The Utilisation of Primary Health Care in Malta

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DECLARATION

I, the undersigned, hereby declare that I myself have carried out this study and this is entirely my own work under the supervision of Dr. Kenneth Grech M.D., MSc. (Lond), MBA, DLSHTM.

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Dedication

To my parents, my brother and my sister and to my boyfriend
Chris
Acknowledgements

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Abstract

The aims of this study were to evaluate the impact of accessibility on the demand for primary health care services by different socioeconomic groups in the general practice setting. Also, this study revealed the key factors that influence the utilization of health care services. The research study was conducted in Malta. The quantitative data was obtained from telephone questionnaires of a sample of the Maltese population (n=200). Qualitative data was collated from the interviews with general practitioners (n=10) working in the private and public sectors. Two elite interviews, were carried out to round up the research findings. The final number of individuals who participated in the telephone questionnaire was two-hundred (n=200). Variables measured included consultations with private versus government general practitioners and also parents' consultations with general private and public practitioners and specialists concerning their children. The reported satisfaction with the use of primary health care services and the general attitudes of the sample chosen towards sources of health information were also assessed. The socio-demographic characteristics of respondents were analysed to explore the utilization of primary health care in terms of gender, monthly household income, level of education, and age and also to study any inequities within the use of health care services. The telephone questionnaire conferred a response rate of 80%. This study revealed the extent to which the Maltese trust their private family doctor. This study revealed study significant correlations that were found between socioeconomic position and the use of health services in relation to primary care. A number of factors have been shown to influence the utilization of health care services and these were mainly related to cost and fear from doctors. Doctors working in the private sector are highly satisfied because of sound doctor-patient relationships and continuity of care. Due to doctors’ stress, shortage of staff and low job satisfaction, both patients and doctors in the public sector are dissatisfied.
Such research findings can then be used to improve our understanding of the potential factors involved in the uptake and utilization of primary health care services by different socioeconomic individuals. Strategies for reducing socio-economic health inequalities are partly associated with changing social and economical policies, empowering individuals, strengthening social and family networks, and improving the equity of the health care system. The health care system needs to be geographically accessible since improving access is a crucial step in encouraging individuals to better utilize the primary health care services.
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CHAPTER 1
INTRODUCTION
Chapter 1: Introduction

1.1 Chapter introduction

The introductory chapter sets the scene for the study of Health Care Utilisation in Malta. The study background makes reference to ‘Primary Health Care’ (PHC) as defined by the World Health Organisation (WHO). The chapter then proceeds with a brief description of health care utilisation on a global scale and subsequently health care inequalities among different strata of society are described. This description is then applied to the Maltese context and analysed as part of patient satisfaction on PHC. This leads to a definition of the problem and an understanding of the significance of the study statements. The study framework as set by the author is then provided, thus leading to the thesis objectives which serve as guidelines for the entire study. Finally, the first chapter concludes with an overview of each chapter that will be presented within this study.

1.2 Defining primary health care


“There is today a recognition that populations are left behind and a sense of lost opportunities that are reminiscent of what gave rise, thirty years ago, to Alma-Ata’s paradigm shift in thinking about health. The Alma-Ata Conference mobilized a ‘Primary Health Care movement’ of professionals and institutions, governments and civil society organizations, researchers and grassroots organizations that undertook to tackle the ‘politically, socially and economically unacceptable health inequalities in all countries. The Declaration of Alma-Ata was clear about the values pursued: social justice and the right to better health for all, participation and solidarity. There was a sense that progress towards these values required fundamental changes in the way health-care systems operated and harnessed the potential of other sectors”

(WHO, 2008a).
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The World Health Organisation (2008b) calls for an enhanced devotion to the execution and completion of a primary healthcare movement that attempts to reduce disparities across the range, from delivery of primary care services, to addressing the underlying health and social determinants.

