understanding towards the French language?

Bad

Average

Good

Excellent

6. How would you describe your level of health literacy?

Bad

Average

Good

Excellent

7. Are you able to understand your doctor?

Yes

No

If not, why?

.....

.....

8. Which language do your doctors tend to use the most during the medical examination?

Arabic French Both

9. In your opinion, what are the reasons that make doctors use both Arabic and French during the medical examination?

.....
.....
.....

10. Do you ask questions to your doctor?

Yes No

Why?

.....
.....
.....

11. Do you think that French and medical jargon can affect the communication process in doctors-patients relationship?

Yes No

Thank You

Appendix B

The Doctors' Interview

1-Which language do you use with both your patients? Is it the same you use with your colleagues? If not, why?

.....

2-As we know, all the Algerian doctors tend to mix French with Arabic during medical examination, you as a doctor, why do you do so?

.....

.....

3-Do your patients understand you when you code switch? All the time i.e; in all cases?

.....

4-Do you answer your patients when requesting for further explanations? Using French or 'Edaridja'? Why?

.....

5-Do you face any problem when communicating with your patients? Could you state some of the difficulties, please?

.....

6-Are all your patients able to understand medical jargon?

.....

7-Since you have been taught in French, do you find difficulties in translating some words, medical words, to Arabic? Could you give us some examples, please?

.....

استبيان

تم تصميم هذا الاستبيان لجمع المعلومات اللازمة لإنجاز رسالة ماستر في اللسانيات حيث سوف يتم تقديم هذه الأسئلة لمرضى مستشفى أحمد مدغري العام بعين تموشنت من أجل التحقيق في كيفية التواصل بين الأطباء و المرضى و معرفة حواجز التواصل في مجال الرعاية الصحية.

1. الجنس

ذكر أنثى

2. العمر

25-15 35-25 45-35 55-45 أكثر من 55

3. المستوى الدراسي

ابتدائي متوسط ثانوي جامعي

4. ما هي اللغة التي تستخدمها في حياتك اليومية؟

اللغة العربية الفصحى اللهجة الجزائرية الفرنسية الأمازيغية

5. كيف تقيم فهمك للغة الفرنسية؟

سيئ متوسط جيد ممتاز

6. كيف تصف مستوى معرفتك بالصحة؟

سيئ متوسط جيد ممتاز

7. هل أنت قادر على فهم طبيبك؟

نعم لا

لماذا؟

.....
.....

8. ما هي اللغة التي يميل طبيبك إلى استخدامها أكثر أثناء الفحص الطبي؟

العربية الفرنسية الاثنين معا

9. في نظرك، ما هي الأسباب التي تجعل الأطباء يستعملون اللغتين العربية و الفرنسية أثناء الفحص الطبي؟

.....
.....
.....

10. هل تطرح أسئلة على طبيبك؟

لا

نعم

لماذا؟

.....
.....
.....

11. هل أنت راض عن جودة الرعاية الصحية الخاصة بك؟

.....
.....
.....

شكرا لكم

مقابلة مع أطباء مستشفى "أحمد مدغري"

1- ما هي اللغة التي تستخدمها مع المرضى؟ هل هي نفس اللغة التي تستخدمها مع زملائك؟ إذا لم يكن كذلك، لماذا؟

.....
.....
.....

2- كما نعلم، يميل جميع الأطباء الجزائريين إلى مزج اللغة الفرنسية بالعربية أثناء الفحص الطبي، أنت كطبيب، لماذا تفعل ذلك؟

.....
.....
.....

3- هل يفهمك المرضى عند مزج اللغة العربية بالفرنسية؟ في كل وقت، في جميع الحالات؟

.....
.....
.....

4- هل تجيب مرضاك عند طلب المزيد من التفسيرات؟ باستخدام الفرنسية أو باللهجة الجزائرية؟ لماذا؟

.....
.....
.....

