

Of AN UNIVERS,

AVRUPA

1990

LEFM

Journal homepage: <u>http://www.journalijar.com</u>

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH

# Assessment of Access to Health Care Services in Lefke-Guzelyurt Districts, Turkish Republic of Northern Cyprus

Thesis submitted to

European University of Lefke

In partial fulfillment of the requirements For the award of the degree of

## MASTER OF PHILOSOPHY

BY

### OLALEKAN BABATUNDE OLAOSEBIKAN

Under The Guidance of

Assist Prof. Dr. Macide Artac OZDAL





## EUROPEAN UNIVERSITY OF LEFKE INSTITUTE OF GRADUATE STUDIES AND RESEARCH DEPARTMENT OF HEALTH-MANAGEMENT

**MASTER THESIS** 



## Assessment of Access to Health Care Services in Lefke-Guzelyurt Districts, Turkish Republic of Northern Cyprus.

Olalekan Babatunde Olaosebikan

**SUPERVISOR** 

Assist Prof. Dr. Macide Artac OZDAL

**LEFKE 2019** 

#### **Signed Plagiarism Form**

Student's Name & Surname: OLALEKAN BABATUNDE OLAOSEBIKAN Student's Number: 174524 Programme: HEALTH-MANAGEMENT

 $\Box$  Master's without Thesis  $\Box$  Master's with Thesis  $\Box$  Ph.D.

I hereby declare that I have fully cited and referenced all material that are not original to this work as required by these rules and conduct. I also declare that any violation of the academic rules and the ethical conduct concerned will be regarded as plagiarism and will lead to a disciplinary investigation which may result in expulsion from the university and which will also require other legal proceedings.

.....

(Signature)

# EUROPEAN UNIVERSITY of LEFKE INSTITUTE of GRADUATE STUDIES and RESEARCH DEPARTMENT OF HEALTH-MANAGEMENT

Olaosebikan Olalekan, BABATUNDE, a Master of Science student of European University of Lefke, Institute of Graduate Studies and Research defended his thesis entitled "Assessment of Access to Health Care Service in Lefke-Guzelyurt Districts, Turkish Republic of Northern Cyprus", on January 22, 2020 and has been found to be satisfactory by the jury members.

#### **Jury Members**

Assist. Prof. Dr. Ozhan ÖZTUG

European University of Lefke

Assist. Prof. Dr. Macide Artac ÖZDAL (Supervisor) European University of Lefke

Assist .Prof. Dr. Davut Cem DİKMEN Cyprus International University

Prof. Dr. Özgur Cemal ÖZERDEM

Director of the Institute of Graduate

**Studies and Research** 

#### ABSTRACT

This paper examines the assessment of access to healthcare service within Lefke-Gurzelyurt districts of the Turkish Republic of Northern-Cyprus through a cross-sectional study using a household survey selected by geographic area, which was selected purposively according to their distance from the facility. Assessment of access to healthcare took dimension in the forms of Availability, Affordability, Accessibility, Adequacy, and Appropriateness. Chi-Square and a between ANOVA test were used to determine the association between population characteristics with the different variables of access, which indicate that age, gender, the ability of the household to make earns meet and last contact with health facility were statistically significant ( $p \ge .001$ ,  $p \ge .005$ ) and nationality less significant. Descriptive Statistics provide simple summaries about the population sample, which also shows that access to healthcare within the districts seems moderate or near perfect.

#### **DEDICATION**

This project is dedicated to Almighty God, the creator of Heaven and Earth for his unconditional love, care and for the unfathomable favor he granted me throughout the period of my MSc. Degree program and also to my families for their financial and psychological support.

#### ACKNOWLEDGMENT

My sincere gratitude goes to Almighty God the giver of life for his enormous mercies during the course of my degree program and for successful completion. My profound gratitude also goes to my supervisor in the person of Assist Prof. Dr. Macide Artac OZDAL for her advice and her unquantifiable contribution towards the completion and success of this study. My appreciation goes to my fiancée Kehinde Mary Bamigboye for staying through, love you. Also, I appreciate my friend in the person of Afolabi S. Olakunle for his support during these study, also my heartfelt cry goes to the respondent of those who took their time to promptly attempt the given questionnaire and interview, stay blessed. My uttermost gratitude goes to my parents (Mr. and Mrs. Olaosebikam) and my siblings (Mrs. Aiello Olawunmi, Mrs. Amaka Olayinka, and Gbolahan Olaosebikan) for being the reasons while my head is kept high, your love and your support kept me when the tide is high, I love you all.

### TABLE OF CONTENTS

Abstra	ii
Dedic	ationii
Ackno	wledgmentiii
Table	of Contentiv
List of	f Tables <b>vii</b>
List of	f Figures <b>xii</b>
СНА	PTER 11
Introd	uction1
1.1	Research Questions
1.2	Aim of the Study
1.3	Objectives of the Study
1.4	Research Hypothesis4
1.5	The Significance of the Study5
СНА	PTER 2
Litera	ture Review6
2.1	Health Facility
2.2	Access to Health Care
2.3	Health Care Access (Inequalities Perspectives)7
2.4	Determinant/Measures/Indicators to Access Health Care10
2.5	Health Utilization in Relation to Access11
2.6	Barriers to Health Access
2.7	Interventions to Barriers14

CHAPTER 316	
Methodology1	5
3.1 Study Design10	5
3.2 Sampling and Data Collection Methods10	5
3.3 Sampling Instrument1'	7
3.4 Statistical Analysis1	3
CHAPTER 41	9
Results1	)
1.1 Demographics and Health Questions	1
1.2 Availability of HealthCare	l
4.2.1 Correlation between population characteristic and variables for the	
availability of healthcare2	5
A.3 Affordability of HealthCare	l
4.3.1 Correlation between population characteristic and variables for the	
affordability of healthcare	6
4.4 Accessibility of HealthCare	2
4.4.1 Correlation between population characteristic and variables for	
accessibility of healthcare6	4
4.5 Adequacy of HealthCare	)
4.5.1 Correlation between population characteristic and variables for the	
adequacy of healthcare	1
.6 Appropriateness of Healthcare	9

CHA	APTER 5	101
Discu	ssion, Recommendation, and Conclusion	101
5.1	Discussions	101
5.2	Conclusions	105
5.3	Recommendations	106
REF	'ERENCES	

## **LIST OF TABLES**

Table 1. Barriers to accessing health services with specification of supply and/or      demand influence
Table 2. Population characteristics and Health Questions 20
<b>Table 3.</b> Significant association between population characteristics and how the information about available healthcare been easy to find
Table 4. Significant association between population characteristics and how the information about available healthcare been useful
Table 5. One-Way ANOVA Analysis between population characteristics and how strenuous or easy to obtain healthcare services
Table 6. One-Way ANOVA Analysis between population characteristics and how they would rate access to information on available healthcare services from the sources
Table 7. When you need it, can you financially afford to access?
<b>Table 8.</b> A significant association between population characteristics and whether they reduce essential needs to cover cost
Table 9. Significant association between population characteristics and whether they recourse to private or reciprocal social insurance protection in order to cover health cost

Table 10. One-Way ANOVA Analysis between population characteristics and whether
they can you afford primary care doctor <b>51</b>
Table 11. One-Way ANOVA Analysis between population characteristics and whether
they can you afford specialist care doctor
Table 12. One-Way ANOVA Analysis between population and whether they can you
afford a specialized healthcare provider (e.g. physiotherapist,
psychologist)53
Table 13. One-Way ANOVA Analysis between population characteristics and whether
they could afford a hospital54
Table 14. One-Way ANOVA Analysis between population and whether they could
afford a medicine55
Table 15. One-Way ANOVA Analysis between population and whether they could
afford medical equipment56
Table 16. One-Way ANOVA Analysis between populations and whether they could
afford dental health care57
Table 17. One-Way ANOVA Analysis between population characteristics and whether
they could afford cosmetic intervention/reconstruction
Table 18. One-Way ANOVA Analysis between population characteristics and whether
the respondents are faced with financial difficulties due to expenditures on
healthcare
Table 19. One-Way ANOVA Analysis between population characteristics and whether
they postpone healthcare visits because of cost

Table 20. One-Way ANOVA Analysis between population characteristics and whether
healthcare costs are covered to a satisfactory extent by the healthcare system
(tax-based or social insurance-based)61
<b>Table 21.</b> Significant delays in access to some services
Table 22. Geographical accessibility of services (are the following services located
close enough to your home?64
<b>Table 23.</b> Significant association between population characteristics and whether they      experienced a significant delay in accessing medicine
Table 24. Significant association between population characteristics and if they
encounter a substantial delay in receiving medical intervention
Table 25. Significant association between population characteristics and whether they      experienced a significant delay in accessing a medical device or equipment7
<b>Table 26.</b> Significant association between population characteristics and if they had a
substantial delay in obtaining a diagnostic test
<b>Table 27.</b> Significant association between population characteristics and if they face a substantial delay in securing a nursing appointment
<b>Table 28.</b> Significant association between population characteristics and whether they
had a substantial delay in obtaining an appointment with primary care
physician73

Table 29.	Significant association between population and whether they have a substantial delay in securing an appointment with a specialist74
Table 30.	Significant association between population characteristics and whether they experienced a significant delay in accessing help from social services75
Table 31.	Significant association between population characteristics and whether a pharmacy service is located near enough their home <b>76</b>
Table 32.	Significant association between population characteristics and whether a specialist is located near enough their home
Table 33.	Significant association between population characteristics and whether a hospital is located near enough their home
Table 34.	Patient-healthcare professional communication80
Table 35.	Statement on the quality and safety of care
Table 36.	One-Way ANOVA Analysis between population characteristics and whether they are suitably informed by healthcare providers about their treatment options
Table 37.	One-Way ANOVA Analysis between population characteristics and whether they are involved in the decision concerning their healthcare by the healthcare provider

Table 38	• One-Way ANOVA Analysis between population characteristic and whether
	the healthcare provider provides necessary details they need about the safety
	of their treatment93

Table 39. One	e-Way ANOVA Analysis between population characteristics and whe	ther
the	healthcare provider adjust their care to changing	
need	ds	94

#### LIST OF FIGURES

Figure 1. Self-reported unmet needs for medical examination due to cost, distance and waiting time
Figure 2. Self-reported unmet needs for medical examination by main reasons (2016)9
Figure 3. Sampling Method illustration17
Figure 4. How Easy or Difficult to obtain Health Service
Figure 5. How did you get access to Healthcare information Services from the following sources or channels
Figure 6. How would you rate access to healthcare information from the available source
Figure 7. Would you agree with the statement that it was easy to find information on available healthcare?
Figure 8. DO you agree with the statement that healthcare information was useful?
Figure 9. Were you faced with financial difficulties as a result of expenditures on health
Figure 10. Have you lowered your essentials needs during contact with health facility to be able to cover healthcare costs

Figure 11. Did you missed or delay visit to Healthcare due to cost during interaction      with health care facility
Figure 12. Healthcare costs are been covered to a satisfactory extent by my healthcare System (whether it is taxed or social insurance-based)34
Figure 13. Do you have to recourse to private or social insurance protection to cover      cost
Figure 14. Do you have to encounter any of the following situations when seeking your healthcare?
Figure 15. How did you have access to tackle geographical barriers?65
Figure 16. Have you ever felt stigmatized because of some reasons?
Figure 17. What type of stigma did you experience?100

## CHAPTER 1 INTRODUCTION

Provision of good health facilities, excellent health services, and qualified and highly trained health personnel doesn't show fort for a good health system but having "access" to these justify their existence and show the provision of health care. Natalie Huls, et al (2004) was of the opinion that access to health is a frequently neglected part of the right to health and without practical access; the right to health becomes a void guarantee. They further expressed that access to health implies that all individuals, despite contrasts in race, sex, language, religion, or social origin should have physical access to health facilities, goods, and services.

Access to health care can be defined as the real use of personal health services and everything that encourages or blocks the use of personal health services according to Andersen et al (2001). While in some studies such as Martin et al (2001), they view access to health care as follows:

(1) where services are available, the population may have access to healthcare as regards adequate provision of services. (2) The extent to which people gain access to healthcare also depends on the financial, organizational and social or cultural barriers which limit t heir use. While the use depends on availability, physical usability, and acceptability of facilities and not just the adequacy of supply. (3) Available services must be relevant and effective if people are to have access to satisfactory health outcomes. (4) The availability of services and barriers to use must be assessed in the context of the different social perspectives, health needs and material and cultural settings of the various groups.

Cyprus Island is divided into two sections. The Greek side is perceived globally as the Republic of Cyprus; however, no country other than Turkey perceives the Turkish side, known as the Turkish Republic of Northern Cyprus.

About 300,000 people live in Northern Cyprus. The estimated 70% of the population is Turkish Cypriot birthplace, 27% is Turkish birthplace, the remaining 3% are different countries. Since 2006, the population has grown by 11.2 percent (fundamental results from the Census of Population and Lodging Units 2011). According to the 2006 evaluation, 96% of the population is educated and 87% have finished secondary school at any rate. The island comprises of six districts: Lefkosa, Gazimagusa, Girne, Guzelyurt, Iskele, and Lefke (sub-district of Guzelyurt) where this study will be conducted. According to the 2011 population and Lodging unit Census Lefke-Guzelyurt comprises of 30,000 populace, which represents 10 percent of the total population.

According to Rahmioglu et al. (2012), it was believed that people living in northern Cyprus can access health care through four possible paths of consideration. Firstly, by means of a public health care system, in which care is given to individuals with social security insurance at significantly limited rates, Which is required for everyone in the workforce, irrespective of whether employed by the government, the private sector or self-employed, also accident care and emergency departments are free for all. Second, there are numerous people in North Cyprus looking for private-sector care. We observed the past decade and saw an increase in private" polyclinics" that provide a wide range of outpatient services, while procedures provided in these settings are typically limited, and in recent years individuals have begun to buy affordable health insurance that was perceived to be not yet widely available. Thirdly was getting public healthcare services in Turkey, where the government of North-Cyprus was sending individuals to Turkey for specialist health care if the required service wasn't available within the public sector. The fourth healthcare pathway is by crossing the border and receiving public services in the Republic of Cyprus. Turkish Cypriots are qualified for the Republic of Cyprus citizenship and thus benefit from health care coverage provided to all its residents.

In this regard a cross-sectional study of household survey will be carried out in the districts of Lefke-Guzelyurt, using the Cengiz Topel health facility as a central reference point; to determine whether the facility has been able to discharge the core duties of establishment towards the entire districts population, determine and identify challenges that may interfere with access to healthcare and present measure for intervention.

#### **1.1 Research Questions**

- Are there health services or products made available to the populace within the Lefke-Guzelyurt districts?
- Can the populace afford to pay for healthcare services, thereby not leading to financial hardship?
- Are there other limiting factors that barriers that than financial, such as waiting time, information, geographical distance, communication, e.t.c, stopping them from healthcare access?
- Does the populace get quality healthcare and if involved in decision making with healthcare providers
- Does the healthcare provider meet the needs of different groups in the population?
- How does the population characteristic of the populations affect their access to healthcare?

#### 1.2 Aim of the Study

- The main aim of this study is to determine whether the populations in Lefke-Guzelyurt districts are capable to access the health care service in terms of availability, affordability, accessibility, adequacy, and appropriateness, also to identify barriers that hinder their access to healthcare services
- Examine if there are any differences with population characteristics on different variables for measuring access to healthcare in terms of availability, affordability, accessibility, adequacy, and appropriateness.

#### **1.3 Objectives of the Study**

- To carry out a cross-sectional study of household surveys within the Lefke districts according to some specific distance from the health facility, to enable a response to the research questions.
- Through the use of Questionnaires based on the measure of health care access for data collections, analysis and statistical tests, which will enable us to justify the hypothesis, further identify the barriers of access, then being able to present interventions measures.

#### **1.4 Research Hypothesis**

- H0: the population in Lefke-Guzelyurt district, TRNC has healthcare facilities made available for them.
- H1: the population in Lefke-Guzelyurt districts, TRNC does not have healthcare facilities made available of healthcare facilities made available for them, due to some barriers.
- H0: the population in Lefke-Guzelyurt district, TRNC can afford healthcare facilities.
- H2: the population in Lefke-Guzelyurt districts, TRNC can't afford healthcare facilities due to some barriers.
- H0: the population in Lefke-Guzelyurt district, TRNC has health care facilities made accessible.
- H3: the population in Lefke-Guzelyurt districts, TRNC doesn't have healthcare facilities made accessible due to some barriers.
- H0: the population in Lefke-Guzelyurt district, TRNC has adequate healthcare facilities.
- H4: the population in Lefke-Guzelyurt districts, TRNC does not have adequate healthcare facilities due to some barriers.

- H0: the population in Lefke-Guzelyurt district, TRNC is given appropriate health care facilities.
- H5: the population in Lefke-Guzelyurt districts, TRNC is not given appropriate healthcare facilities due to some barriers.
- H0: Differences in population characteristics do not play a role to access healthcare services within the districts.
- H6: Differences in population characteristics do play a major to access healthcare services within the district.

#### 1.5 The Significance of the Study

- It will help determine if the populations in Lefke-Guzelyurt district are able to have reasonable access to healthcare and, where there are other obstacles which may stand as difficulties.
- The study will aid the ministry of health to evaluate those health facilities that have been established within the districts whether they have been able to provide the core function.
- It will help the government to tackle some of the challenges and barriers poised by the people and the health providers that may hinder healthcare access.
- ✤ It will help enhance the quality of health services.
- ✤ It will help create and improve the health policies within the districts.
- ✤ It will also serve as a baseline study for further research.

#### **CHAPTER 2**

#### LITERATURE REVIEW

#### **2.1 Health Facility**

As stated by the World Health Organization (WHO, 2018), health-care facilities include hospitals, primary health-care centers, isolation camps, burn patient units, feeding centers, and others. Health science journal, (2018) article on health facility also explains that they are places outfitted with assets that can provide and fulfill the needs of various patients for diagnoses and treatment of disease, in which they share a similar view with the W.H.O in a range of health care settings for quality of care, such as hospitals, nursing homes, assisted living residences, ambulatory care Centre, home health care, medical daycare, etc.

#### 2.2 Access to Health Care

National Academy Press, (1933) on healthcare access in America, expresses health care access as a shorthand term that is used for a comprehensive set of concerns that center on the degree to which people acquire required help from the medical care system. They found that people were equating access to insurance coverage and not getting enough doctors and hospitals in the places they live in because of the difficulties in identifying and measuring the term. But insurance or close-by health care providers is no assurance that people who need services will get them.

Aday & Anderson, (1981) believe access to health care has been an important aspect in public health policy of many health care settings, Their perspectives on access to health care are focused on an equity viewpoint that should satisfy three hypotheses: first, the fundamental right to health care; second, health resources [3Ms: minute (time), manpower, materials] that are often limited; and third, health policy should be based on realistic proof.

McLafferty (2003); Rushton et al (2000) Believed health policy issues access to the degree of power and authority left to local authorities while health geographers interpreted it through regional variability in population and spatial organizations (numbers, sizes, forms, and locations) in the study of disease dynamics and resource allocation.

Also, healthcare access can be defined according to Peters et al. (2008) which implies "the timely use of service according to need" utilization. Further still according to the report of the World Health Organization, (1978), believes it's an extensive term with different dimensions Used interchangeably to think about whether people receive the service they need.

In the regards of the various definitions, which follows the belief of Oliver and Mossialo (2004) which recognize that there is no universally accepted definition, but the view of McLafferty (2003) and Aday, Anderson (1981) Which implies how people access healthcare needs and who plans and delivers those needs, with whom (partnership and networking), and at what levels–central, regional or local –are equally important in terms of how people access healthcare services, And the impact on their well-being and also that access generally has to do with the ability of people to use health services when and where they need it could be a good standard.

#### **2.3 Health Care Access (Health Inequalities Perspectives)**

According to Raphael (2009), health inequalities are firmly connected to social determinants of health such as socioeconomic status, lifestyle, geographical location, age, gender, and community background. Which can be seen to be crucial in healthcare access?