PHC is described as the provision of basic healthcare built on technically sound and socially adequate approaches that are universally accessible and affordable to all individuals (Institute of Development Studies, 2008). The PHC perspective responds to the problem of inadequate resources, shortage of health workers; it gets beyond many countries' past focus on providing limited disease interventions rather than strengthening overall healthcare systems. To succeed in providing an efficient, effective and integrated primary health care service, current policies and practices need to be analysed and evaluated thoroughly and certain changes applied where necessary. The policy objectives remain those of enhancing access to care, promoting quality and safeguarding sustainability, especially in a time of changing socio-demographic trends where it is imperative to ensure a sustainable health care system which addresses the needs of the service user.

1.3 Health utilisation

Utilisation has been defined by Segen (2006) as:

"the extent to which a given group uses a particular service in a specified period, although usually expressed as the number of services used per year per 100 or per 1000 persons eligible for the service, utilisation rates may be expressed in other ratios."

Black and Gruen (2005) defined utilization rate as the measurement of health service use. Therefore, this implies that utilization is the rate at which services are utilised by the target population, represented as the number of visits per person per year in the target population.
Chapter 1: Introduction

Numerous researchers have endeavored to develop and test comprehensive theoretical models to identify the factors at play in explaining the use of health-care services. However, Andersen's and Newman's model was developed to study determinants of acute care health service use which is one of the reasons why the researcher will make use of this particular model for the forthcoming study.

There is an increasing amount of evidence that primary health care has an important role in addressing and reducing health inequalities. Indeed, Cummings et al. (2008) assert that the introduction of a primary health care strategy will be aimed at strengthening the role of primary health care, in order to improve health and to reduce inequalities in health. For this to be accomplished it is necessary to address the differences in access and utilisation of primary health services amongst different population groups, in particular, targeting utilisation inequalities among socioeconomically disadvantaged groups. It is imperative that in order to develop strategies that will eventually enhance access and utilization of primary health services by those occupying low-socio-economic positions, the determinants and predictors of primary health services utilization are established.

1.4 Understanding health care inequalities

Health inequalities are systematic differences in health status among different groups in the population, including factors such as socioeconomic position, ethnicity, age and gender (Australian Institute of Health and Welfare, 1995; Mathers, 1994; Turrell and Mathers, 2000; and Wilson et al., 2003). Tackling socioeconomic health inequalities remains one of Malta's most challenging public health issues (The Ministry of Health, the Elderly and the Community, 2009). There is no one clear-cut definition of equitable access to health services (Allin et al., 2007). Most commonly, it is described as equal access to treatment for those in equal medical need, irrespective of other characteristics, such as income. This principle is also known as 'horizontal equity' of health care delivery (Wagstaff and Van Doorslaer, 2000). In contrast, the concept of 'vertical equity' refers to the
extent to which individuals on unequal incomes are treated equally to achieve equity in health care finance (Tamsma and Berman 2004). WHO defines accessibility as ‘a measure of the proportion of the population that reaches appropriate health services’ (WHO, 1998b).

Ensuring equity in access to health care has become an important issue for policymakers (Culyer and Newhouse 2000). Achieving equity in healthcare, in the form of equal use for equal need, is an objective of many healthcare systems (Morris et al 2005). Moreover, Andersen (1995), Gerdtham (1997) and Van der Heyden et al (2003) declared that the prime policy objective is to achieve adequate access to health care by all individuals based solely on their needs, as well as provision of health-care that is independent from individual socio-economic status. Goffin and Goffin (2005) stated that equitable access to health care may alleviate health inequalities. Therefore, access to good quality health services is a significant health determinant.