5- هل تواجه أي مشكلة عند التواصل مع مرضاك؟ هل يمكن أن تذكر بعض الصعوبات، من فضلك؟

.....
.....
.....

6- هل يقدر جميع مرضاك على فهم المصطلحات الطبية؟

.....
.....
.....

7- بما أنك درست الطب باللغة الفرنسية، هل تجد صعوبة في ترجمة بعض المصطلحات، خاصة الطبية منها والتي لا يوجد لها مقابل باللغة العربية؟ هل يمكنك أن تعطينا بعض الأمثلة، من فضلك؟

.....
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تعتمد الرعاية الطبية الجيدة في قطاع الصحة علي جودة المحادثة بين الأطباء والمرضى لان سوء المحادثة والحوار قد يؤدي إلى نتائج صحية غير مرضية . على ما يبدو ، فمن المفترض أن عدم قدرة الأطباء على تشخيص مرضاهم وإعطاءهم الدواء و العلاج المناسب قد يتسبب في إخلال العلاقة بينهما وبالتالي قد يؤدي إلى نقص في الثقة بينهما . يستند هذا البحث على دراسة التواصل و المحادثة بين الأطباء والمرضى في مجال الرعاية الصحية، كما يسلط الضوء على حواجز المحادثة وتأثيرها على العلاقة بين الأطباء والمرضى. في الجزائر فرضت اللغة الفرنسية نفسها في معظم المجالات العلمية. حيث يميل مقدمي الخدمات الصحية إلى كثرة استخدام اللغة الفرنسية والمصطلحات الطبية خلال الفحوص الطبية و التي هي غير مفهومة من طرف المرضى. وفي الوقت نفسه غالبا ما يلتقي الأطباء مع مرضى ذوي مستوى ضعيف في مجال المعرفة الطبية، إلى جانب افتقارهم إلى الكفاءة في اللغة الفرنسية.

الكلمات المفتاحية: القطاع الصحي- المحادثة- الطبيب-المريض- حواجز المحادثة- اللغة الفرنسية – المصطلحات الطبية.

Résumé

Dans le secteur de la santé, un bon soin médical dépend de l'efficacité de la communication entre les médecins et les patients ; une mauvaise communication peut entraîner à des résultats de soin insatisfaisants. Apparemment, il est supposé que l'incapacité des médecins à diagnostiquer la maladie de leurs patients peut fluctuer la relation entre eux. Ainsi, la confiance dans la relation entre les médecins et les patients sera compromise. Cette recherche étudie les barrières de communication entre Médecins et Patients, et leur impacte sur leurs relations. En Algérie, le Français s'impose dans la plupart des domaines scientifiques; les prestataires de soins de santé sont susceptibles d'utiliser beaucoup plus le Français et le jargon médical au cours de leurs examens médicaux qui est inintelligible pour la majorité des patients. Cependant, les médecins sont susceptibles de converger avec les patients qui se caractérisent par leur pauvre connaissance dans le domaine de la santé ainsi que leur manque de compétence dans la langue Française.

Mots Clés : Secteur de la santé- Communication- Médecin-Patient- Barrières de communication- Français- Jargon médical.

Summary

In health sector, a good medical care depends upon the effectiveness of communication between the therapists and the patients; poor communication may lead to unsatisfactory healthcare outcomes. Apparently, it is supposed that doctors' inability in diagnosing their patients' illness may fluctuate the relationship between the two. Thus, the trust in D-P relationship will be undermined. The present research paper sheds light on the communication barriers and their impact on the D-P relationship. In Algeria, French imposes itself in most scientific fields; health providers are likely to use much more French and medical jargon during their medical examinations which is unintelligible to most of patients. Meanwhile, doctors are likely to converge with patients who are characterized by their poor health knowledge along with their lack of proficiency in the French language.

Key words: Health sector- Communication- Doctor-Patient- Communication barriers- French- Medical jargon.