The review into the exploration of Brenda and colleagues (2014), where they took a gander at the inequalities of healthcare access among the Aboriginal and non-Aboriginal people in Canada. They highlight according to Beiser (2005) that in Canada Aboriginal individuals were the helpless populaces given that they bear a higher number of disparities than their non-Aboriginal counterparts, also Camargo (2012) research show that people from vulnerable groups suffer more from disease and die younger and are less likely to receive or benefit from optimal access to health care services. Following the research findings, it can be seen that health inequalities stand as a barrier to equitable access.

Health inequalities in access to healthcare can also be seen amidst one county to another as reported from the European Commission (2018) on the inequalities of access to healthcare within the member state countries, from their report it was identified that even if people were legally protected by the health system, their needs may not be met due to cost, waiting times and distance travel. (see Fig 1).



Source: Eurostat [hlth\_silc\_08]; \* ESPN countries not included in the dataset: LI; \*\*No data for 2008 for the following ESPN countries: HR, MK, RS; \*\*\* Data for IS and TR refer to 2015, no data available

Figure 1. Self-reported unmet needs for medical examination due to cost, distance and waiting time.

Costs were observed as the most important factor impeding efficient access to healthcare and the less important factor of time observed (see Fig 2).



Source: Eurostat [hlth\_silc\_08]; \* ESPN countries not included in the dataset: LI; \*\* Data for IS and TR refer to 2015, no data available for 2016.

Figure 2. Self-reported unmet needs for medical examination by main reasons (2016)

Ineffective access to healthcare inequality was clarified by two interlinked groups of factors: (1) those related to the characteristics of population groups, such as income, activity level, age, gender, ethnicity, disability status, and health literacy; and (2) those related to the nature of the health system, including costs, waiting times and territorial disparities. They identified that the health system's attributes may look more thoroughly at the needs of certain groups than others.

#### 2.4 Determinant/ Measures/ Indicators to Access Health Care

A lot of studies show different variations on the determinant or measure of access to health care. Goodman DC et al (1997); Haynes R. et al (1999, 2001); Joseph AE (1984); Fortney J, (1999), Specify that the determinant of access to health care is the types and quality of service, including cost, time, distance (travel facilities) and routine interaction between service users and health care providers. While Aday and Anderson (1981) still agree that the basic questions remain unanswered, i.e. how can we quantify access to health care and what approach should be used within the nuances of its context, because access to health care tends to be more political than operational, they believe that, when conceptualizing its significance, two views frequently appear in many forms of literature: firstly, researchers often try to match it with the demographic profile of the population (income, race residence); secondly, they relate it to the health system (resource allocation, available services, including health and non-health human resources), More so, they agree that health services should be adapted to people's needs while receiving health care, rather than allocated on the basis of demographic attributes.

El Paso County Health Indicators (2012) Report argued that health insurance is key to the health care system and that insurance coverage should be far-reaching and moderate in term of out-of-pocket expenses which should be dependent on having adequate numbers and type of providers who accept individual's health insurance, their report show that insurance should be an access point but insurance alone can't guarantee the necessary access levels.

Donabedian (1972) states that the evidence of access is the use of the service and not just the existence of a facility and that access can be calculated appropriately by the degree of use in relation to' need.' They believe one should recognize that the' needs' are evaluated differently by clients and professionals. In addition, two components in service use must be distinguished: 'initiation' and 'continuation'. It is because different factors have been said to affect each, although any factor can influence both. While Krishna & Gurch (2013) argues that in order to measure access to health care, some provision should be made for accessing and re-accessing the health needs of people on a regular basis and should fit it within the' IPO (input process, output/outcome) configuration' to see what extent the existing system would address the health care needs of people. Their understanding of accessing healthcare is currently narrowly focused, so establishing defined and appropriate parameters that expose both quantitative and quantitative characteristics, encompassing the viewpoints of patients and clinicians within the' usage' and' satisfaction' dimensions, would be crucial.

According to Simeonsson et al (1999); O'Donnell( 2007); Bronwyn, H et al (2011); also a report and recommendation based on the submission and proceeding of the public hearing south-Africa human commission (June 2007), tend to deviate from the above determinant to health care access but put some of the determinant in groups such as availability (service form and extent), accessibility (physical barriers), affordability (financial, time or energy costs), acceptability (reciprocity and mutual acceptance) and geographical. Part of determining the availability of healthcare is to seek or source for information about healthcare, which can be seen from the study of Lambert & Loiselle, 2007; Mills & Todorova, 2016.

#### 2.5 Health Utilization in Relation to Access

Health utilization and access are like two sides of coin that goes hand-in-hand. One can't separate health utilization from access because they both go alongside one another, which be seen from various studies. Health-Care Utilization as a Proxy in Disability Determination (2018) relates health utilization and access, where it was viewed that health utilization, in theory, should correspond highly with need, but certain services are needed and not obtained (access). This need is to use healthcare service (utilization) to diagnose, cure or alleviate illness or injury; to improve or maintain function, or even to

obtain information on their health status and prognosis and the ability to obtained these required needs can be seen as access.

A.kazanjian and colleagues (2004) whereof the view that the concept of access and utilization are often used without further description or diverse definition is used in various studies, they believe it is difficult to estimate valid measure of either concept and how much access is desirable remains debatable, where there are different views on appropriate levels of utilization for population groups. There so many factors that affect utilization, some studies call it differences or levels, of such studies, are: Health-Care Utilization as a Proxy in Disability Determination (2018) and Retooling for an Aging America: Building the Health Care Workforce (2008), where they considered a socio-demographic and socioeconomic factor. Freedman et al., (2004) also identify other factors or differences in utilization based on marital status, educational level, geographic location, and other factors.

#### 2.6 Barriers to Health Access

In Donabedian's study (1972), it was found that barriers to access are not financial but psychological, information, social and organizational, spatial, temporal, etc. while preceding studies from the National Academy Press, (1993) on access to health care in America and J. Emilio Carrillo (2011) Shares the same views on both the structural (impediment to medical care directly related to the number, size, concentration, location or organizational structure of health care providers) and the financial (may restrict access either by inhibiting patients ' ability to pay for the necessary medical services or by discouraging physicians and hospitals from treating patients with limited means) barriers but personal, cultural barriers (such as education or attitudes) and cognitive barriers (knowledge and communication) separate their views.

Ensor and Cooper (2004); O'Donnell (2007) are of the opinion that barriers to accessing health services may arise from the demand/or supply-side where the demand side determinants are factors influencing the ability to use health services at the individual, household or community level and the supply side determining the inherent aspect of the health system that hinder individuals, households or the community from receiving service. O'Donnell (2007) stresses that both viewpoints must be discussed simultaneously.

Throughout his research, Peters et al. (2008) provided a capture to access barriers along the four access dimensions where each of them had supply-side and demand-related aspects, as well as Ensor and Cooper (2004), presented a capture of supply-side and/or demand-side barriers where the two methods are combined throughout Table 1, Ensor and Cooper's barrier-related component was grouped according to four access dimensions. In which the table shows that there is considerable overlap between the two systems, even though some variations still exist. Table 1. Barriers to accessing health services with the specification of supply and/or demand influence

Dimension of barriers (Peters et al. 2008)	<b>Barriers (Ensor and Cooper 2004)</b>	
Geographic accessibility		
• Service location (S)	• Indirect household costs (transport cost) (D)	
• Household location (D)		
Availability		
• Health workers, drugs, equipment (S)	• Waiting time (S)	
• Demand for services (D)	• Wages and quality of staff (S)	
	• Health care choice/provider information (D)	
	• Education (D)	
Affordability		
• Costs and prices of services (S)	• Direct price of service, including informal fees (S)	
• Household resources and willingness to pay (D)	• Opportunity costs (D)	
Acceptability		
• Characteristics of the health services (S)	• Management/staff efficiency (S)	
• User's attitudes and expectations (D)	• Technology (S)	
	• Household expectations (D)	
	• Community and cultural preferences, attitudes,	
	and norms (D)	

Source: Adapted from Peters et al. (2008) and Ensor and Cooper (2004). Notes: D <sup>1</sup>/<sub>4</sub> demand side; S <sup>1</sup>/<sub>4</sub> supplyside.

#### 2.7 Interventions to Barriers

Interventions pointed at ensuring easier access to health service is needed to be implemented at districts levels, as this is known to constitute the most geographical circumstance for the primary health care according to the study of Ekman et al. 2008; Lawn et al. 2008; Rohde et al. 2008.

More so Braveman and Gruskin (2003); Ensor and Cooper (2004) believe that there should be an inter-sectoral collaboration because most barriers to care cannot be overcome by the health sector acting alone.

Van Damme et al. (2002); Rasanathan et al. 2009 also pointed out that public engagement should be incorporated into programs addressing obstacles to access, as it reduces power gaps between population and health system.

Further still in the study of Braveman and Gruskin 2003; Whitehead and Bird 2006; Peters et al. (2008) they believed that whatever service created the monitoring their service delivery should be an integral part of the strategy.

Standing (2004) suggested that many interventions take a monetary incentive approach to address barriers to access health services that are often channeled through the demand side of these financial incentives, apparently due to donor responses to the failure of governments to provide adequate health services and the perception of inertia at all levels by authorities but Bart et al (2011) argue that given the considerable amount of literature that focuses on financial demand-side interventions, the highest number of interventions tend to be non-financial and supply-based.

Chieh Li et al (2017) describe strategies to resolve communication barriers that tackle linguistic and cultural barriers in healthcare as requiring both the level of the program (national strategies to eliminate language barriers) and the level of the person (steps to increase awareness of our own verbal and non-verbal communication styles, as well as effectiveness in communicating with different population and identifying our strength, our weakness, and our obstacles.)

## CHAPTER 3 METHODOLOGY

#### 3.1 Study Design

A cross-sectional study using a household survey was carried out across the Lefke-Guzelyurt districts. The survey was selected by geographic area, which was selected purposively according to their distance from the facility.

#### 3.2 Sampling & Data Collection Method

Cluster Sampling was chosen as the sampling method from a population of 30,000 within Lefke-Guzelyurt district. The sample size from the population was 400 which were calculated based on confidence intervals width (Bernard Rosner, 2015), using a 95% confidence level and 5% confidence interval. The quota sample of 400 households to the facility was divided into 40 clusters: 20 households (2 clusters of 10) was be selected within 300metre, 600metre, continuously till 6500m, beginning with the health facility as a central reference point, the cluster was divided such that they are in two opposite directions as illustrated in the figure below.



Figure 3. Sampling Method

This method was adopted to evenly represent the distributed population

#### **3.3 Sampling Instrument**

The appropriate sample tool for the type of style of research was the use of the questionnaire, which was subdivided into the category of parts a and b. Part a comprises demographic characteristics such as the gender, age categories, nationality, etc, and some health-related questions to examine who the respondent was health-wise and also to evaluate how long they came in contact with health facilities. While part b took the dimension of access in five different ways, which will be summarized as follows:

- Affordability: Questions if health care seekers are able to pay for the service and if that may lead to financial hardship.
- Accessibility: Questions if there are barriers limiting health care seekers other than financial (e.g. waiting time, information, communication, etc.) that stop them from health care access.

- Adequacy: Questions if health care seekers got quality health care and if involved in the decision making with the health care providers.
- Appropriateness: Questions if health care meets the needs of different groups in the population and if there was disrespectful treatment from health care providers.
- Availability: Questions if there is a healthcare service or product available within the district's healthcare system.

#### **3.4 Statistical Analysis**

In checking the scale of reliability for the given set of measurements from the sample instrument, the Cronbach's Alpha Test was adopted. These tests examine the reliability, or internal consistency, of a set of scale or test items. Ten variables with different scales of measurement were examined using the Cronbach's Alpha Test, which gave an  $\alpha$  coefficient of 0.8, which is an acceptable value for the coefficient of reliability. When the study information was gathered it was applied within specific statistical tests, which were carried out through the use of standard package statistical software (SPSS) that was used to determine the interference for the hypothesis testing and the descriptive analysis. In order to check if the data was normally distributed before carrying the inferential analysis the stem-leaf plot and histogram was used in determining the normality, the result shows that all data were approximately normally distributed.

#### **CHAPTER 4**

#### RESULT

#### **4.1 Demographic and Health-Questions**

There were 400 completed surveys, 52.5% males and 47.5% females, which had their age spread across from 20 to 65 above, where 11.5% are of age 20-24, 48.0% are 25-49, 25.5% are 50-64 and 15.0% are >65, when asked about nationality,61.3% pointed out to be of Turkish-Cypriot while 38.8% were Turkish. 87.0% answered on their own behalf while 13.0% answered on somebody else's behalf When asked, about ability of household to make ends meet, 26.3% indicated it was easy, 40.0% indicated it was difficult, 6.0% couldn't tell and 18.8% preferred not to say.17.5% visit a health facility in the last 12month, 27.0% in 6months, 44.0% in 3months and 10.8% above a year. The response has shown that 10.3% is chronic or long-term, 50% with multiple chronic and long-term conditions, 95% with family members/informal caregivers and 20% with informal caregivers (Table 2).
Demographics characteristics & Health Utilization	Response Count	Response Percent
Gender		
Male	210	52.5%
Female	190	47.5%
Age		
20-24	46	11.5%
25-49	192	48.0%
50-64	102	25.5%
>65	60	15.0%
Nationality		
Turkish-Cypriot	245	61.3%
Turkish	155	38.8%
Response		
On behalf of you	348	87.0%
On behalf of someone else	52	13.0%
Response(the ability of a household		
to make ends meet)		
Easy	105	26.3%
Difficult	196	49.0%
Don't know	24	6.0%
Prefer not to say	75	18.8%
Response( last contact with health facility)		
12months	70	17.5%
6months	108	27.0%
3months	179	44.0%
>a year	43	10.8%
Are you		
A chronic condition patient	41	10.3%
Patient with several chronic and long-	20	5.0%
term conditions		
Family / informal caregiver	38	9.5%
Patient & informal caregiver	8	2.0%
None of the above	293	73.3%

## Table 2. Population Characteristics and Health Questions

## 4.2 Availability of HealthCare

The availability component aims to assess whether healthcare services or products are av ailable to the population in the healthcare system in the district of Lefke-Guzelyurt. When asked, how easy or difficult to get the healthcare services they needed (fig 4), 39.5% indicate it is easy or very easy, 44.25% indicates moderate easy access while 16.1% show that it is difficult or very difficult, showing that the respondents were divided on this issue. Additionally posed inquiries with respect to the availability of information on healthcare services, where respondent was asked to rate different sources of information on healthcare (fig 5), The accompanying sources were considered to provide high-quality information by the highest percentage of respondents: hospital (38.25%), doctor practice (20.75%), work (15.25%) while relatives & peer patients (5%), internet websites (4%), social media (3.25%), school (3.75%), TV (1.25) and insurance company (0.75%) were recorded as poor quality information source. Rating access from the following sources to information on available healthcare service, 49.5% felt access to the available information was good or very good, 43% average, 7.5% poor or very poor (fig 6), also as to if the information was easy to find and useful, 94% ascertain it was easy while 86.5% felt it was useful, more so 6% felt it wasn't easy and 12.5% for not useful but 1% were unsure (fig 7&8).



Figure 4. How easy or difficult to obtain Health services



Figure 5. How did you get access to health services information from the following sources or channels



Figure 6. how would you rate access to healthcare information from the available source?



Figure 7. Would you agree with the statement that it was easy to find information on available healthcare



Figure 8. Do you agree with the statement that healthcare information was useful

Association of population characteristics and variables for the availability of healthcare using the Chi-square Test. This test was carried out on the population characteristics of the respondent alongside how information about the available healthcare been easy, the result shows that there was a significant association for ages,  $\Box^2(3) = 82.53$ , P $\leq .05$ , gender,  $\Box^2(1) = 13.14$ , P $\leq .05$ , ability of household to make earns meets,  $\Box^2(3) = 32.33$ , P $\leq .05$ , last contact with health facility,  $\Box^2(3) = 83.28$ , P $\leq .05$ , rejecting, therefore, the null hypothesis because there was no substantial relation between nationality of the respondent,  $\Box^2(1) = 0.54$ , P $\geq .05$  (Table3). Likewise, these test was carried out further between the population characteristics and how the information about the available healthcare was been useful, results also shows significance for ages,  $\Box^2(6) = 58.64$ , P $\leq .05$ , gender,  $\Box^2(2) = 18.84$ , P $\leq .05$ , ability of households to make earns meets,  $\Box^2(6) = 33.98$ , P $\leq .05$  and last contact with health facility,  $\Box^2(2) = 3.29$ , P $\geq .05$  (Table 4).

The inferential statistics associated with how strenuous or easy it was to really get healthcare with on the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facilities are reported in table 5. A between-group ANOVA was performed on population characteristics expectations (very difficult, difficult, moderate, easy, and very easy) and how strenuous or easy it was to really get healthcare. For gender: there were significant among the males and females, F (1,398) =71 P $\leq$ .001. Males (M=2.97 SD=0.81), females (M=3.61 SD=0.69), these indicate that females obtain healthcare more easily than males. For ages: three out of the four comparisons among the group means were significant, F (3, 396) =30 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages with 20-24(M=2.54 SD=0.98) lower than 25-49(M=3.16 SD=0.75), lower than both 50-64(M=3.53, SD=0.56) and 65+ (M=3.77, SD=0.81).these indicates that age

50-64 and 65+ obtain healthcare more easily when they needed it. For nationality: there was significance among Turkish Cypriot and the Turkish, F (1,398) = 16.0P≤.001.Turkish Cypriot (M=3.15, 0.86) and Turkish (M=3.48 SD=0.71), Turkish respondents were able to obtain healthcare easily than the Turkish Cypriot. For the ability of the household to make earns meet: three out the four comparisons among the group mean were significant, F (3, 396) =12.8 P≤.001. Post hoc testing revealed the significance difference between the pairs of the ability to make earns meet with being easy (M=2.92, SD=1.05), lower than, being difficult (M=3.31, SD=0.59); don't know (M=3.42, SD=0.72) and prefer not to say (M=3.64, SD=0.82).these show that those that find earns meet difficult, don't know and prefer not to say we're able to obtain healthcare more easily when needed. For the last contact with health facility: three out the four comparisons among the group mean were significant, F (3, 396) =21.5 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with health facility with 12months (M=2.77, SD=1.01) lower than 6month (M=3.19, SD=0.74); 3months (M=3.37, SD=0.60), lower than more than a year (M=3.91, SD=0.95). These indicate that respondent that had their last contact more than a year was able to obtain healthcare more easily when they needed it.

The inferential statistics associated with how the respondent rate access to available healthcare information with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facilities are reported in table 6. A between-group ANOVA was performed on population characteristics expectations (poor, very poor, average, good, very good) and how the respondent rate access to information on available healthcare. For gender: there were significant among the males and females, F (1,398) =24.96 P $\leq$ .001. Males (M=3.15, SD=1.71), Females (M=3.65, SD=0.67).females rate access to available health information better than the males. For ages: three out the four comparisons among the group mean were significant, F (3, 396) =49.44 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages with 20-24(M=2.50 SD=1.23) lower

than 25-49(M=3.25 SD=0.62); lower than both 50-64(M=3.74, SD=0.51) and 65+(M=3.93, SD=0.58).these indicates that age 50-64 and 65+ rate access to information on available healthcare more better. For nationality: there was significance among Turkish Cypriot and the Turkish, F (1,398) =14.76 P≤.001.Turkish Cypriot (M=3.27, 0.86) and Turkish (M=3.58 SD=0.65), the Turkish respondent rate access to available health information better than the Turkish Cypriot. For the ability of the household to make earns meet: three out the four comparisons among the group means were significant, F (3, 396) =23.74 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet with being easy (M=2.91, SD=0.99) lower than being difficult (M=3.46, SD=0.93); don't know (M=3.49, SD=0.59) and prefer not to say (M=3.80, SD=0.59). these show that those that find earns meet difficult, don't know and prefer not to say, rate access to available healthcare information better. For the last contact with health facility: three out the four comparisons among the group means were significant, F (3, 396) =26.92 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with health facility with 12months (M=2.74, SD=1.13) lower than 6month (M=3.47, SD=0.57; 3months (M=3.46, SD=0.62), lower than more than a year (M=3.93, SD=0.74). These indicate that respondent that had their last contact more than a year, rate access to information on available healthcare better.

				p-value
Gender	male	<b>yes</b> 206	<b>No</b> 4	.000
Age	Female	170	20	
	20-24 25-49 50-64 65+	45 189 101 41	1 3 1 19	.000
Nationality	Turkish-Cypriot Turkish	232 144	13 11	.463
The ability of a household to make ends meet	Easy Difficult Don't know Prefer not to say	103 190 23 60	2 6 1 15	.000
last contact with health facility	12months 3months 6months More than a year	68 106 175 27	2 2 4 16	.000

**Table 3.** Significant association between population characteristics and how the information about available healthcare been easy to find

T-Cypriot(Turkish Cypriot)

					p-value
		yes	No	unsure	
Gender	male	196	14	0	.000
	Female	150	36	4	
Age					
-	20-24	45	1	0	
	25-49	181	11	0	
	50-64	82	20	0	000
	65+	38	18	4	
Nationality					
indicinality	T-Cypriot	217	25	3	192
	Turkish	129	25	1	.152
The ability of a					
household to make ends	Easy	103	2	0	
meet	Difficult	167	29	0	000
	Don't know	19	5	0	.000
	Prefer not to say	57	14	4	
last contact with health	12month	69	1	0	
facility	6month	105	3	0	000
lacinty	3months	157	22	0	.000
	More than a year	15	24	4	

**Table 4.** Significant association between population characteristics and how the information about available healthcare been useful.

• T-Cypriot(Turkish Cypriot)

		Ν	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		p-value
						Lower Bound	Upper Bound	
Gender	male Female	210 190	2.9714 3.6105	.81208 .68691	.05604 .04983	2.8610 1.0612	3.0819 3.7088	.000
Age	20-24 25-49 50-64 <sup>*</sup> 65+	46 192 102 60	2.5435 3.1615 3.5294 3.7667	.98221 .74495 .55768 .81025	.14482 .05376 .05522 .10460	2.2518 3.0554 3.4199 3.5574	2.8352 3.2675 3.6390 3.9760	.000 .000 .000 .206
Nationality	T.Cypriot Turkish	245 155	3.1469 3.4774	.86059 .70559	.05498 .05667	3.0386 3.3655	3.2552 3.5894	.000
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 96 24 75	2.9238 3.3061 3.4167 3.6400	1.05334 .58893 .71728 .81606	.10280 .04207 .14641 .09423	2.7200 3.2232 3.1138 3.4522	3.1277 3.3891 3.7195 3.8218	.000 .029 .000 .000
Last contact with health facility	12month 6month 3month* More than a year	70 108 179 43	2.7714 3.1852 3.3743 3.9070	1.00968 .73812 .59926 .94652	1.2068 .07103 .04479 .14437	2.5307 3.0444 3.2859 3.1945	3.0122 3.3260 3.4627 4.1983	.000 .177 .000 .000

**Table 5.** One-Way ANOVA Analysis between population characteristics and how strenuous or easy to really get healthcare services

• Reference Group: age (50-64), Ability of household to make earns meet(easy), the last contact with a health facility. T-Cypriot(Turkish Cypriot)

		Ν	Mean	Std. Deviation	Std. Error	95% Confiden Me	ce Interval for	p- value
						Lower Bound	Upper Bound	
Gender	Male Female	210 190	3.1524 3.6526	.83901 .67091	.05790 .04867	3.0382 3.5566	3.2665 3.7486	.000
Age	20-24 25-49 50-64 <sup>*</sup> 65+	46 192 102 60	2.5000 3.2500 3.7353 5.5500	1.22474 .62244 .50593 .57833	1.8058 .04492 .05009 .07466	2.1363 3.1614 3.6359 3.7839	2.8637 3.3386 3.8347 4.0827	.000 .000 .000 .289
Nationality	T.Cypriot Turkish	245 155	3.2694 3.5806	.86418 .65337	.05521 .05248	3.1606 3.4770	3.3781 3.6843	.000
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 96 24 75	2.9048 3.4847 3.4583 3.8000	.99541 .59465 .93153 .59275	.09714 .04248 .19015 .06844	2.7121 3.4009 3.0650 3.6636	3.0974 3.5685 3.8517 3.9364	.000 .006 .000 .000
Last contact with health facility	12month 6months 3month* More than a year	70 180 108 43	2.7429 3.4722 3.4637 3.9302	1.12528 .57125 .62041 .73664	.13450 .05497 .04637 .11234	2.4745 3.3633 3.3722 3.7035	3.0112 3.5812 3.5552 4.1569	.000 1.000 .000 .001

Table 6. One-Way ANOVA Analysis between population characteristics and how they rate access to available healthcare information

• Reference Group: age (50-64), Ability of household to make earns meet(easy), the last contact with health facility(3months). T-Cypriot(Turkish Cypriot)

## 4.3 Affordability of HealthCare

This part of the survey planned for evaluating whether health care services are affordable for the people, or if the expenses of health care cause them financial hardship. When asked whether they face financial difficulties as a result of expenditure on health care, the response from respondents shows that 83.5% experience financial hardship while 16.5% never (fig 9). At the point when posed progressively explicit inquiries about their ability to afford specific services as responses primary care doctors, specialized doctors, specialized healthcare professionals such as physiotherapist or psychologist, hospital costs, medicines costs when needed, medical equipment, dental care, and reconstruction or cosmetic intervention necessary, the result indicated as shown in table 7. 58% of the respondents also detailed reducing household expenditure

on essential needs; such as food or clothing, to have the option to take care of health care costs while 42% reacted they did not need to reduce such expenses on essential needs such as food or clothing as shown in (fig 10). While looking into forgoing or postponing visits to healthcare due to costs over the past 12 months 20.25% of respondents reported at least one time, of these, 10.75% said twice and 4% they did so 3 times or more. The majority of respondents (60%) indicated they never postponed healthcare visits because of costs (fig 11). when inquired as to whether their healthcare costs are sufficiently covered by their healthcare system, participants answered that they agreed or strongly agreed at 41.75 %, while 25.25% of participants stayed neutral, 18.75% disagreed or strongly disagreed and 14.25% reported they don't know(fig 12). Private or reciprocal social insurance protection to take care of to costs 44.75% of respondents attest to have recourse to that while 47.25% indicated not to and 8% profess as to not knowing (fig 13).



Figure 9. where you faced with financial diffculties as a result of expenditures on Healthcare



**Figure 10.** Have you lowered your expenditures on essential needs during contact with health facility to be able to cover health costs?



Figure 11. Did you missed or delay your visit to healthcare due to cost during interaction with health care facility



**Figure 12.** Healthcare costs are being covered to a satisfactory extent by my Healthcare System (taxable or based on social insurance?)



Figure 13. Do you have to recourse to Private or reciprocal social insurance protection to take care of costs?

Answer options	Always %	Very often %	Sometimes %	Rarely %	Never %	Not applicable %
Primary care doctor	65.5	5.0	22.3	3.8	35	_
Specialist doctor	29.0	3.0	51.8	11.0	5.3	
Specialized healthcare provider (e.g.	6.8	2.3	47.3	32.3	11.0	0.5
physiotherapist, psychologist, etc.)						
Hospital	71.0	3.8	21.5	2.3	1.5	-
Medicine	43.0	1,8	44.3	6.3	4.8	
Medical equipment or device	14.8	3.3	40.5	34.5	6.3	0.8
Dental health care	18.3	2.0	19.0	30.0	29.8	1.0
Cosmetic intervention	2.0	1.8	6.0	7.0	82.8	0.5
Answered question						400

Table7. When you need it, can you financially afford to have access to?

## 4.3.1 Correlation between Population Characteristics and Variables for Affordability of HealthCare.

This test was carried out on the population characteristics of the respondent alongside whether they reduce essential needs to cover cost, the result shows that there was a significant association for ages,  $\Box^2(3) = 21.63$ , P $\leq .05$ , gender,  $\Box^2(1) = 30.44$ , P $\leq .05$ , last contact with health facility,  $\Box^2(3) = 38.34$ , P $\leq .05$ , therefore rejecting the null hypothesis, while there was no significant association seen for ability of household to make earns meets,  $\Box^2(3) = 2.73$ , P $\geq .05$ , and the respondent nationality,  $\Box^2(1) = 4.23$ , P $\geq .05$  (Table 8). Likewise, these test was carried out further between the population characteristics and whether they recourse to a private or reciprocal social insurance protection in order to take care of healthcare cost, results also shows significance for ages,  $\Box^2(6) = 113.10$ , P $\leq .05$ , gender,  $\Box^2(2) = 40.91$ , P $\leq .05$ , nationality,  $\Box^2(2) = 51.17$ , P $\leq .05$ , ability of households to make earns meets,  $\Box^2(6) = 103.95$ , P $\leq .05$  (Table 9).

The inferential statistics associated with if the respondent can afford (financially) to access a primary care doctor with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 10. A between-group ANOVA was performed on population characteristics expectations (always, very often, sometimes, rarely, never, not applicable) and if the respondent can afford (financially) to access a primary care doctor. For gender: there were significant among the males and females, F (1,398) = 20.49 $P \le .001$ . Males (M=1.51, SD=0.91), Females (M=2.01, SD=1.29). These show that females can afford less (financially) to access a primary care doctor than females. For ages: all of the comparisons among the group means are significant, F (3, 396) = 27.85 $P \le .001$ . Post hoc testing revealed the significant difference between the pairs of ages with 20-24(M=1.15 SD=0.51); 25-49(M=1.47 SD=0.87), lower than 50-64(M=2.02, SD=1.03) lower than 65+ (M=2.62, SD=1.67).these indicates that age 65+ can afford less (financially) to access a primary care doctor. For nationality: there was no significance among Turkish Cypriot and the Cypriot, F (1,398) =2.34 P $\geq$ .001.Turkish Cypriot (M=1.87, 1.14) and Turkish (M=1.64 SD=1.11), the Turkish respondent can afford slightly lesser (financially) access to a primary care doctor than the Turkish Cypriot. For the ability of the household to make earns meet: three out the four comparisons among the group means were significant, F (3, 396) =10.00 P≤.001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet with being easy (M=1.27, SD=0.75) lower than being difficult (M=1.86, SD=1.24); don't know (M=1.83, SD=1.00) and prefer not to say (M=2.09, SD=1.60).these show that those that find earns meet difficult, don't know and prefer not to say, afford less (financially) to access a primary care doctor. For the last contact with health facility: all the four comparisons among the group means were significant, F (3, 396) =79.02 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with health facility with 12months (M=1.17, SD=0.64); 6month (M=1.19, SD=0.64) lower than 3months (M=1.89, SD=0.98), lower than more than a year (M=3.49, SD=1.35). These indicate that respondent that had their last contact for more than a year, can't afford (financially) to access a primary care doctor better.

The inferential statistics associated with if the respondent can afford (financially) to access a specialist doctor with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 11. A between-group ANOVA was performed on population characteristics expectations (always, very often, sometimes, rarely, never, not applicable) and if the respondent can afford (financially) to access a specialist doctor. For gender: there were significant among the males and females, F (1,398) = 28.47 $P \le .001$ . Males (M=2.32, SD=1.07), Females (M=2.92, SD=1.86). These show that females afford less (financially) to access a specialist doctor than males. For ages: all of the comparisons among the group mean were significant, F (3, 396) = 39.78 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages with 20-24(M=1.33 SD=0.92) lower than 25-49(M=2.51 SD=1.02); 50-64(M=2.87, SD=0.96) lower than 65+ (M=3.43, SD=1.21).these indicates that age 65+ can't afford (financially) to access a specialist care doctor. For nationality: there was no significance among Turkish Cypriot and the Turkish, F (1,398) =2.34 P2.001.Turkish Cypriot (M=2.53, 1.14) and Cypriot (M=2.73 SD=1.20), Turkish respondents afford slightly lesser (financially) access to a specialist doctor than the Turkish Cypriot. For the ability of the household to make earns meet: all four comparisons among the group means were significant, F  $(3, 396) = 66.81 \text{ P} \le .001$ . Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet with being easy (M=1.48, SD=0.88), is lower than don't know (M=2.88, SD=1.33); being difficult (M=3.01, SD=0.71); and prefer not to say (M=3.05, SD=1.38) these show that those that find earns meet difficult, don't know and prefer not to say, afford less (financially) to access a specialist doctor. For last contact with health facility: all the four comparisons among the group means were significant, F (3, 396) =49.71 P $\leq$ .005 Post hoc testing revealed the significant difference between the pairs of the last contact with health facility with 12months

(M=1.86, SD=1.22); 6month (M=2.29, SD=1.08), lower than, 3months (M=2.73, SD=0.89), lower than, more than a year (M=4.09, SD=0.78). These indicate that respondent that had their last contact for more than a year, afford less (financially) to access a specialist doctor better.

The inferential statistics associated with if the respondent can afford (financially) to access a specialized healthcare provider with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 12. A between-group ANOVA was performed on population characteristics expectations (always, very often, sometimes, rarely, never, not applicable) and if the respondent can afford (financially) to access a specialized healthcare provider. For gender: there was no significance among the males and females, F (1,398) =5.69 P > .001. Males (M=3.29, SD=0.92), Females (M=3.52, SD=1.02). Females can afford slightly lesser (financially) to access specialized healthcare providers than males. For ages: two out of the four comparisons among the group mean were significant, F (3, 396) =39.78 P $\leq$ .001. Post hoc testing revealed the significance difference between the pairs of ages with 20-24(M=2.85 SD=1.03) lower than 25-49(M=3.35 SD=0.75); 50-64(M=3.63, SD=1.16); 65+ (M=3.60, SD=1.03). These indicate that ages 25-49, 50-64 and 65+ can't afford (financially) to access specialized healthcare providers. For nationality: there was no significance among Turkish Cypriot and the Turkish, F (1,398) =0.28 P $\geq$ .001.Turkish Cypriot (M=2.53, 1.14) and Turkish (M=2.73 SD=1.20), Turkish respondent can afford slightly lesser (financially) access to a specialist doctor than the Turkish Cypriot. For the ability of the household to make earns meet: two out of the four comparisons among the group means were significant, F (3, 396) =12.02 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet with being easy (M=2.94, SD=1.00) is lower than don't know (M=3.61, SD=0.86); being difficult (M=3.54, SD=1.10); and prefer not to say (M=3.44, SD=0.96).these show that those that find earns meet difficult, don't know and prefer not to say, can't afford (financially) to access a specialized healthcare provider. For last contact with health facility: three out of the four comparisons among the group mean were significant, F (3, 396) =49.71 P $\leq$ .005 Post hoc testing revealed the significant difference between the pairs of the last contact with health facility, with 12months (M=2.89, SD=1.02) lower than 6month (M=3.23, SD=0.71); 3month (M=3.54, SD=0.93), lower than more than a year (M=4.07, SD=0.78). These indicate that respondent that had their last contact for more than a year, can't afford the most (financially) to access a specialized healthcare provider.

The inferential statistics associated with if the respondent can afford (financially) to access hospital with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 13. A between-group ANOVA was performed on population characteristics expectations (always, very often, sometimes, rarely, never, not applicable) and if the respondent can afford (financially) to access hospital. For gender: there were significant among the males and females, F (1,398) =26.02 P $\ge$ .001. Males (M=1.35, SD=0.78), Females (M=1.86, SD=1.13). These show that females can afford less (financially) to access hospitals than males. For ages: three out of the four comparisons among group means were significant, F (3, 396) =33.05 P $\leq$ .001. Post hoc testing revealed the significance difference between the pairs of ages, with 20-24(M=1.13 SD=0.50); 25-49(M=1.28 SD=0.70), lower than 50-64(M=1.94, SD=0.98), lower than 65+ (M=2.38, SD=1.38). These indicate that age 65+ afford lesser (financially) to access a hospital. For nationality: there was no significance among Turkish Cypriot and the Turkish, F (1,398) =0.28 P $\geq$ .005.Turkish Cypriot (M=1.62, 1.00) and Turkish (M=1.55 SD=0.93), the Turkish Cypriot afford slightly lesser (financially) access to a hospital. For the ability of the household to make earns meet: three out of the four comparisons among the group mean were significant, F (3, 396) =10.77 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=1.16, SD=0.57), is lower than, don't know (M=1.63, SD=0.92); being difficult (M=1.70, SD=0.93); and prefer not to say

(M=1.92, SD=1.39).these show that those that find earns meet difficult, don't know and prefer not to say, can afford less (financially) to access a hospital. For the last contact with health facility: all of the four comparisons among the group mean were significant, F (3, 396) =59.36 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=1.14, SD=0.52); 6month (M=1.18, SD=0.62), lower than, 3month (M=1.68, SD=0.93), lower than more than a year (M=3.02, SD=1.19). These indicate that respondent that had their last contact for more than a year, can't afford (financially) to access a hospital better.

The inferential statistics associated with if the respondent can afford (financially) to access medicine with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 14. A between-group ANOVA was performed on population characteristics expectations (always, very often, sometimes, rarely, never, not applicable) and if the respondent can afford (financially) to access medicine. For gender: there were significant among the males and females, F (1,398) =18.30 P $\leq$ .001. Males (M=2.04, SD=1.09), Females (M=2.55, SD=1.30). These show that females can afford less (financially) to access medicine than males. For ages: three out of the four comparisons among group means were significant, F (3, 396) =34.28 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=1.24 SD=0.71), lower than, 25-49(M=2.06 SD=1.03), lower than, 50-64(M=2.64, SD=1.05), lower than, 65+ (M=3.18, SD=1.48). These indicate that age 65+ can't afford (financially) to access medicine. For nationality: there was no significance among Turkish Cypriot and the Turkish, F (1,398) =2.22 P $\geq$ .005.Turkish Cypriot (M=2.21, SD= 1.21, Turkish (M=2.40 SD=1.21), The Turkish respondents were able to afford slightly lesser (financially) access medicine than the Turkish Cypriot. For the ability of the household to make earns meet: all the four comparisons among the group mean were significant, F (3, 396) =49.32 P≤.001. Post hoc testing revealed the significance difference between the pairs of the ability to make earns meet, with being easy (M=1.23,

SD=0.64), lower than, don't know (M=2.59, SD=0.98); being difficult (M=2.75, SD=1.26); and prefer not to say (M=2.80, SD=1.49).these show that those that find earns meet difficult, don't know and prefer not to say, can afford less (financially) to access medicine. For the last contact with health facility: all of the four comparisons among the group mean were significant, F (3, 396) =55.82 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=1.56, SD=0.97); 6month (M=1.82, SD=1.16), lower than, 3month (M=2.45, SD=0.93), lower than more than a year (M=3.88, SD=1.10). These indicate that respondent that had their last contact for more than a year, can't afford (financially) to access medicine.

The inferential statistics associated with if the respondent can afford (financially) to access medical equipment with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 15. A between-group ANOVA was performed on population characteristics expectations (always, very often, sometimes, rarely, never, not applicable) and if the respondent can afford (financially) to access medical equipment. For gender: there were significant among the males and females, F (1,398) = 30.37 $P \le .001$ . Males (M=2.88, SD=1.09), Females (M=3.48, SD=1.08). These show that females can't afford (financially) to access medical equipment as males. For ages: three out of the four comparisons among the group mean were significant, F(3, 396) = 28.73 $P \leq .001$ . Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=2.04 SD=1.21), lower than, 25-49(M=3.07 SD=0.93); 65+ (M=3.50, SD=1.26), lower than, 50-64 (M=3.65, SD=0.94). These indicate that age 50-64 can't afford the most (financially) to access medical equipment. For nationality: there was significance among Turkish Cypriot and the Cypriot, F (1,398) =7.87 P $\leq$ .005.Turkish Cypriot (M=3.04, SD= 1.14) and Turkish (M=3.36 SD=1.07), Turkish respondents weren't able to afford the most (financially) access medical equipment as to the Turkish Cypriot. For the ability of the household to make earns meet: all the four comparison

group means were significant, F (3, 396) =49.32 P $\leq$ .005. Post hoc testing revealed the significance difference between the pairs of the ability to make earns meet, with being easy (M=2.51, SD=1.18), lower than, being difficult (M=3.38, SD=0.85); don't know (M=3.38, SD=1.47); and prefer not to say (M=3.45, SD=1.21).these show that those that find earns meet difficult, don't know and prefer not to say, can't afford (financially) to access medical equipment. For the last contact with health facility: three out of the four comparisons among the group mean were significant, F (3, 396) =29.33 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=2.41, SD=1.28) lower than, 6month (M=2.97, SD=0.94); 3month (M=3.34, SD=0.89); more than a year (M=4.16, SD=1.21). These indicate that respondent that had their last contact 6months, 3months and more than a year, can't afford (financially) to access medical equipment better.

The inferential statistics associated with if the respondent can afford (financially) to access dental healthcare with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 16. A between-group ANOVA was performed on population characteristics expectations (always, very often, sometimes, rarely, never, not applicable) and if the respondent can afford (financially) to access dental healthcare. For gender: there were significant among the males and females, F  $(1,398) = 33.44 \text{ P} \le .001$ . Males (M=3.16, SD=1.48), Females (M=3.96, SD=1.25). These show that females can't afford the most (financially) to access dental healthcare as to the males. For ages: three out of the four comparisons among the group were significant, F (3, 396) =19.68 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=2.41 SD=1.85), lower than, 25-49(M=3.38 SD=1.29), lower than, 65+(M=3.98), SD=1.40); 50-64(M=4.09, SD=1.10). These indicate that age 50-64 and 65+ can't afford (financially) to access dental healthcare more. For nationality: there was significance among Turkish Cypriot and the Turkish, F (1,398) =28.83 P≤.001.Turkish Cypriot (M=3.25, SD=1.42) and Turkish (M=4.01 SD=1.32), Turkish respondents weren't able

to afford (financially) access dental healthcare. For the ability of the household to make earns meet: all the four comparisons among the group means were significant, F (3, 396) =18.99 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=2.72, SD=1.70), lower than, being difficult (M=3.74, SD=1.09); prefer not to say (M=3.93, SD=1.36); don't know (M=4.29, SD=1.43). These show that those that find earns meet difficult, don't know and prefer not to say, can't afford (financially) to access dental healthcare. For the last contact with health facility: three out of the four comparisons among the group means were significant, F (3, 396) =11.62 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=2.96, SD=1.77); 6month (M=3.22, SD=1.53), lower than, 3month (M=3.80, SD=1.09); more than a year (M=4.21, SD=1.30). These indicate that respondent that had their last contact, 3months and more than a year, can't afford the most (financially) to access dental healthcare.

The inferential statistics associated with if the respondent can afford (financially) to access cosmetic intervention with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 17. A between-group ANOVA was performed on population characteristics expectations (always, very often, sometimes, rarely, never, not applicable) and if the respondent can afford (financially) to access cosmetic intervention. For gender: there were significant among the males and females, F (1,398) =29.04 P $\leq$ .001. Males (M=4.48, SD=1.05), Females (M=4.91, SD=0.40). These show that females can't afford the most (financially) to access dental cosmetic intervention as to the males. For ages: two out of the four comparisons among the group mean were significant, F (3, 396) =53.20 P $\leq$ .001. Post hoc testing revealed the significance difference between the pairs of ages, with 20-24(M=3.46 SD=1.43), lower than, 25-49(M=4.79 SD=0.59); 50-64(M=4.89, SD=0.47); 65+ (M=4.93, SD=0.55). These indicate that age 25-49, 50-64, and 65+ can't afford the most (financially) to access

cosmetic intervention. For nationality: there was significance among Turkish Cypriot and Turkish, F (1,398) =23.43 P $\leq$ .001.Turkish Cypriot (M=4.53, SD= 0.99) and Turkish (M=4.93 SD=0.40), Turkish respondents weren't able to afford the most (financially) access cosmetic intervention as to the Turkish Cypriot. For the ability of the household to make earns meet: two out of the four comparisons among the group mean were significant, F (3, 396) =  $45.20 \text{ P} \le .001$ . Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=3.98, SD=1.24), lower than, being difficult (M=4.90, SD=0.46); prefer not to say (M=4.99, SD=0.26); don't know (M=5.00, SD=0.00). These show that those that find earns meet difficult, don't know and prefer not to say, can't afford the most (financially) to access cosmetic intervention. For the last contact with health facility: two out of the four comparisons among the group means were significant, F (3, 396) =33.79 P≤.001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=3.91, SD=1.41), lower than, 6month (M=4.66, SD=0.63); 3month (M=4.91, SD=0.47), lower than, more than a year (M=5.05, SD=0.21). These indicate that respondent that had their last contact, more than a year, can't afford the most (financially) to access cosmetic intervention.

The inferential statistics associated with if the respondent faces financial difficulties due to healthcare expenditure with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 18. A between-group ANOVA was performed on population characteristics expectations (never, rarely, sometimes, and regularly) and if the respondent faces financial difficulties as a result of spending on healthcare. For gender: there were significant among the males and females, F (1,398) =18.27 P $\leq$ .001. Males (M=2.39, SD=0.87), Females (M=2.77, SD=0.95). These show that females face financial difficulties the most than males as a result of spending on healthcare. For ages: all of the four comparisons among the group means were significant, F (3, 396) =52.11 P $\leq$ .005. Post hoc testing revealed the significance difference between the pairs of ages,

with 20-24(M=1.41 SD=0.72), lower than, 25-49(M=2.50 SD=0.84); 50-64(M=2.82, SD=0.70), lower than, 65+ (M=3.25, SD=0.79). These indicate that age 65+ faces financial the most as a result of spending on healthcare. For nationality: there was significance among Turkish Cypriot and Turkish, F (1,398) =8.90 P $\leq$ .005.Turkish Cypriot (M=2.46, SD= 0.89) and Turkish (M=2.74 SD=0.95), Turkish respondents face financial difficulties the most as a result of spending on healthcare. For the ability of the household to make earns meet: all of the four comparisons among the group means were significant, F (3, 396) =  $45.20 \text{ P} \le .001$ . Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=1.60, SD=0.73), lower than, don't know (M=2.83, SD=0.87); being difficult (M=2.87, SD=0.60); prefer not to say (M=3.05, SD=0.93). These show that those that find earns meet difficult, don't know and prefer not to say, face financial difficulties as a result of spending on healthcare. For the last contact with health facility: all of the four comparisons among the group mean were significant, F (3, 396) =35.51 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=1.96, SD=1.06), lower than, 6month (M=2.34, SD=0.86), lower than, 3month (M=2.73, SD=0.70), lower than, more than a year (M=3.49, SD=0.80). These indicate that respondent that had their last contact, more than a year, experience financial difficulties as a result of spending on healthcare.

The inferential statistics associated with if the respondents postpone healthcare visits because of cost with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facilities are reported in table 19. A between-group ANOVA was performed on population characteristics expectations (never, 1 time, 2 times, 3 or more times) and if the respondents postpone healthcare visits because of cost. For gender: there were significant among the males and females, F (1,398) =37.02 P $\leq$ .001. Males (M=1.30, SD=0.64), Females (M=1.79, SD=0.95). These show that the rate at which females didn't postpone healthcare visits because of cost is higher than the males. For ages: three

out of the four comparison group means were significant, F (3, 396) =29.82 P $\leq$ .001. Post hoc testing revealed the significance difference between the pairs of ages, with 20-24(M=1.09 SD=0.46); 25-49(M=1.29 SD=0.57), lower than, 50-64(M=1.86, SD=0.82), lower than, 65+ (M=2.12, SD=1.24). These indicate that age 65+ do postpone healthcare visits because of cost. For nationality: there was no significance among Turkish Cypriot and Turkish, F (1,398) =2.41 P $\geq$ .001.Turkish Cypriot (M=1.49, SD= 0.81) and Turkish (M=1.62 SD=0.88), these indicate that the rate of which respondent didn't postpone is slightly higher than the Turkish Cypriot on the postponement of healthcare visit. For the ability of the household to make earns meet: all of the four comparisons among the group means were significant, F (3, 396) =22.60 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=1.06, SD=0.23), lower than, don't know (M=1.60, SD=0.75); being difficult (M=1.75, SD=0.94), lower than, prefer not to say (M=1.99, SD=1.19). These show that the rate at which those respondents who prefer not to say anything about their earns meets, that didn't postpone healthcare visits because of cost is higher. For the last contact with health facility: three out of the four comparison group means were significant, F (3, 396) = 74.46 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 6month (M=1.16, SD=0.44); 12months (M=1.36, SD=0.76), lower than, 3month (M=1.50, SD=0.67), lower than, more than a year (M=2.93, SD=0.99). These indicate that respondent that had their last contact, more than a year, do postpone healthcare visit because of cost.

The inferential statistics associated with the thought of respondents, if their healthcare costs are covered to a satisfactory extent by the healthcare system with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 20. A between-group ANOVA was performed on population characteristics expectations (strongly agree, agree, neutral, disagree, strongly disagree, don't know) and the thought of respondents, if their healthcare costs are covered to a satisfactory extent by the healthcare system. For

gender: there were significant among the males and females, F (1,398) =  $37.02 \text{ P} \le 001$ . Males (M=2.60, SD=1.68), Females (M=3.35, SD=1.52). These show that females didn't agree that their healthcare costs are covered to a satisfactory extent by the healthcare system. For ages: three out of the four comparisons among the group means were significant, F (3, 396) =25.20 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=1.85 SD=1.43), lower than 25-49(M=2.61 SD=1.63), lower than, 50-64(M=3.46, SD=1.33); 65+(M=4.07, SD=1.65). These indicate that those respondents age 50-64 and 65+ didn't agree the most that their healthcare costs are covered to a satisfactory extent by the healthcare system. For nationality: there was significance among Turkish Cypriot and Turkish, F (1,398) =44.66 P≤.001.Turkish Cypriot (M=2.53, SD= 1.56) and Turkish (M=3.63 SD=1.64), these indicate that the Turkish respondent didn't agree that their healthcare costs are covered to a satisfactory extent by the healthcare system as to their counterpart who did. For the ability of the household to make earns meet: three out of the four comparisons among the group mean were significant, F (3, 396) =23.96 P≤.001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=2.04, SD=1.54), lower than, don't know (M=3.01, SD=1.46); being difficult (M=3.33, SD=1.58), lower than, prefer not to say (M=3.99, SD=1.76). These show that those respondents who prefer not to say anything disagree that their healthcare costs are covered to a satisfactory extent by the healthcare system. For the last contact with health facility: two out of the four comparisons among the group mean were significant, F (3, 396) =21.50 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=2.34, SD=1.80); 6month (M=2.57, SD=1.73), lower than, 3month (M=3.04, SD=1.38), lower than, more than a year (M=4.58, SD=1.42). These indicate that respondent that had their last contact, more than a year, disagree the most that their healthcare costs are covered to a satisfactory extent by the healthcare system.

				p-value
Gender	male	<b>yes</b> 149	<b>no</b> 61	.000
	Female	83	107	
Age	20-24 25-49 50-64 65+	34 126 46 26	12 66 56 34	.000
Nationality	T.Cypriot Turkish	152 80	93 75	.040
The ability of household to make earns meet	easy difficult don't know prefer not to say	64 117 11 40	41 79 12 35	.434
Last contact with health facility	12months 6months 3months More than a year	53 75 94 10	17 33 85 33	.000

**Table 8.** Significant association between population characteristics and whether they reduce

 essential needs to cover the cost

• T-Cypriot (Turkish Cypriot)

					p-value
		yes	No	don't know	
Gender	male	124	79	7	.000
	female	55	110	25	
Age					
9-	20-24	29	15	2	
	25-49	113	72	7	
	50-64	28	72	2	.000
	65+	9	30	21	
Nationality					
lationality	T.Cypriot	144	84	17	.000
	Turkish	35	105	15	
The ability of					
household to make	Easy	66	38	1	
earns meet	Difficult	95	94	7	.000
	Don't know	7	13	4	
	Prefer not to	11	44	20	
	say				
Last contact with	12months	36	31	3	
health facility	6months	56	47	5	.000
health lacinty	3months	83	93	4	
	More than a	5	18	20	
	year	Ũ	10	20	

**Table 9.** Significant association between population characteristics and whether they recourse to private or reciprocal social insurance protection to take care of health cost

• T-Cypriot(Turkish Cypriot)

eure doetor								
		N	Mean	Std.	Std.	95% Confiden	ce Interval for	p-value
				Deviation	Error	Me	an	
						Lower	Upper	
						Bound	Bound	
Gender	male	210	1.5095	.90844	.06269	1.3859	1.6331	.000
	Female	190	2.0105	1.28890	.09351	1.8261	2.1950	
Age	20-24	46	1.1522	.51499	.07593	.9992	1.3051	.000
-	25-49	192	1.4740	.86790	.06264	1.3504	1.5975	.000
	50-64*	102	2.0196	1.03389	.10237	1.8165	2.2227	.000
	65+	60	2.6167	1.66816	.21536	2.1857	3.0476	.003
Nationality	T.Cypriot	245	1.8163	1.41293	.07302	1.6725	1.9602	.121
-	Turkish	155	1.6387	1.11007	.08916	1.4626	1.8149	
The ability of	Easy*	105	1.2667	.75021	.07321	1.1215	1.4119	.000
household to	Difficult	196	1.8622	.99042	.07074	1.7227	2.0018	.103
make earns meet	Don't know	24	1.8333	1.23945	.25300	1.3100	2.3567	.000
	Prefer not to say	75	2.0933	1.60382	.18519	1.7243	2.4623	.000
Last contact	12months	70	1 1714	63637	07606	1 0197	1 3232	000
with health	6months	108	1 1 8 5 2	6/3/2	06101	1.0625	1 3070	.000
facility	3months*	170	1 8030	08000	07326	1 7/03	2 0384	.000
lacinty	More then e	113	2 1000	1 25176	20614	20724	2.0304	.000
	year	43	3.4004	1.33170	.20014	3.0724	3.9044	.000

**Table 10.** One-Way ANOVA Analysis between population characteristics and whether they can you afford a primary care doctor

• Reference Group: age (50-64), Ability of household to make earns meet(easy), last contact with health facility(3months). T-Cypriot(Turkish Cypriot)

care doctor			Maar	01.1	011	05% 0		
		N	wean	Std.	Std.	95% Confiden	ce Interval for	p-value
				Deviation	Enor		dii Unnor	
						Lower	Opper	
						Боила	Bound	
Gender	male	210	2.3190	1.07076	.07389	2.1734	2.4647	.000
	Female	190	2.9211	1.18593	.08604	2.7513	3.0908	
Age	20-24	46	1.3261	.92025	.13568	1.0528	1.5994	.000
	25-49	192	2.5104	1.01811	.07348	2.3655	2.6553	.022
	50-64*	102	2.8725	.96135	.09519	2.6837	3.0614	.000
	65+	60	3.4333	1.21246	.15653	3.1201	3.7465	.005
Nationality	T.Cypriot	245	2.5265	1.13635	.70260	2.3835	2.6695	.090
	Turkish	155	2.7290	1.20232	.09657	2.5383	2.9198	
The ability	Easy*	105	1.4762	.87810	.08569	1.3063	1.6461	.000
of	Difficult	196	3.0051	.70527	.05038	2.9057	3.1045	.000
household	Don't know	24	2.8750	1.32902	.27129	2.3138	3.4362	.000
to make	Prefer not to say	75	3.0533	1.38421	.15983	2.7349	3.3718	.000
earns meet								
	12months	70	1.8571	1.21924	.14573	1.5664	2.1479	.000
Last	6months	108	2.2870	1.07695	.10363	2.0816	2.4925	.002
contact	3months	179	2.7318	.89043	.06655	2.6005	2.8632	.000
with health	more than a year	43	4.0930	.78115	.11912	3.8526	4,3334	.000
facility								

Table 11. One-Way ANOVA Analysis between population characteristics and whether they can you afford a specialist care doctor

• Reference Group: age (50-64), Ability of household to make earns meet(don't know), the last contact with health facility(3months). T-Cypriot(Turkish Cypriot)

		N	Mean	Std.	Std.	95% Confidence	e Interval for	p-value
				Deviation	Error	Ме	an	-
						Lower	Upper	
						Bound	Bound	
Gender	male	210	3.2905	.91579	.06320	3.1659	3.4151	.017
	Female	190	3.5211	1.01683	.07377	3.3755	3.6666	
Age	20-24	46	2.8478	1.03209	.15217	2.5413	3.1543	.000
-	25-49	192	3.3490	.75064	.05417	3.2421	3.4558	.078
	50-64*	102	3.6275	1.15973	.11483	3.3997	3.8552	.000
	65+	60	3.6000	1.02841	.13277	3.3343	3.8657	.998
Nationality	T.Cypriot	245	3.3796	.99938	.06385	3.2538	3.5054	.598
	Turkish	155	3.4323	.92596	.07437	3.2853	3.5792	
The ability	Easy*	105	2.9429	.99835	.09743	2.7497	3.1361	.000
of	Difficult	196	3.6122	.86092	.06149	3.4910	3.7335	.025
household	Don't know	24	3.5417	1.10253	.22505	3.0761	4.0072	.000
to make	Prefer not to say	75	3.4400	.96198	.11108	3.2187	3.6613	.003
earns meet								
	12month	70	2.8857	1.01500	.12132	2.6437	3.1277	.000
Last	6months	108	3.2315	.70521	.06786	3.0970	3.3660	.029
contact with	3months"	179	3.5419	.93146	.06962	3.4045	3.6793	.000
health facility	More than a year	43	4.0698	1.12113	.17097	3.7247	4.4148	.004

**Table 12.** One-Way ANOVA Analysis between population and whether they can you afford a specialized healthcare provider(e.g. physiotherapist, psychologist)

• Reference Group: age (50-64), Ability of household to make earns meet(easy), the last contact with health facility(3months). T-Cypriot(Turkish Cypriot)

		Ν	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		p-value
						Lower	Upper	
						Bound	Bound	
Gender	male	210	1.3524	.77621	.05356	1.2468	1.4580	.000
	Female	190	1.8632	1.13259	.08217	1.7011	2.0252	
Age	20-24	46	1.1304	.49927	.07361	.9822	1.2787	.000
	25-49	192	1.2760	.70291	.05073	1.1760	1.3761	.000
	50-64*	102	1.9412	.98326	.09736	1.7480	2.1343	.000
	65+	60	2.3833	1.37892	.17802	2.0271	2.7395	.013
Nationality	T.Cypriot	245	1.6204	.99938	.06385	1.4946	1.7462	.521
	Turkish	155	1.5548	.98786	.07935	1.3981	1.7116	
The ability of	Easy*	105	1.1619	.57385	.05600	1.0509	1.2730	.000
household to	Difficult	196	1.6990	.92609	.06615	1.5685	1.8294	.144
make earns	Don't know	24	1.6250	.92372	.18855	1.2349	2.0151	.000
meet	Prefer not to say	75	1.9200	1.39264	.16081	1.5996	2.2404	.000
Last contact	12months	70	1.1429	.51880	.06201	1.0192	1.2666	.000
with health	6months	108	1.1759	.62396	.06004	1.0569	1.2949	.000
facility	3months <sup>°</sup>	179	1.6816	.92666	.06926	1.5449	1.8182	.000
	More than a year	43	3.0233	1.18499	.18070	2.6586	3.3879	.000

Table 13. One-Way ANOVA Analysis between population characteristics and whether they could afford a hospital

-

• Reference Group: age (50-64), Ability of household to make earns meet(easy), the last contact with health facility(3months). T-Cypriot(Turkish Cypriot)

		Ν	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		p-value
						Lower Bound	Upper Bound	
Gender	male Female	210 190	2.0381 2.5474	1.07538 1.30338	.07421 .09456	1.8918 2.3608	2.1844 2.7339	.000
Age	20-24 25-49 50-64* 65+	46 192 102 60	1.2391 2.0573 2.6373 3.1833	.70505 1.03441 1.05106 1.47857	.10395 .07465 .10407 .19088	1.0298 1.9100 2.4308 2.8014	1.4485 2.2045 2.8437 3.5653	.000 .000 .000 .011
Nationality	T.Cypriot Turkish	245 155	2.2082 2.3935	1.21193 1.21408	.07743 .09752	2.0557 2.2009	2.3607 2.5862	.137
The ability of household to make earns meet Last contact with health	Easy <sup>*</sup> Difficult Don't know Prefer not to say 12months 6months 3months <sup>*</sup> More than a year	105 196 24 75 70 108 179 43	1.2286 2.5867 2.7500 2.8000 1.5571 1.8241 2.4525 3.8837	.63937 .97540 1.25974 1.48870 .97261 1.15870 .931190 1.09565	.06240 .06967 .25714 .17190 .11625 .11150 .06960 .16708	1.1048 2.4493 2.2181 2.4575 1.3252 1.6030 2.3152 3.5465	1.3523 2.7241 3.2819 3.1425 1.7891 2.0451 2.5899 4.2209	.000 .000 .000 .000 .000 .000 .000 .00

Table 14. One-Way ANOVA Analysis between population and whether they could afford a medicine

• Reference Group: age (50-64), Ability of household to make earns meet(don't know), the last contact with health facility(3months). T-Cypriot(Turkish Cypriot)
		Ν	Mean	Std. Deviation	Std. Error	95% Confiden Me	ce Interval for an	p-value
						Lower Bound	Upper Bound	
Gender	male Female	210 190	2.0381 3.4789	1.08496 1.08236	.07487 .07852	2.7334 3.3241	3.0285 3.6338	.000
Age	20-24 25-49 50-64* 65+	46 192 102 60	2.0435 3.0729 3.6471 3.5000	1.21026 .92939 .94027 1.25550	.17844 .06707 .09310 .16208	1.6841 2.9406 3.4624 3.1757	2.4029 3.2052 3.8317 3.8243	.000 .000 .000 .813
Nationality	T.Cypriot Turkish	245 155	3.0408 3.3613	1.13728 1.07440	.07266 .08630	2.8979 3.1908	3.1839 3.5318	.005.
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 196 24 75	2.5143 3.3776 3.3750 3.4533	1.17763 .84750 1.46888 1.21136	.11492 .06054 .29983 .13988	2.2864 3.2582 2.7547 3.1746	2.7422 3.4969 3.9953 3.7320	.000 .002 .000 .000
Last contact with health facility	12months 6months 3months <sup>*</sup> More than a year	70 108 179 43	2.4143 2.9722 3.3352 4.1628	1.27964 .94184 .89282 1.121362	.15295. .09063 .06673 .18507	2.1092 2.7926 3.2035 3.7893	2.7194 3.1519 3.4669 4.5363	.000 .019 .000 .000

Table 15. One-Way ANOVA Analysis between population and whether they could afford medical equipment

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		p-value
						Lower Bound	Upper Bound	
Gender	male	210	3.1619	1.47790	.10198	2.9609	3.3630	.000
	Female	190	3.9579	1.25074	.09074	3.7789	4.1369	
Age	20-24	46	2.0435	1.84483	.27200	1.8652	2.9609	.000
-	25-49	192	3.3802	1.29284	.09330	3.1962	3.5642	.000
	50-64*	102	4.0882	1.09998	.10891	3.8722	4.3043	.000
	65+	60	3.9833	1.39602	.18023	3.6227	4.3440	.963
Nationality	T.Cypriot	245	3.2449	1.41900	.09066	3.0663	3.4235	.000
-	Turkish	155	4.0665	1.32163	.10616	3.7967	4.2162	
The ability of	Easy <sup>*</sup>	105	2.7238	1.69556	.16547	2.3957	3.0519	.000
household to	Difficult	196	3.7347	1.08652	.07761	3.5816	3.8878	.000
make earns	Don't know	24	4.2917	1.42887	.29167	3.6883	4.8950	.000
meet	Prefer not to say	75	3.9333	1.35899	.15692	3.6207	4.2460	.000
Last contact		70	2.9571	1.77287	.21190	2.5344	3.3799	.000
with health	12months	108	3.2222	1.53058	.14728	2.9303	3.5142	.004
facility	6months	179	3.7989	1.08814	.08133	3.6384	3.9594	.000
-	3months* More than a year	43	4.2093	1.30125	.19844	3.8088	4.6098	.296

able 16.	One-Way ANOV	A Analysis between	population and	whether they could	afford dental health care
	2	2	1 1	2	

		Ν	Mean	Std.	Std.	95% Confiden	ce Interval for	p-value
				Deviation	Error	Me	an	
						Lower	Upper	
						Bound	Bound	
Gender	male	210	4.4762	1.04534	.07214	4.3340	4.6184	.000
	Female	190	4.9105	.39493	.02865	4.8540	4.9670	
Age	20-24	46	3.4565	1.42527	.21014	3.0333	3.8798	.000
	25-49	192	4.7865	.58892	.04250	4.7026	4.8703	.613
	50-64*	102	4.8922	.46473	.04602	4.8009	4.9834	.000
	65+	60	4.9333	.54824	.07078	4.7917	5.0750	.984
Nationality	T.Cypriot	245	4.5265	.98571	.06297	4.4025	4.6506	.000.
	Turkish	155	4.9290	.39657	.03185	4.8661	4.9920	
The ability of	Easy	105	3.9810	1.24020	.12103	3.7409	4.2210	.000
household to	Difficult	196	4.9031	.45942	.03282	4.8383	4.9678	.000
make earns	Don't know	24	5.0000	.00000	.00000	5.0000	5.0000	.000
meet	Prefer not to say	75	4.9867	.25959	.02997	4.9269	5.0464	.000
Last contact	12months	70	3.9143	1.41158	.16872	3.5777	4.2509	.000
with health	6months	108	4.6574	.62893	.06052	4.5374	4.7774	.028
facility	3months*	179	4.9106	.46549	.03479	4.8420	4.9793	.000
	More than a year	43	5.0465	.21308	.03249	4.9809	5.1121	.706

**Table 17.** One-Way ANOVA Analysis between population characteristics and whether they could afford cosmetic intervention/reconstruction

		Ν	Mean	Std. Deviation	Std. Error	95% Confidend Me	ce Interval for an	p-value
						Lower	Upper	
						Bound	Bound	
Gender	male	210	2.3857	0.86880	.05995	2.2675	2.5039	.000
	Female	190	2.7737	.94636	.06866	2.6383	2.9091	
Age	20-24	46	3.4565	.71728	.10576	1.2000	1.6260	.000
-	25-49	192	2.5000	.84383	.06090	2.3799	2.6201	.005
	50-64*	102	2.8235	.69527	.06884	2.6870	2.9601	.000
	65+	60	3.2500	.79458	.10258	3.0447	3.4553	.005
Nationality	T.Cypriot	245	2.4612	.89370	.05710	2.3488	2.5737	.003
	Turkish	155	2.7419	.95236	.07650	2.5908	2.8931	
The ability of	Easy*	105	1.6000	.72854	.07110	1.4590	1.7410	.000
household to	Difficult	196	2.8724	.59834	.04274	2.7882	2.9567	.000
make earns	Don't know	24	2.8333	.86811	.17720	2.4668	3.1999	.000
meet	Prefer not to say	75	3.0533	.92587	.10721	2.8397	3.2669	.000
Last contact	12months	70	1.9571	1.05550	.12616	1.7055	2.2088	.000
with health	6months	108	2.3426	.85557	.08233	2.1794	2.5058	.001
facility	3months*	179	2.7263	.70147	.05243	2.6228	2.8297	.000
	More than a year	43	3.4884	.79798	.12169	3.2428	3.7340	.000

**Table 18.** One-Way ANOVA Analysis between population characteristics and whether the respondents are faced with financial difficulties due to expenditures on healthcare

		Ν	Mean	Std.	Std.	95% Confiden	ce Interval for	p-value
				Deviation	Error	Lower	an Upper	
						Bound	Bound	
Gender	male	210	1.3048	.63583	.04388	1.2183	1.3913	.000
	Female	190	1.7947	.95672	.06941	1.6578	1.9317	
Age	20-24	46	1.0870	.46313	.06829	.9494	1.2245	.000
-	25-49	192	1.2917	.56821	.04101	1.2108	1.3726	.000
	50-64*	102	1.8627	.82100	.08129	1.7015	2.0240	.000
	65+	60	2.1167	1.23634	.15961	1.7973	2.4360	.172
Nationality	T.Cypriot	245	1.4857	.81281	.05193	1.3834	1.5880	.121
-	Turkish	155	1.6194	.87736	.07047	1.4801	1.7586	
The ability of	Easy*	105	1.0571	.23323	.02276	1.0120	1.1023	.000
household to	Difficult	196	1.5969	.74819	.05344	1.4915	1.7023	.001
make earns	Don't know	24	1.7500	.94409	.19271	1.3513	2.1487	.000
meet	Prefer not to say	75	1.9867	1.19111	.13754	1.7126	2.2607	.000
Last contact	12months	70	1.3571	.76207	.09108	1.1754	1.5389	.419
with health	6months	108	1.1574	.43583	.04194	1.0743	1.2405	.000
facility	3months*	179	1.5028	.66514	.04971	1.4047	1.6009	.000
-	More than a year	43	2.9302	.98550	.15029	2.6269	3.2335	.000

Table 19. One-Way ANOVA Analysis between population and whether they postpone healthcare visits because of cost

		Ν	Mean	Std.	Std.	95% Confiden	ce Interval for	p-value
				Deviation	Error	Me	an	
						Lower	Upper	
						Bound	Bound	
Gender	male	210	2.6048	1.68329	.11616	2.3758	2.8338	.000
	Female	190	3.3474	1.58210	.11478	3.1210	3.5738	
Age	20-24	46	1.8478	1.42933	.21074	1.4234	2.2723	.000
-	25-49	192	2.6094	1.63359	.11789	2.3768	2.8419	.000
	50-64*	102	3.4608	1.33254	.13194	3.1990	3.7225	.000
	65+	60	4.0667	1.64540	.21242	3.6416	4.4917	.076
Nationality	T.Cypriot	245	2.5347	1.55626	.09943	2.3389	2.7305	.000
-	Turkish	155	3.6258	1.64415	.13206	3.3649	3.8867	
The ability of	Easy*	105	2.0381	1.53750	.15005	1.7406	2.3356	.009
household to	Difficult	196	3.0102	1.46056	.10433	2.8045	3.2160	.001
make earns	Don't know	24	3.3333	1.57885	.32228	2.6666	4.0000	.000
meet	Prefer not to say	75	3.9867	1.75909	.20312	3.5819	4.3914	.000
Last contact	12months	70	2.3429	1.80085	.21524	1.9135	2.7723	.009
with health	6months	108	2.5741	1.72504	.16599	2.2450	2.9031	.070
facility	3months*	179	3.0391	1.37540	.10280	2.8362	3.2420	.000
<b>,</b>	More than a year	43	4.5814	1.41812	.21626	4.1450	5.0178	.000

**Table 20.** One-Way ANOVA Analysis between population and whether healthcare cost are covered to a satisfactory extent by the healthcare system (tax-based or social insurance-based)

### 4.4 Accessibility of Health Care

The accessibility section of the questionnaire assesses whether respondents face obstacles, other than financial ones (e.g. waiting times, geographical barriers...), that stops or delays their access to healthcare. When inquired as to whether they encountered delay in connection to getting to different services respondents indicated that 71.0% did not encounter delay in access to medicines, while 27.0% did encounter such delays and 2.0% said it's wasn't applicable to them, also 76.8% encounter no delay in accessing a treatment intervention, while 19.0% did encounter a delay and it wasn't applicable to 4.3%, in like manner 76.5% encounter no delay in accessing a medical device, whereas 19.8% did and it wasn't applicable to 3.8%. 51.5% encounter no delay in accessing a diagnostic test, while 46.0% did and not applicable to 2.5%. an appointment with a nurse 68.5% encounter no delay, 30.0% did, not applicable to 1.5%, 68.8% encounter no delay in accessing an appointment with a primary care doctor, while 31.0% did, not applicable to 0.3%, 50.5% encounter a significant delay in accessing appointments with a specialist, while 48% did, not applicable to 1.5%, also 45.8% did not encounter any delay in accessing support from social services, while 14.5% did, not applicable to 39.8% (Table 21). Accessibility to a variety of services in terms of geographical distance from home, 95.3% indicated that a pharmacy is located near enough from their home, while it wasn't for 6.5%. 23.0% indicated having a specialist near their home, it wasn't for 77.0%, more so 55.3% indicated a hospital is near enough their home while it wasn't for 44.8% (Table 22). Respondent was asked whether they face certain issues when seeking care for their conditions as shown in (fig 14), 32.5% of respondents need to make a trip to a different city to get the service they need, and 11.5% have to go to a different region and 8.75% have to to go to a different nation. About (50.9%) portion among respondents demonstrated they don't have to take a trip or journey in search of medical services for their conditions. In overcoming geographical barriers, 28.25% of the respondents have access to a mobile or e-Health service, 9.25% financial support for travel, 41.75% transportation, 18.5% use either of the preceding ones and 2.25% for other means (fig 15)

#### Table 21. Significant delays in access to some services

Answer Options	Yes %	No %	Not applicable %
Your medicine(s)	27.0	71.0	2.0
A treatment involvement, for instance, surgery or any other procedure.	19.0	76.0	4.3
A medical device or medical equipment	19.8	76.5	3.8
A diagnostic test	46.0	51.5	2.5
An appointment with a nurse	30.0	68.5	1.5
Meeting with a primary care physician (e.g. a general practitioner)	31.0	68.8	0.3
A specialist appointment	48.0	50.5	1.5
Help/support from social services	14.5	45.8	39.8
answered question			400

Table 22. Geographical accessibility of services (are the following service located close enough to your home?)

Answer Options	Yes %	No %
A pharmacy	93.5	6.5
A specialist	23.0	77.0
An hospital	55.3	44.8
answered question		400
A specialist An hospital answered question	23.0 55.3	77.0 44.8 400



Figure 14. Do you have to encounter any of the following situations when seeking your health care?



Figure 15. How do you have access to tackle geographic barriers?

# 4.4.1 Correlation between Population Characteristics and Variables for Accessibility of HealthCare.

This test was carried out on the population characteristics of the respondent alongside whether they experience delay in accessing medicine, the result shows that there was a significant association for ages,  $\Box^2(6) = 107.05$ ,  $P \le .05$ , gender,  $\Box^2(2) = 20.38$ ,  $P \le .05$ , ability of household to make earns meets,  $\Box^2(6) = 77.91$ ,  $P \le .05$ , last contact with health facility,  $\Box^2(6) = 85.30$ ,  $P \le .05$ , therefore rejecting the null hypothesis, while there was no significant association seen for the respondent nationality,  $\Box^2(2) = 4.42$ ,  $P \ge .05$  (Table23). For significant delay in accessing treatment intervention, results also shows significance for ages,  $\Box^2(6) = 150.85$ ,  $P \le .05$ , gender,  $\Box^2(2) = 28.09$ ,  $P \le .05$ , nationality,  $\Box^2(2) = 12.60$ ,  $P \le .05$ , ability of households to make earns meets,  $\Box^2(6) = 107.48$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(6) = 157.75$ ,  $P \le .05$  (Table 24). For significant delay in accessing

medical device or equipment, results also shows significance for ages,  $\Box^2(6) = 116.43$ , P $\leq$ .05, gender,  $\Box^2(2) = 20.91$ , P $\leq$ .05, ability of households to make earns meets,  $\Box^2(6)$ =80.15, P $\leq$ .05, last contact with health facility,  $\Box^2(6)$  =113.75, P $\leq$ .05, while there was no significant association for the nationality of the respondent nationality,  $\Box^2(2) = 12.60$ ,  $P \ge .05$  (Table 25). For significant delay in accessing diagnosis test, For significant delay in accessing medical device or equipment, results also shows significance for ages,  $\square^2(6) = 69.83$ , P<.05, gender,  $\square^2(2) = 15.97$ , P<.05, ability of households to make earns meets,  $\Box^2(6) = 59.86$ , P $\leq .05$ , last contact with health facility,  $\Box^2(6) = 110.77$ , P $\leq .05$ , while there was no significant association for the nationality of the respondent nationality,  $\Box^2(2) = 4.55$ , P $\geq .05$  (Table 26). For significant delay in having an appointment with a nurse, results also shows significance for ages,  $\Box^2(6) = 56.94$ , P $\leq .05$ , gender,  $\Box^2(2) = 25.33$ , P<.05, ability of households to make earns meets,  $\Box^2(6) = 68.53$ , P $\leq$ .05, last contact with health facility,  $\Box^2(6) = 60.55$ , P $\leq$ .05, while there was no significant association for the nationality of the respondent nationality,  $\Box^2(2) = 0.87$ ,  $P \ge 0.05$  (Table 27). For significant delay in getting an appointment with a primary care physician, results also shows significance for ages,  $\Box^2(6) = 49.93$ , P $\leq .05$ , gender,  $\Box^2(2)$ =11.53, P $\leq$ .05, ability of households to make earns meets,  $\Box^2(6)$  =80.23, P $\leq$ .05, last contact with health facility,  $\Box^2(6) = 30.00$ , P $\leq .05$ , while there was no significant association for the nationality of the respondent nationality,  $\Box^2(2) = 4.63$ , P $\geq$ .05 (Table 28). For significant delay in having an appointment with a specialist, results also shows significance for ages,  $\Box^2(6) = 62.79$ , P<.05, gender,  $\Box^2(2) = 11.29$ , P<.05, ability of households to make earns meets,  $\Box^2(6) = 77.87$ , P $\leq .05$ , last contact with health facility,  $\square^2(6) = 73.88$ , P $\leq .05$ , while there was no significant association for the nationality of the respondent nationality,  $\Box^2(2) = 3.21$ , P $\geq$ .05 (Table 29). For significant delay in accessing help/support from social services, results also shows significance for ages,  $\Box^2(6)$ =124.77, P $\leq$ .05, gender,  $\Box^2(2)$  =31.51, P $\leq$ .05, nationality,  $\Box^2(2)$  =73.90, P $\leq$ .05, ability of households to make earns meets,  $\Box^2(6) = 82.07$ , P $\leq .05$  and last contact with health facility,  $\Box^2(6) = 79.50$ , P $\leq .05$  (Table 30). Furthermore, for correlation between the population characteristic and whether a pharmacy is located near enough the respondent

home, results also shows significance for ages,  $\Box^2(3) = 73.85$ ,  $P \le .05$ , gender,  $\Box^2(1) = 9.65$ ,  $P \le .05$ , ability of households to make earns meets,  $\Box^2(3) = 47.13$ ,  $P \le .05$ , last contact with health facility,  $\Box^2(3) = 99.91$ ,  $P \le .05$ , while there was no significant association for the nationality of the respondent nationality,  $\Box^2(1) = 0.01$ ,  $P \ge .05$  (Table 31). For whether a specialist is located near enough their home, results also shows significance for ages,  $\Box^2(3) = 62.46$ ,  $P \le .05$ , gender,  $\Box^2(1) = 24.25$ ,  $P \le .05$ , nationality,  $\Box^2(1) = 36.13$ ,  $P \le .05$ , ability of households to make earns meets,  $\Box^2(3) = 73.02$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 60.14$ ,  $P \le .05$  (Table 32). For whether a hospital is located near enough their home, results also shows significance for ages,  $\Box^2(1) = 16.17$ ,  $P \le .05$ , nationality,  $\Box^2(1) = 70.35$ ,  $P \le .05$ , ability of households to make earns meets also shows significance for ages,  $\Box^2(3) = 28.84$ ,  $P \le .05$ , gender,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 69.40$ ,  $P \le .05$  and last contact with health facility,  $\Box^2(3) = 25.84$ ,  $P \le .05$  (Table 33).

		yes	no	not applicable to	p-value
		•		me	
Gender	male	76	132	2	.000
	female	32	152	6	
Age	20-24	36	10	0	.000
	25-49	46	145	1	
	50-64	13	89	0	
	65+	13	40	7	
Nationality	T.cyproit	75	166	4	.110
	Turkish	33	118	4	
The ability of household to make earns	Easy Difficult Don't know	55 29 9	49 167 15	1 0 0	.000
meet	Prefer not to say	15	53	7	
Last contact with health facility	12months 6months 3months More than a year	39 38 26 5	31 70 151 32	0 0 2 6	.000

**Table 23.** Significant association between population characteristics and whether they experienced a significant delay in accessing medicine

					p-value
		yes	no	not applicable to	
				me	
Gender	male	57	151	2	.000
	Female	19	156	15	
Age	20-24	33	12	1	
	25-49	30	161	1	.000
	50-64	6	94	2	
	65+	7	40	13	
Nationality					000
	T.cypriot	59	179	7	.002
	Turkish	17	128	10	
The ability of household to make earns meet	Easy Difficult Don't know Prefer not to say	47 24 2 6	56 174 22 55	2 1 0 14	.000
Last contact with health facility	12months 6months 3months More than a year	37 17 18 4	33 91 158 25	0 0 3 14	.000

**Table 24.** Significant association between population characteristics and if they encounter a substantial delay in receiving medical intervention.

		yes	no	not applicable to	p-value
				me	
Gender	male	56	152	2	.000
	female	23	154	13	
Age	20-24	31	12	3	.000
	25-49	28	164	0	
	50-64	10	90	2	
	65+	10	40	10	
Nationality	T.cypriot	60	178	7	
	Turkish	19	128	8	.008
The ability of	Fasy	47	57	1	
make earns	Difficult	18	174	4	.000
meet	Don't Know	3	21	0	
	Prefer not to say	11	54	10	
	12months	37	31	2	
Last contact	6months	21	86	1	
with health facility	3months	18	159	2	.000
,	More than a year	3	30	10	

**Table 25.** Significant association between population characteristics and whether they experienced a significant delay in accessing a medical device or equipment

		yes	no	not applicable to me	p-value
Gender	male	113	96	1	.000
	female	71	110	9	
Age					
	20-24 25-49 50-64 65+	39 91 34 20	7 100 67 32	0 1 1 8	.000
Nationality	T.Cyproit Turkish	123 61	116 90	6 4	.103
The ability of household to make earns meet	Easy Difficult Don't Know Prefer not to say	72 71 14 27	31 125 10 40	2 0 0 8	.000
Last contact with health facility	12months 6months 3months More than a year	52 73 51 8	17 35 126 27	1 0 2 7	.000

**Table 26.** Significant association between population characteristics and if they had a substantial delay in obtaining a diagnostic test

		yes	no	not applicable to	p-value
Gender	male	86	121	3	.000
	female	34	153	3	
Age	20-24	33	13	0	
	24-49 50-64 65+	47 23 17	143 79 39	2 0	.000
Nationality	T.Cyproit Turkish	75 43	165 109	3 3	.649
The ability of household to make earns meet	Easy Difficult Don't Know Prefer not to say	58 33 9 20	47 163 14 50	0 0 1 5	.000
Last contact with health facility	12months 6months 3months More than a year	40 46 31 3	30 60 146 38	0 2 2 2	.000

**Table 27.** Significant association between population characteristics and if they face a substantial delay in securing a nursing appointment

					p-value
		yes	no	not applicable	P
				to me	
Gender	male	80	129	1	.000
	female	44	146	0	
Age	20-24	34	12	0	.000
-	24-49	54	137	1	
	49-50	18	84	0	
	65+	18	42	0	
Nationality	T.Cypriot	84	161	0	
	Turkish	40	114	1	.099
The ability of	Fasy	67	37	1	
nousenoid to make earns	Difficult	31	165	0	.000
meet	Don't Know	4	20	0	
	Prefer not to say	22	53	0	
Last contact	12months	39	31	0	
with health	6months	35	73	0	000
lacinty	3months	37	141	1	.000
	More than a	13	30	0	
	year				

**Table 28.** Significant association between population characteristics and whether they had a substantial delay in obtaining an appointment with a primary care physician

		yes	no	not applicable to	p-value	
		•		me		
Gender	male	116	93	1	.000	
	female	76	109	5		
Age	20-24	39	7	0		
	25-49	101	91	0	.000	
	50-64	35	66	1		
	65+	17	38	5		
Nationality	T.Cyproit	126	115	4		
	Turkish	66	87	2	.201	
he ability of	Fasy	86	16	3		
ousenoid to hake earns	Difficult	63	132	1		
neet	Don't Know	13	11	0		
	Prefer not to say	30	43	2	.000	
ast contact						
vith health	12months	52	18	0		
acility	6months	75	33	0	000	
	3months	55	120	4	.000	
	More than a year	10	31	2		

**Table 29.** Significant association between population and whether they have a substantial delay in securing an appointment with a specialist

		VAS	no	not applicable to	p-value
		yee	no	me	
Gender	male	49	95	66	.000
	female	9	88	93	
Age	20-24	28	4	14	
	25-49	21	112	59	000
	50-64	2	53	47	.000
	65+	7	14	39	
Nationality	T.Cypriot	50	138	57	
	Turkish	8	45	102	.000
The ability of	Easy	37	35	33	
household to	Difficult	14	119	63	
make earns	Don't Know	1	10	13	.000
meet	Prefer not to say	6	19	50	
Last contact	12months	31	14	25	
with a health	6months	15	43	50	
facility	3months	11	107	61	.000
	More than a year	1	19	23	

**Table 30.** Significant association between population characteristics and whether they experienced a significant delay in accessing help from social services

		Yes	No	p-value
Gender	male	204	6	.000
	Fomolo	170	20	
	remaie	170	20	
Age	20-24	45	1	
	25-49	187	5	.000
	50-64	101	1	
	65+	41	19	
Nationality	T.Cyproit	229	16	.975
	Turkish	145	10	
The ability of	Fasy	104	1	
household to	Difficult	190	6	.000
make earns	Don't Know	23	1	
meet	Prefer not to say	57	18	
	12months	68	2	
Last contact	6months	104	4	.000
with health	3months	177	2	
facility	More than a year	25	18	

**Table 31.** Significant association between population characteristics and whether a pharmacy service is located near enough their home

		enough the	ii nome	
		Yes	No	p-value
Gender	Male	69	141	.000
	Female	23	167	
Age	20-24	27	19	
	25-49	55	137	.000
	50-64	6	96	
	65+	4	56	
Nationality	T.Cypriot	81	164	000
	Turkish	11	144	.000
The ability of	Easy	55	50	
household to	Difficult	31	165	
make earns	Don't Know	2	22	.000
meet	Prefer not to	4	71	
	say			
Last contact	12months	30	40	
with health	6months	43	65	.000
facility	3months	18	161	
	More than a	1	42	
	year			

**Table 32.** Significant association between population characteristics and whether a specialist is located near enough their home

			p-value
	Yes	No	•
Male	136	74	.000
Female	85	105	
20-24	33	13	
25-49	119	73	.000
50-64	53	49	
65+	16	44	
T.Cypriot	176	69	.000
Turkish	45	110	
Easy	72	33	
Difficult	129	67	
Don't Know	9	15	.000
Prefer not to	11	64	
say			
12months	40	30	
6months	58	50	.000
3months	114	65	
More than a	9	34	
year			
	Male Female 20-24 25-49 50-64 65+ T.Cypriot Turkish Easy Difficult Don't Know Prefer not to say 12months 6months 3months More than a year	YesMale136Female8520-243325-4911950-645365+16T.Cypriot176Turkish45Easy72Difficult129Don't Know9Prefer not to11say4012months583months114More than a9year9	Yes         No           Male         136         74           Female         85         105           20-24         33         13           25-49         119         73           50-64         53         49           65+         16         44           T.Cypriot         176         69           Turkish         45         110           Easy         72         33           Difficult         129         67           Don't Know         9         15           Prefer not to         11         64           say         40         30           6months         58         50           3months         114         65           More than a         9         34

 Table 33. Significant association between population characteristics and whether a hospital is located near enough their home

### 4.5 Adequacy of Health Care

This section of the survey describes the quality of healthcare, and in particular the quality of the informed partnership between patient and healthcare providers and the participation of the patients in joint decision making about their treatment. With that in mind, respondents were asked to rate a scaled-up arrangement involving five responses (always, very often, sometimes, rarely, never), to patient-healthcare professional communication statements (Table 34). When asked whether their healthcare providers effectively informed them about treatment options: 48.8% respond always, 4.5% respond very often, 38.3% respond sometimes, 7.3% respond rarely and 1.3% responds never. When asked whether they have been involved in decisions concerning their care by healthcare providers: 40.8% respond always, 2.3% respond very often, 37.0% respond sometimes, 8.5% respond rarely and 11.5% respond never. Inquiries into if the healthcare provider provides the necessary details regarding the safety of their treatment: 53.5% respond always, 12.8% respond very often, 20.3% respond sometimes, 8.8% respond rarely and 4.8% respond never. Additionally, respondents were also inquired if healthcare providers adjust their healthcare to their changing needs: 15.0% respond always, 3.5% respond very often, 32.0% respond sometimes, 10.8% respond rarely and 38.8% respond never. Lastly, when asked if their healthcare providers are obtaining their suggestions on the quality of care they provide: 13.3% of respondents respond always, 2.8% respond very often, 25.8% respond sometimes, 18.5% respond rarely and 39.8% respond never. Statements that pays attention to quality of healthcare and its safety (Table 35), When inquired as to whether they receive good quality care in keeping with protocol/ guidelines or for their condition, 50.8% claimed that this was the case at least very often, or always, 34.8% claimed it is sometimes the case, while 13.5% felt it is rarely or never the case, and 1.0% did not know. Inquiring if they were pleased with the safety of care provided to them, 40.5% claimed that it was the case at least very often, or always, 33.8% claimed it is sometimes the case, while 23.5% felt it is rarely or never the case and 2.3% did not know. Participants were also asked how pleased they were as to the continuity of their care over time, 40.1% claimed that it was the case at least very often, or always, 30.3% claimed it is sometimes the case, while 27.3% felt it is rarely or never the case and 2.5% did not know.

Answer options	Always %	Very often %	Sometimes %	Rarely %	Never %
Where you effectively informed about your treatment options by the healthcare providers	44.8	4.5	38.3	7.3	1.3
Where you involved in the decision concerning your care by the healthcare providers	40.8	2.3	37.0	8.5	11.5
Does your healthcare providers provide the necessary details regarding the safety of your treatment	53.5	12.8	20.3	8.8	4.8
Does your healthcare providers adjust your care according to your changing needs	15.0	3.5	32.0	10.8	38.8
Does your healthcare providers obtain your suggestions on the quality of care provided (through satisfaction survey or other means)	13.3	2.8	25.8	18.5	39.8
Answer question					400

Table 34. Patient-healthcare professional communication

Answer options	Always %	Very often %	Sometimes %	Rarely %	Never %	I don't Know %
Did you receive good quality care keeping to protocol/guidelines available for your condition	186	17	139	34	20	4
Are you pleased with the safety of care provided to you	152	10	135	40	60	90
Are you pleased as to the continuity of your care over time	121	39	121	56	53	10
Answered questions						400

#### Table 35. Statement on the quality and safety of care

# 4.5.1 Correlation between Population Characteristics and Variables for Adequacy of HealthCare.

The inferential statistics associated with the respondents rating on how effectively they are informed by their healthcare providers about their treatment options with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 36. A between-group ANOVA was performed on population characteristics expectations (Always, very often, sometimes, rarely, never) and the rating by the respondent on how effectively they are informed by their healthcare providers about their treatment options. For gender: there were significant among the males and females, F (1,398) =48.78 P $\leq$ .001. Males (M=1.72, SD=0.96), Females (M=2.47, SD=1.17). These show that they both gave good ratings on how effectively they are informed by their treatment options. For ages: three out of the four comparisons among the group means were significant, F (3, 396) =20.62 P $\leq$ .001. Post hoc testing

revealed the significance difference between the pairs of ages, with 20-24(M=1.30 SD=0.73), lower than 25-49(M=1.90 SD=1.02); 50-64(M=2.39, SD=1.01), lower than 65+ (M=2.72, SD=1.39). These indicate that those respondents of 65+ gave not to good rating on how effectively they are informed by their healthcare providers about their treatment option. For nationality: there was no significance among Turkish Cypriot and Turkish, F (1,398) =4.82 P $\leq$ .001.Turkish Cypriot (M=1.98, SD= 1.10) and Cypriot

rating on how effectively they are informed by their healthcare providers about their treatment option. For nationality: there was no significance among Turkish Cypriot and Turkish, F (1,398) = 4.82 P $\leq$ .001.Turkish Cypriot (M=1.98, SD= 1.10) and Cypriot (M=2.23 SD=1.16), both gave a good rating on how effectively they are informed by their healthcare providers about their treatment option. For the ability of the household to make earns meet: all of the four comparisons among the group mean were significant, F (3, 396) =21.62 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=1.41, SD=0.79), lower than, difficult (M=2.20, SD=1.01); prefer not to say (M=2.49, SD=1.33) and don't know (M=2.67, SD=1.34). These show that those respondents who had difficulty in earns meet gave bad ratings on how effectively informed by their healthcare providers about their treatment option. For the last contact with health facility: all the four among the comparison group means were significant, F (3, 396) =40.30 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=1.53, SD=0.93); 6month (M=1.70, SD=1.03), lower than, 3month (M=2.19, SD=0.95), lower than, more than a year (M=3.44, SD=1.14). These indicate that respondent that had their last contact; more than a year gave a bad rating on how effectively they are informed by their healthcare providers about their treatment option.

The inferential statistics with if the respondents are involved in the decisions concerning their care by their healthcare provider with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 37. A between-group ANOVA was performed on population characteristics expectations (Always, very often, sometimes, rarely, never) and if the respondents are involved in the decisions concerning their care by their

healthcare provider. For gender: there were significant among the males and females, F  $(1,398) = 19.80 \text{ P} \le .001$ . Males (M=2.20, SD=1.28), Females (M=2.79, SD=1.44). These show that females gave bad ratings on them being involved in the decisions concerning their care by their healthcare provider. For ages: three out of the four among comparison group mean were significant, F (3, 396) =23.08 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=1.54 SD=1.11), lower than 25-49(M=2.19 SD=1.10), lower than, 65+ (M=3.07, SD=1.72); 50-64(M=3.09, SD=1.39). These indicate that those respondents age 50-64 and 65+ gave a bad rating on them being involved in the decisions concerning their care by their healthcare provider. For nationality: there was no significance among Turkish Cypriot and Turkish, F(1,398)=0.54 P>.001.Turkish Cypriot (M=2.44, SD= 1.39) and Cypriot (M=2.54 SD=1.39), both gave a good rating on them being involved in the decisions concerning their care by their healthcare provider. For the ability of the household to make earns meet: all of the four among the comparison group mean were significant, F (3, 396) =  $32.01 \text{ P} \le .001$ . Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=1.48, SD=0.98), lower than, difficult (M=2.74, SD=1.25); prefer not to say (M=2.93, SD=1.51) and don't know (M=3.29, SD=1.43). These show that those respondents who had difficulty, don't know, prefer not to say in earns meets gave bad ratings on them being involved in the decisions concerning their care by their healthcare provider. For the last contact with health facility: all the four among comparison group means were significant, F (3, 396) =55.86 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=1.71, SD=0.98); 6month (M=1.79, SD=1.11), lower than, 3month (M=2.79, SD=1.19); more than a year (M=4.14, SD=1.46). These indicate that respondent that had their last contact within 3months and more than a year gave a bad rating on them being involved in the decisions concerning their care by their healthcare provider.

The inferential statistics associated with the rating of whether the healthcare provider gave the respondent necessary details regarding safety of their treatment with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 38. A between-group ANOVA was performed on population characteristics expectations (Always, very often, sometimes, rarely, never) and whether the healthcare provider gave the respondent necessary details regarding the safety of their treatment. For gender: there were significant among the males and females, F (1,398) =54.68 P $\leq$ .001. Males (M=1.63, SD=0.98), Females (M=2.37, SD=1.36). Both gave good ratings on their healthcare provider giving them necessary details regarding the safety of their treatment. For ages: three out of the four among the comparison group mean were significant, F(3, $(396) = 28.26 \text{ P} \le .001$ . Post hoc testing revealed the significance difference between the pairs of ages, with 20-24(M=1.28 SD=0.75); 25-49(M=1.65 SD=0.91), lower than, 50-64(M=2.44, SD=1.17); 65+(M=2.82, SD=1.72). These indicate that those respondents age 50-64 and 65+ gave a bad rating on their healthcare provider giving them the necessary details they needed about the safety of their treatment. For nationality: there was no significance among Turkish Cypriot and Turkish, F (1,398) =4.49  $P \ge .001$ . Turkish Cypriot (M=1.88, SD= 1.20) and Cypriot (M=2.15 SD=1.26), both gave a good rating on their healthcare provider giving them the necessary details they needed about the safety of their treatment. For the ability of the household to make earns meet: all of the four comparisons among group means were significant, F (3, 396) = 24.25 $P \leq .001$ . Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=1.27, SD=0.71), lower than, difficult (M=2.65, SD=1.60), lower than, don't know (M=2.46, SD=1.32); prefer not to say (M=2.93, SD=1.51) and. These show that those respondents who, don't know and prefer not to say in earns meet gave bad ratings on their healthcare provider giving them the necessary details they needed about the safety of their treatment. For the last contact with health facility: three out of the four comparisons among the group mean were significant, F (3, 396) =  $49.38 \text{ P} \le .001$ . Post hoc testing revealed the significant difference

between the pairs of the last contact with the health facility, with 12months (M=1.56, SD=1.06); 6month (M=1.56, SD=0.99); 3month (M=1.98, SD=0.99), lower than, more than a year (M=3.74, SD=1.42). These indicate that respondent that had their last contact more than a year gave a bad rating on their healthcare provider giving them the necessary details they needed about the safety of their treatment.

The inferential statistics associated with the rating of whether the healthcare provider adjusts the care of respondent according to their changing needs with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 39. A between-group ANOVA was performed on population characteristics expectations (Always, very often, sometimes, rarely, never) and whether the healthcare provider adjusts the care of respondents according to their changing needs. For gender: there were significant among the males and females, F (1,398) =32.05 P≤.001. Males (M=3.18, SD=1.50), Females (M=3.95, SD=1.18). Both gave bad ratings on their healthcare providers adapting their care according to their changing needs. For ages: three out of the four comparisons among the group mean are significant, F (3, 396) =32.84 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=2.20 SD=1.68, lower than, 25-49(M=3.33 SD=1.27), lower than, 65+ (M=4.17, SD=1.30); 50-64(M=4.20, SD=1.02). These indicate that those respondents age 50-64 and 65+ gave a bad rating on their healthcare provider adapting their care according to their changing needs. For nationality: there was significance among Turkish Cypriot and Turkish, F  $(1,398) = 22.88 P \ge .001$ . Turkish Cypriot (M=3.29, SD= 1.49) and Cypriot (M=3.96) SD=1.17), both gave a bad rating on their healthcare provider adapting their care according to their changing needs. For the ability of the household to make earns meet: all of the four comparisons among the group mean were significant, F(3, 396) = 43.65 $P \leq .001$ . Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=2.46, SD=1.58), lower than, difficult (M=3.71, SD=1.07), lower than, prefer not to say (M=4.35, SD=1.11); don't know (M=4.46, SD=1.06). These show that those respondents who, don't know and prefer not to say in earns meet gave bad ratings on their healthcare provider adapting their care according to their changing needs. For the last contact with health facility: two out of the four comparisons among the group mean were significant, F (3, 396) =17.05 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=2.79, SD=1.78); 6month (M=3.31, SD=1.46), lower than, 3month (M=3.77, SD=1.07), lower than, more than a year (M=4.47, SD=1.16). These indicate that respondent that had their last contact more than a year gave a bad rating the most on their healthcare provider adapting their care according to their changing needs.

The inferential statistics associated with the rating of whether the healthcare provider obtains suggestion of the respondent on the quality of their care with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 40. A between-group ANOVA was performed on population characteristics expectations (Always, very often, sometimes, rarely, never) and whether the healthcare provider obtains the suggestion of the respondent on the quality of their care. For gender: there were significant among the males and females, F (1,398) =41.14 P $\leq$ .001. Males (M=3.29, SD=1.47), Females (M=4.13, SD=1.09). These indicate that females gave bad ratings the most on the healthcare provider obtaining their suggestion on the quality of their care. For ages: three out of the four comparisons among the group mean are significant, F (3, 396) =26.16 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=2.30 SD=1.78), lower than, 25-49(M=3.63 SD=1.19), lower than, 65+ (M=4.13, SD=1.33); 50-64(M=4.16, SD=0.99). These indicate that those respondents age 50-64 and 65+ gave a bad rating the most on the healthcare provider obtaining their suggestion on the quality of their care. For nationality: there was significance among Turkish Cypriot and Turkish, F (1,398) =60.36 P≤.001.Turkish Cypriot (M=3.29, SD=1.35) and Cypriot (M=4.31 SD=1.15). These indicate that the

Turkish respondents gave a bad rating the most on the healthcare provider obtaining their suggestion on the quality of their care. For the ability of the household to make earns meet: all of the four comparisons among the group mean were significant, F (3, 396) =18.64 P $\leq$ .005. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=2.95, SD=1.64), lower than, difficult (M=3.81, SD=1.12); don't know (M=3.92, SD=1.38); prefer not to say (M=4.33, SD=1.08). These show that those respondents who find earns meet difficult, don't know, and prefer not to say, gave bad ratings the most on the healthcare provider obtaining their suggestion on the quality of their care. For the last contact with health facility: two out of the four comparisons among the group mean were significant, F(3,396) =17.05 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12months (M=3.09, SD=1.87); 6month (M=3.55, SD=1.40), lower than, 3month (M=3.80, SD=0.99); more than a year (M=4.53, SD=1.12). These indicate that respondent that had their last contact within 3months and more than a year gave bad rating the most on the healthcare obtaining their suggestion on the quality of their care.

The inferential statistics associated with the whether the respondent agree that they receive good quality care keeping to protocol/guidelines for their condition with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 41. A between-group ANOVA was performed on population characteristics expectations (Always, very often, sometimes, rarely, never, I don't know) and whether the respondent agrees that they receive good quality care keeping to protocol/guideline for their condition. For gender: there were significant among the males and females, F (1,398) =41.28 P $\leq$ .001. Males (M=1.86, SD=1.09), Females (M=2.66, SD=1.40). These indicate that females agree the most that they receive good quality care keeping to protocol/guideline for their condition. For ages: two out of the four comparisons among the group mean are significant, F (3, 396) =21.85 P $\leq$ .001. Post hoc testing revealed the

significant difference between the pairs of ages, with 20-24(M=1.35 SD=0.85), lower than, 25-49(M=2.05 SD=1.15); 50-64(M=2.50, SD=1.17), lower than, 65+ (M=3.12, SD=1.67). These indicate that those respondents of age 65+ didn't agree they receive good quality care keeping to protocol/guideline on the basis for their condition. For nationality: there was significance among Turkish Cypriot and Turkish, F (1,398) =1.11  $P \ge .001$ . Turkish Cypriot (M=2.19, SD= 1.31) and Cypriot (M=2.33 SD=1.29). These indicate that the Turkish respondents agree slightly better than the Turkish Cypriot that they receive good quality care keeping to protocol/guideline for their condition. For the ability of the household to make earns meet: all of the four comparisons among the group mean were significant, F (3, 396) =  $30.84 \text{ P} \le .001$ . Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=1.31, SD=0.76), lower than, difficult (M=2.47, SD=1.10); don't know (M=2.71, SD=1.46); prefer not to say (M=2.80, SD=1.68). These show that those respondents who find earns meet difficult, don't know, and prefer not to say, agree lesser that they receive good quality care keeping to protocol/guidelines for their condition. For the last contact with health facility: all of the four comparisons among the group mean were significant, F (3, 396) =46.61 P≤.005. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 6month (M=1.66, SD=1.15); 12months (M=1.81, SD=1.18), less than, 3month (M=2.35, SD=1.04), less than, more than a year (M=3.95, SD=1.34). These indicate that respondent that had their last contact more than a year disagrees the most that they receive good quality care keeping to protocols/guidelines for their condition.

The inferential statistics associated with the whether the respondent agree that they are pleased with the safety of their care provided to them with the population characteristics such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility are reported in table 42. A between-group ANOVA was performed on population characteristics expectations (Always, very often, sometimes, rarely, never, I don't know) and whether the respondent agrees that they were pleased

with the safety of their care provided to them. For gender: there were significant among the males and females, F (1,398) =41.28 P $\leq$ .001. Males (M=2.31, SD=1.43), Females (M=3.06, SD=1.54). These indicate that females disagree that they pleased with the safety of their care. For ages: two out of the four comparisons among the group mean are significant, F (3, 396) =  $14.74 \text{ P} \le .001$ . Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=1.61 SD=1.18), lower than, 25-49(M=2.52)SD=1.28; 50-64(M=3.08, SD=1.56), lower than, 65+ (M=3.25, SD=1.91). These indicate that those respondents of age 65+ didn't agree that they pleased with the safety of their care. For nationality: there was no significance among Turkish Cypriot and Turkish, F (1,398) =0.01 P $\geq$ .001.Turkish Cypriot (M=2.67, SD= 1.47) and Cypriot (M=2.66 SD=1.61). These indicate that the Turkish Cypriot respondents agree slightly lesser than the Turkish that they were pleased with the safety of their care. For the ability of the household to make earns meet: all of the four comparisons among the group mean were significant, F (3, 396) =42.08 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=1.73, SD=1.15), lower than, prefer not to say (M=2.93, SD=1.91); difficult (M=2.98, SD=1.91); SD=1.31; don't know (M=3.33, SD=1.61). These show that those respondents who find earns meet difficult, prefer not to say, agree the less while those who indicated their ability to earn meets as disagree slightly that they are pleased with the safety of their care. For the last contact with health facility: all of the four comparisons among the group mean were significant, F (3, 396) =42.08 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with 12 months (M=1.60, SD=1.18), less than, 6 month (M=2.25, SD=1.27), less than, 3month (M=2.95, SD=1.34), less than, more than a year (M=4.28, SD=1.67). These indicate that respondent that had their last contact more than a year disagrees the most that they are pleased with the safety of the care they receive.

The inferential statistics associated with the whether the respondent agrees to be pleased with the continuity of their care provided to them with the population characteristics

such as gender, ages, nationality, and the ability of a household to make ends meet and last contact with health facility is reported in table 43. A between-group ANOVA was performed on population characteristics expectations (Always, very often, sometimes, rarely, never, I don't know) and whether the respondent agrees that they are pleased with the continuity in their care providers to them. For gender: there were significant among the males and females, F (1,398) =26.53 P $\leq$ .001. Males (M=2.43, SD=1.49), Females (M=3.16, SD=1.35). These indicate that females disagree to be pleased with the continuity in the care provided to them. For ages: three out of the four comparisons among the group mean are significant, F (3, 396) =13.21 P≤.001. Post hoc testing revealed the significant difference between the pairs of ages, with 20-24(M=1.83 SD=1.32), lower than, 25-49(M=2.63, SD=1.28); 65+ (M=3.15, SD=1.73), lower than, 50-64(M=3.26, SD=1.46). These indicate that those respondents within the age 50-64didn't agree the most be pleased with the continuity in the care provider to them. For nationality: there was no significance among Turkish Cypriot and Turkish, F (1,398) =0.64 P≥.001.Turkish Cypriot (M=2.73, SD= 1.47) and Turkish (M=2.85, SD=1.48). These indicate that the Turkish respondents agree slightly lesser than the Turkish Cypriot to be pleased with the continuity in the care provider to them. For the ability of the household to make earns meet: all of the four comparisons among the group mean were significant, F (3, 396) =12.81 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the ability to make earns meet, with being easy (M=2.96, SD=1.33), difficult (M=2.96, SD=1.33); prefer not to say (M=3.04, SD=1.75); don't know (M=3.50, SD=1.32). These show that those respondents who prefer not to say and indicated don't know about their earns means disagree to be pleased with the continuity in the care provided to them. For the last contact with health facility: three out of four comparisons among the group means were significant, F (3, 396) =35.64 P $\leq$ .001. Post hoc testing revealed the significant difference between the pairs of the last contact with the health facility, with12months (M=1.70, SD=1.71), less than, 6month (M=2.53, SD=1.28; 3month (M=3.01, SD=1.37), less than, more than a year (M=4.19, SD=1.35). These indicate that respondent that had their last contact more than a year disagree the most to be pleased with the continuity in the care provider to them.

		Ν	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		p-value
						Lower Bound	Upper Bound	
Gender	male Female	210 190	1.7238 2.4684	.96340 1.16680	.06648 .08465	1.5928 2.3014	1.8549 2.6354	.000
Age	20-24 25-49 50-64* 65+	46 192 102 60	1.7826 1.8958 2.3922 2.7167	.72632 1.01795 1.00648 1.39115	.10709 .07346 .09966 .17960	1.0887 1.7509 2.1945 2.3573	1.5200 2.0407 2.5898 3.0760	.000 .000 .000 .231
Nationality	T.Cypriot Turkish	245 155	1.9796 2.2323	1.09563 1.16116	.07000 .09327	1.8417 2.0480	2.1175 2.4165	.029
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 196 24 75	1.4095 2.2041 2.6667 2.4933	.79294 1.00725 1.34056 1.32923	.07738 .07195 .27364 .15349	1.2561 2.0622 2.1006 2.1875	1.5630 2.3460 3.2327 2.7992	.000 .000 .000 .000
Last contact with health facility	12months 6months 3months <sup>*</sup> More than a year	70 108 179 43	1.5286 1.7037 2.1899 3.4419	.92817 1.03454 .94673 1.14022	.11094 .9955 .07076 .17388	1.3073 1.5064 2.0503 3.0910	1.7499 1.9010 2.3296 3.7928	.000 .000 .000 .000

Table 36. One-Way ANOVA Analysis between population characteristics and whether they are suitably informe	ed by							
healthcare providers about their treatment options								
concerning the	in neurineare by the	N	Mean	Std.	Std.	95% Confidence Interval for		p-value
--	--	------------------------	--------------------------------------	--	--------------------------------------	--------------------------------------	--------------------------------------	-------------------------------
				Deviation	Error	Me Lower Bound	an Upper Bound	
Gender	male Female	210 190	2.1952 2.7895	1.27732 1.44306	.08814 .10469	2.0215 2.5830	2.3690 2.9960	.000
Age	20-24 25-49 50-64* 65+	46 192 102 60	1.5435 2.1927 3.0882 3.0667	1.10969 1.09704 1.39378 1.71599	.16361 .07917 .13801 .22153	1.2139 2.0365 2.8145 2.6234	1.8730 2.3489 3.3620 3.5100	.000 .000 .000 1.000
Nationality	T.Cypriot Turkish	245 155	2.4367 2.5419	1.38828 1.39218	.08869 .11182	2.2620 2.3210	2.6114 2.7628	.461.
The ability of household to make earns meet	Easý <sup>*</sup> Difficult Don't know Prefer not to say	105 196 24 75	1.4762 2.7362 3.2917 2.9333	.98151 1.24803 1.42887 1.50973	.09579 .08915 .29167 .17433	1.2862 2.5640 2.6883 2.5860	1.6661 2.9156 3.8950 3.2807	.000 .000 .000 .000
Last contact with health facility	12months 6months 3months <sup>*</sup> More than a year	70 108 179 43	1.7143 1.7870 2.7933 4.1395	.98013 1.11112 1.19303 1.45703	.11715 .10692 .08917 .22219	1.4806 1.5751 2.6173 3.6911	1.9480 1.9990 2.9693 4.5879	.000 .000 .000 .000

**Table 37.** One-Way ANOVA Analysis between population characteristics and whether they are involved in the decision concerning their healthcare by the healthcare provider

neeessary detai	is they need doodt t	N N	Maan	04-1	04-1	OFO/ Confident	an Internal for	
		N	wean	Std. Deviation	Std. Error	95% Confident	ce interval for	p-value
				Deviation	LIIO	Lower Bound	Upper Bound	
Gender	male Female	210 190	1.6333 2.3737	.98497 1.35785	.06797 .09851	1.4993 2.1794	1.7673 2.5680	.000
Age	20-24 25-49 50-64* 65+	46 192 102 60	1.2826 1.6510 2.4412 2.8167	.75020 .90842 1.17375 1.73197	.11061 .06556 .11622 .22360	1.0598 1.5217 2.2106 2.3693	1.5054 1.7804 2.6717 3.2641	.000 .000 .000 .170
Nationality	T.Cypriot Turkish	245 155	1.8816 2.1484	1.20376 1.26282	.07691 .10143	1.7301 1.9480	2.0331 2.3488	.035
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 196 24 75	1.2667 2.0561 2.4583 2.6533	.71072 1.08695 1.31807 1.59808	.06936 .07764. .26905 .18453	1.1291 1.9030 1.9018 2.2856	1.4042 2.2092 3.0149 3.0210	.000 .000 .000 .000
Last contact with health facility	12months 6months 3months <sup>*</sup> More than a year	70 108 179 43	1.5571 1.5648 1.9832 3.7442	1.05824 .98847 .99139 1.41578	.12648 .09512 .07410 .21590	1.3048 1.3763 1.8370 3.3085	1.8095 1.7534 2.1295 4.1799	.023 .007 .000 .000

**Table 38.** One-Way ANOVA Analysis between population characteristic and whether the healthcare provider provides necessary details they need about the safety of their treatment

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		p-value
						Lower Bound	Upper Bound	
Gender	male Female	210 190	3.1810 3.9526	1.50458 1.18316	.10383 .08584	2.9763 3.7833	3.3856 4.1219	.000
Age	20-24 25-49 50-64 <sup>*</sup> 65+	46 192 102 60	2.1957 3.3333 4.1961 4.1667	1.68153 1.26712 1.01513 1.30406	.24793 .09145 .10051 .16835	1.6963 3.1530 3.9967 3.8298	2.6950 3.5137 4.3955 4.5035	.000 .000 .000 .999
Nationality	T.Cypriot Turkish	245 155	3.2857 3.9613	1.49041 1.17265	.09522 .09419	3.0982 3.7752	3.4733 4.1474	.000
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 196 24 75	2.4571 3.7143 4.4583 4.3467	1.58131 1.06699 1.06237 1.10885	.15432 .07621 .21685 .12804	2.1511 3.5640 4.0097 4.0915	2.7632 3.8646 4.9069 4.6018	.000 .000 .000 .000
Last contact with health facility	12months 6months 3months <sup>*</sup> More than a year	70 108 179 43	2.7857 3.3148 3.7654 4.4651	1.78474 1.45749 1.06567 1.16187	.21332 .14025 .07965 .17718	2.3602 3.0368 3.6082 4.1075	3.2113 3.5928 3.9225 4.8227	.000 .030 .000 .012

**Table 39.** One-Way ANOVA Analysis between population characteristics and whether the healthcare provider adjust their care to changing needs

		N Mean Std. Std. 95% Confidence Inte Deviation Error Mean		ce Interval for an	p-value			
						Lower Bound	Upper Bound	
Gender	male Female	210 190	3.2905 4.1263	1.46943 1.08615	.10140 .07880	3.0906 3.9709	3.4904 4.2818	.000
Age	20-24 25-49 50-64* 65+	46 192 102 60	2.3043 3.6302 4.1569 4.1333	1.78723 1.19498 .99250 1.33362	.26351 .08624 .09827 .17217	1.7736 3.4601 3.9619 3.7888	2.8351 3.8003 4.3518 4.4778	.000 .000 .000 .999
Nationality	T.Cypriot Turkish	245 155	3.2939 4.3097	1.34719 1.14850	.08607 .09225	3.1243 4.1274	3.4634 4.4919	.000
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 196 24 75	2.9524 3.8061 3.9167 4.3333	1.63719 1.11547 1.38051 1.08221	.15977 .07968 .28179 .12496	2.6355 3.6490 3.3337 4.0843	3.2692 3.9633 4.4996 4.5823	.000 .005 .000 .000
Last contact with health facility	12months 6months 3months* More than a year	70 108 179 43	3.0857 3.5463 3.8045 4.5349	1.88620 1.40350 .98914 1.12014	,22544 .13505 .07393 .17082	2.6360 3.2786 3.6586 4.1902	3.5355 3.8140 3.9504 4.8796	.001 .372 .000 .006

**Table 40.** One-Way ANOVA Analysis between population characteristics and whether their healthcare provider obtain their suggestion on quality of care provided (through a survey of satisfaction or other means)

	*	N Mean Std. Std. 95% Confidence Interval fo Deviation Error Mean		ce Interval for an	p-value			
				200000		Lower Bound	Upper Bound	
Gender	male Female	210 190	1.8619 2.6632	1.08710 1.40000	.07502 .10157	1.7140 2.4628	2.0098 2.8635	.000
Age	20-24 25-49 50-64 <sup>*</sup> 65+	46 192 102 60	1.3478 2.0469 2.5000 3.1167	.84898 1.14539 1.16678 1.66816	.12518 .08266 .11553 .21536	1.0957 1.8838 2.2708 2.6857	1.5999 2.2099 2.7292 3.5476	.000 .013 .000 .010
Nationality	T.Cypriot Turkish	245 155	2.1878 2.3290	1.31412 1.29489	.08396 .10401	2.0224 2.1236	2.3531 2.5345	.293.
The ability of household to make earns meet	Easyٌ Difficult Don't know Prefer not to say	105 196 24 75	1.3143 2.4694 2.7083 2.8000	.76352 1.09735 1.45898 1.67655	.07451 .07838 .29781 .19359	1.1665 2.3148 2.0923 2.4143	1.4620 2.6240 3.3244 3.1857	.000 .000 .000 .000
Last contact with health facility	12months 6months 3months <sup>*</sup> More than a year	70 108 179 43	1.8143 1.6574 2.3520 3.9535	1.18313 1.14518 1.03540 1.34436	.14141 .11020 .07739 .20501	1.5322 1.4390 2.1992 3.5398	2.0964 1.8759 2.5047 4.3672	.004 .000 .000 .000

**Table 41.** One-Way ANOVA Analysis between population characteristics and whether they receive good quality care in keeping with protocol/guidelines for their conditions.

Reference Group: age (50-64), Ability of household to make earns meet(easy), the last contact with health facility(3months). T-Cypriot(Turkish Cypriot)

٠

•		N Mean		Std. Deviation	Std. Error	95% Confidence Interval for Mean		p-value
						Lower Bound	Upper Bound	
Gender	male Female	210 190	2.3143 3.0579	1.42644 1.54022	.09843 .11174	2.1202 2.8375	2.5083 3.2783	.000
Age	20-24 25-49 50-64 <sup>*</sup> 65+	46 192 102 60	1.6087 2.5208 3.0784 3.2500	1.18281 1.27792 1.55866 1.91005	.17440 .09223 .15433 24659	1.2574 2.3389 2.7723 2.7566	1.9599 2.7027 3.3846 3.7434	.000 .010 .000 .887
Nationality	T.Cypriot Turkish	245 155	2.6735 2.6581	1.47086 1.61341	.09397 .12959	2.4884 2.4021	2.8586 2.9141	.922
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 196 24 75	1.7333 2.9847 3.3333 2.9333	1.14578 1.31452 1.60615 1.90542	.11182 .09389 .32785 .22002	1.5116 2.7995 2.6551 2.4949	1.9551 3.1699 4.0115 3.3717	.000 .000 .000 .000
Last contact with health facility	12months 6months 3months <sup>*</sup> More than a year	70 108 179 43	1.6000 2.2500 2.9497 4.2791	1.18444 1.26878 1.33776 1.66656	.14157 .12209 .09999 .25415	1.3176 2.0080 2.7524 3.7662	1.8824 2.4920 3.1470 4.7920	.000 .000 .000 .000

**Table 42.** One-Way ANOVA Analysis between population characteristic and whether they are pleased with the safety of care provided to them

		N	Mean	Std. Deviation	Std. Error	95% Confiden Me	ce Interval for an	p-value
						Lower Bound	Upper Bound	
Gender	male Female	210 190	2.4286 3.1632	1.48586 1.35292	.10253 .09815	2.2264 2.9695	2.6307 3.3568	.000
Age	20-24 25-49 50-64* 65+	46 192 102 60	1.2826 1.6510 2.4412 2.8167	.75020 .90842 1.17375 1.73197	.11061 .06556 .11622 .22360	1.0598 1.5217 2.2106 2.3693	1.5054 1.7804 2.6717 3.2641	.000 .001 .000 .959
Nationality	T.Cypriot Turkish	245 155	2.7306 2.8516	1.46576 1.47619	.09364 .11857	2.5462 2.6174	2.9151 3.0858	.423
The ability of household to make earns meet	Easy <sup>*</sup> Difficult Don't know Prefer not to say	105 196 24 75	2.0762 2.9643 3.5000 3.0400	1.29121 1.32964 1.31876 1.75098	.12601 .09497 .26919 .20219	1.8263 2.7770 2.9431 2.6371	2.3261 3.1516 4.0569 3.4429	.000 .000 .000 .000
Last contact with health facility	12months 6months 3months <sup>*</sup> More than a year	70 108 179 43	1.7000 2.5278 3.0112 4.1860	1.17152 1.27857 1.36567 1.34971	.14002 .12303 .10207 .20583	1.4207 2.2839 2.8097 3.7707	1.9793 2.7717 3.2126 4.6014	.000 .014 .000 .000

**Table 43.** One-Way ANOVA Analysis between population characteristics and whether they are pleased with continuity of care over time

## 4.6 Appropriateness of Health Care

Here the survey looked into if healthcare is sufficient for the needs of different population groups. Where question such as, if they have ever felt stigmatized when pursuing or obtaining healthcare on a variety of grounds or characteristics. 87.8% declared they have never felt stigmatized, while rest of the respondents did, in the following proportions: Young age 4.5%, Older age 1.3%, Physical impairment 0.5%, Mental health status 1.3%, chronic/long term illness 0.8%, Ethnicity 0.8%, Being a man 1.0%, Income/social status 2.0%, Sexual orientation 0.3% (fig 15). As a subsequent inquiry, respondents were asked what kind of stigma or prejudice they face, by and large (7.5%) respondents highlighted the conduct of healthcare worker as the core issue, and about 10.25% experienced different issues: denial of rights, lack of community healthcare facilities and inappropriate language, where 89.8% were not of such encounter (fig 16).



Figures 16. Have you ever felt stigmatized because of some reasons?



Figure 17. What type of stigma did you experience?

# CHAPTER 5 DISCUSSION, CONCLUSION AND RECOMMENDATION

## **5.1 Discussion**

The outcome of the analysis has shown that the majority of the population characteristics such as gender, age, the ability of the household to make ends meet, last contact with a health facility in relation to access to healthcare variables were more statistically significant for both the Chi-square and a between ANOVA analysis, while nationality proved to be less significant. While the descriptive analysis shows that access to healthcare for the people in Lefke-Guzelyurt districts is found to be moderately ok, while few challenges can be fixed to make it better.

The characteristic of the population in this study stands as inequalities (i.e. make them have access to health in different ways) of healthcare access, which also justifies the report by the European Commission (2018) that disparities in population characteristics can create disparities in access to healthcare to some degree. A lot of observation was found partaking the assessment of healthcare access within Lefke-Guzelyurt districts as reported in the report section, but some major highlights and unexpected results will be discussed within.

Finding from the healthcare availability in the study, the availability of health information from this report which refers to how individuals seek information about their health which is in consonance with Lambert & Loiselle, 2007; Mills & Todorova, 2016. Hospital and doctor practice serve as the major source of information in this study, which supports the findings of Hesse et al., (2005), where it was viewed that Healthcare professionals have traditionally been the initial source of health information and that they served as gatekeepers in determining what health information their patients

received. Also, it was discovered that thinking of access overall to actually obtain healthcare, females obtain access to healthcare more easily than the males which are in consonance with the studies from Health-Care Utilization as a Proxy in Disability Determination (2018) & Retooling for an Aging America: Building the Health Care Workforce (2008), where it was said that females have a higher rate of health utilization, which may have allowed them to obtain easy access. Also, the respondent within the age 50-64 and 65+ obtain healthcare more easily when they needed it which agrees with the finding from Retooling for an Aging America: Building the Health Care Workforce (2008), where older adults have significantly higher rates of utilization of health service than non-older people. For the ability to make earns meets, these show that those that find earns meet difficult, don't know and prefer not to say was able to obtain healthcare more easily when needed more than those who were able to make earns meet easily, the reason for this couldn't be explained.

Findings from affordability of healthcare: it was observed that respondent had experienced high financial hardship after spending on healthcare, which shows that healthcare is not that affordable, report also shows that majority had to reduce more on essential needs to be able to cover healthcare costs, which also agrees with the study of Hancock (1933) under opportunity costs, basic needs, and short term affordability. Insight into if the respondent can afford (financially) to access, primary care doctor, specialist doctor, specialized healthcare provider, hospital, medicine, medical equipment, dental healthcare, cosmetic intervention, as to when needed, it was seen that the males could afford better than the female, except for dental healthcare and cosmetic intervention, where both couldn't afford but still the male did better than the females, this share similar view from the findings of Robin M. et al (2005). It was also discovered that respondents within the age of 50-64 & 65+ had challenges to financially afford the majority of the above-listed services. For the ability to make earns meets: there is no disparities observed for the hospital, medicine and cosmetics intervention. Despite the differences in the ability to make earns meets, they could all afford to

hospital and medicine, likewise, they could not all afford cosmetic intervention. For no disparities in hospital and medicine, it might be that the health system has a structure that could have allowed the occurrence to these and for cosmetic intervention; reasons to this can't be ascertained. For the last contact with health facility: there were no disparities found, only for cosmetics intervention, the respondents all could not afford cosmetic intervention, despite their differences in the last contact with a health facility. Reasons for these also can't be ascertained. Insight into if the respondent experienced financial difficulties due to healthcare expenditure, it was discovered that both male and females respondent had financial difficulties following expenditure on health but the results show that the females experience it the most which might have been as a result of frequent healthcare usage according to various studies. The respondent age 65 and over had financial issues as a consequence of health spending and these can't be farfetched because according to various research persons within the age bracket are supposed to be placed on Medicare. Insight into if the respondent postpone health visit because of cost, age 65+ do postpone healthcare visits because of cost, similar finding can also be seen from the report of Listl, S. (2016), where it was discovered that 2.2% of Europe's older adults (50+) reported not going to the dentist because of costs. This situation can also be seen as a result of the lack of Medicare for the people within the districts. Also, insight as to the thought, if the expenses of the healthcare of the respondent are sufficiently covered by the health care system, it was discovered that the females disagree on this, judging along this study, which has found to them to have financial difficulties after spending on health and had to postpone healthcare the more may have large influence the reasons for the belief, also the respondent from the age of 50 below disagree about this due them also facing similar challenges. For the other population characteristic on the subject matter, reasons for results outcome couldn't be ascertained.

Accessibility of health care seems sound within the district expect that the report shows the respondent does not have a specialist near enough their homes and open interview to these reveals that more specialists can only be found in much more bigger health facility in the other districts within the country.

Under the adequacy of healthcare, it can be observed that the healthcare provider does not adapt the care of the respondent to their changing needs, which might be that in doing this, it will improve the quality of care given and they been able to follow standard/best practice in the discharge of their duty, also the healthcare provider is not capturing the feedback on quality of care provided which does not help to determine the quality of service provided, which can be seen as a barrier on the supply-side that is in consonance with studies of Ensor and Cooper (2004); O'Donnell (2007). Patienthealthcare professional communication recorded bad ratings to good ratings among the population characteristics, which indicate that there is a little bridge of gap for some the population characteristics and the health providers, which is consistent with the study of Chandra S, Mohammadnezhad M, Ward P (2018), where patients discontentment was seen to be associated with medical interaction with patients.

Insight into the appropriateness of healthcare, there was a higher percentage of no stigmatization recorded and a few of the type of stigma was the attitude of healthcare staff, which can be totally eradicated with some approach that can be found in various research studies.

Limitation for this study, firstly concern that a lot of studies see access to healthcare from different points of view, thereby making it difficult in sharing similarities. Secondly, the population characteristics of when last the respondents came in contact with the health facility, gave the respondent the count from the time they responded to the questionnaire. And thirdly few out of the questions on the questionnaire were not put in a manner to be able to perform a between-group ANOVA analysis.

## **5.2 Conclusion**

Reflection from this study shows that the assessments of access to healthcare within Lefke-Guzelyurt districts seem to be moderately ok. Assessment of availability of healthcare such as the available information source for healthcare, ratings of access to the information's and how easy and useful the information is, all seems perfectly great. In order to check that healthcare is made available to the populace, information is key, which seems to describe the health product and the health services. Also looking into the affordability of healthcare within the district, it can be deduce that the healthcare cost and payment plan as to be looked into, despite larger percentage of the respondent agree that their healthcare cost are been covered to a sufficient degree many the respondents still testify to face financial difficulties due to healthcare expenditure, while more had to reduce spending on essential needs to cover cost. Accessibility of healthcare within the districts seems great where few significant delays were recorded towards the healthcare services. Set back that could only be seen was that the respondent indicated that a specialist service is not located near enough of their homes. Adequacy of healthcare within the district, showing the quality of care rendered to the respondents seems perfect; expect that healthcare provider does not adapt the care of the respondents to their changing needs, which seems to be a step in the right directions. Also, the health providers are not getting feedback from their patients which does not seems right, as to be able to determine the quality of healthcare they received. Searching out the appropriateness of healthcare, it can be seen that the healthcare providers were able to discharge health services needed to different groups within-population bringing to the barest minimal, segregation and discrimination within the diverse groups of the population.

## **5.3 Recommendations**

This study presents the recommendation from the report of the analysis and options of the respondent gotten from their additional comments section in the survey questionnaires. Recommendations form the report of the analysis:

- The health policymaker should review the social insurance policies so as to make it more effective for the elderly.
- The healthcare system should make use of other sources the more in the dissemination of health information apart from through the Hospital and doctor's practice.
- Healthcare Costs should the reviewed by health administrators and health policymakers so that health beneficiaries won't find financial hardship after spending on health.
- Healthcare providers should try to capture feedback after administering care, so as to be able to ascertain the quality of care given.

Options from the respondents concerning what actions they think policymakers could take to improve access to healthcare within the districts:

- Respondent's view that the health services were good but the health policymaker should put necessary equipment to the nearby health services to run the area on time for the people.
- More doctors should be provided than patients and more health services should be rendered.
- More health investment should be provided within the districts.
- The health ministries should overcome the shortcoming in achieving better health.
- Provision of advanced technology for healthcare providers.
- Ministry of health to do more frequently to improved health within the districts.

- Diagnosis of complex diseases.
- Health policymakers should give more interest in health laws.

#### REFERENCES

- Aday LA, Anderson RM (1981) Equity of access to medical care: a conceptual and empirical overview. Medical Care 19: 4-27.
- Andersen RM, Rice TH, and Kominski GF: Changing the U.S. health care system key issues in health services, policy, and management San Francisco: Jossey-Bass; 2001.
- Arminée Kazanjian, Denise Morettin, Robert Cho (2004). Open access journal. Health Care Utilization by Canadian Women. BMC Women's Health, 4(Suppl 1): S33 DOI: 10.1186/1472-6874-4-S1-S33
- Bronwyn H., Jane G., et al (2011). Journal of Public Health Policy. Inequities in access to health care in South Africa. DOI: 10.1057/jph.2011.35.
- Braveman P, Gruskin S. 2003. Policy, equity, and human rights. Bulletin of the World Health Organization 81: 539–45.
- Bart et al. (2011). Addressing access barriers to health services: an analytical framework for selecting appropriate intervention in low-income Asian countries. *Health policy and planning*. Dio: 10.1093/heapol/czr038.
- Bernard R. (2015). *Fundamentals of Biostatistics*. 8<sup>th</sup> rev. ed. United States of America: Cengage Learning
- Beiser M, Stewart M. Reducing health disparities: a priority for Canada. *Can J Public Health*.2005; 96(S2): s4-s5

- Chieh Li et al. (2017). Overcoming Communication Barriers to Healthcare for Culturally and Linguistically Diverse Patients. North American Journal of Medicine and Science. Vol 10(3): 103-109 DOI: 10.7156/najms.2017.1003103.
- Camargo Plazas MdP, Cameron BL, Smith DG. Neoliberal oriented health care system answer to global competition or a threat to health equality for people with chronic illness. *Adv Nurs Sci.* 2012; 35(2):166-181.
- Chandra S, Mohammadnezhad M, Ward P (2018) Trust, and Communication in a Doctor-Patient Relationship: A Literature Review. J Healthc Commun Vol.3 No.3:36. DOI: 10.4172/2472-1654.100146
- Donabedian A. (1972) Models for organizing the delivery of personal health services and criteria for evaluating them. Milbank Mem Fund Quart 50: 103-154.
- Ensor T, Cooper S. (2004). Overcoming barriers to health service access: influencing the demand side. Health Policy Planning 19: 69–79.
- El Paso Country Health Indicators (2012). Health Indicators: Access to care. Pg.18-19 (6, Dec 2018) citied from <u>https://www.elpasocountyhealth.org/sites/default/files/files/services/Community-Health-Data-Statistics/AccesstoCare.pdf</u>
- Ekman B, Pathmanathan I, Liljestrand J. 2008. Integrating health interventions for women, newborn babies, and children: a framework for action. The Lancet 372: 990–1000.

- European Commission (2018). Inequalities in access to healthcare: A study of national policies. (Dec 6, 2018) cited from https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8152&furtherPubs= yes
- Fortney J, Rost K, Zhang M, Warren J (1999). The impact of geographic accessibility on the intensity and quality of depression treatment. Medical Care 37: 884-893.
- Goodman DC, Fisher E, Stukel TA, Chang C (1997). The distance to community medical care and the likelihood of hospitalization: is closer always better? AmJ Public Health 87: 1144-1150.
- Haynes R, Gale S, Mugford M, Davies P (2001) Cataract surgery in a community hospital outreach clinic: patient costs and satisfaction. SocSci Med 53:1631-1640.
- Haynes R, Bentham G, Lovett A, Gale S (1999) Effects of distances to hospital and GP surgery on hospital inpatient episodes controlling for needs and provision. SocSci Med 49: 425-433.
- Health Science Journal (2018). Health Facility. (6, Dec 2018) cited from <u>Http://www.imedpub.com/scholarly/health-facilities-Journal-articles-ppts-list.php</u>
- Hesse, B.W., Nelson, D.E., Kreps, G.L., Croyle, R.T., Arora, N.K., Rimer, B.K., Viswanath, K. (2005). Trust and sources of health information: The impact of the Internet and its implications for health care providers: Findings from the first Health Information National Trends Survey. *Archives of Internal Medicine*, 165, 2618–2624.10.1001/archinte.165.22.2618.

- Health-Care Utilization as a Proxy in Disability Determination (2018). Committee on Health Care Utilization and Adults with Disabilities; Board on Health Care Services; Health and Medicine Division; National Academies of Sciences, Engineering, and Medicine. ISBN 978-0-309-46918-0 | DOI 10.17226/24969.
- Hancock KE. 'Can pay? Won't pay?' or economic principles of 'affordability'. *Urban Studies* 1993; 30(1): 127^5.
- Joseph AE, Phillips DR (1984). Accessibility and utilization: geographical respective on healthcare delivery. SAGE.
- J. Emilo Carrillo et al (2011). Journal of Health Care for the Poor and Underserved. Defining and Targeting Health Care Access Barriers. DOI: 10.1353/hpu.2011.0037.
- Krisha & Gurch (2013). Access to Health Care: Issues of Measures and Method. *Open Access Journal*. DIO 10.4172/2167-1079-1000136.
- Lawn JE, Rohde J, Rifkin S, et al. 2008. Alma-Ata 30 years on revolutionary, relevant, and time to revitalize. The Lancet 372:917–27.
- Lambert, S., & Loiselle, C. (2007). Health information-seeking behavior. *Qualitative Health Research*, 17, 1006–1019.10.1177/1049732307305199. (Crossref), (PubMed]), (Web of Science], [Google Scholar]

Listl, S. (2016). Cost-related dental non-attendance in older adulthood: Evidence from eleven European countries and Israel. Gerodontology 33, 253–259. [CrossRef] [PubMed]

McLafferty SL (2003). GIS and healthcare. Annu Rev Public Health 24: 25-42.

- Michael Millman (2013). Access to Health in America. National academy press. Defining Access, pg. 31. ISBN 0-309-58466-3.
- Martin et al (2001). Report of a Scoping Centre for NHS Service Delivery and OrganizationR&D (NCCSDO). The Public Health and Health Services Research Group, Department of Public Health Service. King's College London.
- Mills, A., & Todorova, N. (2016). An integrated perspective on factors influencing online health-information seeking behaviors. *Australasian Conference on Information Systems*, 4, 6. (Google Scholar).
- Natalie Huls et al, (2004). Human Rights & Health Welfare. (Dec 6, 2019) cited from https://www.du.edu/korbel/hrhw/researchdigest/health/health.pdf.
- O'Donnell O. 2007. Access to health care in developing countries: breaking down demandside barriers. Cadernos de Sau'dePu'blica 23: 2820–34.
- Oliver A, Mossialos E. 2004. Equity of access to health care: outlining the foundations for action. Journal of Epidemiology and Community Health 58: 655–8.

- Peters DH, Garg A, Bloom G, et al. 2008. Poverty and access to health care in developing countries. Annals of the New York Academy of Sciences 1136: 161–71.
- Rushton G, Elmes G, McMaster R (2000) Considerations for improving geographic information research in public health. URISA J 12: 31-49.
- Rohde J, Cousens S, Chopra M et al. 2008. 30 years after Alma-Ata: has primary health care worked in countries? The Lancet 372: 950–61.
- Rasanathan K, Montesinos EV, Matheson D, Etienne C, Evans T. 2009. Primary Health Care and the social determinants of health: essential and complementary approaches for reducing inequities in health. Journal of Epidemiology and Community Health. [Epub ahead of print].
- Raphael D. Poverty, human development, and health in Canada: research, practice, and advocacy dilemmas. Can J Nurs Res. 2009; 41(2): 7-18.
- Rahmioglu et al (2012). Improving Health Care Service in Northern Cyprus: a call for research and action. *European Journal of Public Health*. Vol. 22, No. 6, 754-755.
- Retooling for an Aging America: Building the Health Care Workforce (2008). Committee on the Future Health Care Workforce for Older Americans, Institute of Medicine. ISBN: 0-309-11588-4. (7 Dec 2018), cited from <u>http://www.nap.edu/catalog/12089.html</u>.
- Robin M. et al (2005). Journal of General Internal Medicine. *Who Can't Pay for Health Care?* https://doi.org/10.1111/j.1525-1497.2005.0087.

- Simeonsson R J, Bailey J R, Donald B, Scandlin D, Huntington G S & Roth M (1999) Disability, Health, secondary conditions and quality of life: emerging issues in public health. In R J Simeonsson, & L N McDevitt, (Eds.) Issues in Disability and Health: The Role of Secondary Conditions and Quality of Life. North Carolina: Office on Disability and Health.
- South Africa Human Rights Commission (2007). Public Inquiry: Access to Health Care Service; A Report and Recommendation based on the Submission and Proceedings of Public Hearing. 2.2.10 Convention Protecting Vulnerable Groups. Pg. 24. (7, Dec 2018) cited from Http://www.sahrc.org.za /home/21/files/health%20Report.pdf
- Standing H. 2004. Understanding the 'demand side' in service delivery: definitions, frameworks, and tools from the health sector. London: DFID Health Systems Resource Centre.
- Tanahashi T. Health services coverage and its evaluation. Bulletin of the World Health Organization, 1978, 56:295–303. Shenghelia B et al. Beyond access and utilization: Defining and measuring health system coverage in Health Systems Performance Assessment: Debates Methods and Empiricism. Edited by CJL Murray and DB Evans. Geneva, World Health Organization, 2003: 221-23.

- Van Damme, Van Lerberghe W, Boelaert M. 2002. Primary health care vs. emergency medical assistance: a conceptual framework. Health Policy and Planning 17: 49–60.
- Whitehead M, Bird P. 2006. Breaking the poor health-poverty link in the 21st century: do health systems help or hinder? Annals of Tropical Medicine and Parasitology 100: 389– 99.
- World Health Organization (WH0) in 2018. Environmental health in emergencies. Health<br/>Facility.(6,Dec2018)citedfromHttp://www.who.int/environmental<br/>health<br/>emergencies/services/en.health<t