Over the years, improved access to health care services for the lower socio-economic groups helped reduce inequities in health, notably differences in mortality (Dahlgren and Whitehead 2006). Health systems are still widely recognized as an important means to improve population health. Improving health systems can play a role in tackling health inequalities (WHO 2008b and Mackenbach 2005). Socio-economic differences in health services access across socioeconomic groups may exacerbate existing health inequalities. Thus, understanding the extent of inequalities in access is essential in order to appreciate the broader goal of health equity (Allin et al 2005). The overall picture emerging from research is that richer, better educated people find their way to medical specialists more easily and more frequently, while people in the lower income brackets tend to use emergency services more often. The access to general practitioner services seems fairly equally distributed across incomes.
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1.5 Health utilisation and patient satisfaction in Malta

The Health Interview Survey (Asciak et al., 2003) carried out in Malta in 2002 provides an idea of the level of patient satisfaction experienced by the Maltese population in various sectors of health care. Although patients expect a better service from the private than from the public sector, the expectations of the user across sectors may not always be met (Camilleri and O'Callaghan 1998).

The majority of the Maltese population prefers to use the service of a private family doctor rather than attend the public health practice (Azzopardi and Dixon, 1999). Despite this, around 80% of the Maltese population makes use of the government health services at some point even though most of these would still have their own private family doctor (Balzan et al., 2008). Unlike the U.K., Malta does not require a patient to register with a family doctor practice and therefore Maltese patients are likely to shop around when looking for a family doctor. If the private family doctor provides a good service and the patient is satisfied, he/she would then remain loyal to this doctor unless for some reason something goes wrong and the relationship with the doctor breaks down (Robertson et al. 2008). This results in a strong doctor patient relationship and good continuity of care and, in turn, leads to a high level of satisfaction for both doctor and patient.

1.6 Statement of the problem

Locally the utilization of primary health care services is considered as insufficient and inadequate. Therefore the utilization of primary health care although it exists it is not being used efficiently and appropriately. Besides, acute care services overshadowed primary care for the past two decades. There is no continuity of care between various provider settings. In order to maximize the services offered at Mater Dei Hospital, the services delivered by the PHC have to be complementary to one another. Revamp of the primary health care sector is an essential process that will eventually remove unnecessary pressure from acute health care services. This spared the researcher to carry-out this research study to
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take an in-depth analysis of this matter. In this study it is postulated that if targeted measures are aimed to tackle health inequalities and improve access and utilization of health care services for the different socioeconomic groups, health inequalities may be alleviated.

1.7 Significance of the study

The first report derived from the European Health Interview Survey (EHIS) carried out in 2008 by the Department of Health Information and Research presents a comprehensive overview of health care services utilization in Malta, out of pocket expenditure and the perceived level of satisfaction by the Maltese population. This research, however, takes an in-depth perspective on health services utilization in Malta and the research findings can then be used to improve our understanding of the potential factors involved in the uptake and utilization of primary health care services by different socio-economic groups.

1.8 Study framework

Firstly, this study will be conducted in Malta excluding the island of Gozo as the health utilization patterns in Gozo are different.

Secondly, the study will cover the PHC which is provided by two main sectors. The first sector is the private sector (accounting for two thirds of the workload) and consists mainly of solo family doctor practices (Azzopardi Muscat and Dixon 1999). Over the last few years some family doctor group practices have been evolving in various parts of the island.

The second sector is the public sector which consists of nine regional health centres and forty-seven district clinics which provide free\(^1\) comprehensive health care services.

\(^1\) The term ‘free’ is defined as the delivery of service without payment for Maltese citizens
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Such research findings can then be used to improve our understanding of the potential factors involved in the uptake and utilization of primary health care services by different socio-economic groups.

1.9 Thesis objectives

The main research question guiding this study is:
Do different population sub-groups in Malta show different patterns of utilization in relation to general practitioner services in the PHC setting and what are the key factors that influence this relationship? Therefore it is pertinent that the objectives of the thesis are clearly defined.

Firstly, the study is to evaluate the impact of accessibility on the demand for primary health care services by different socio-economic groups in the general practice setting.

Secondly, it aims to evaluate theoretical models that have been used to understand the utilization of primary health care services.

Thirdly, this dissertation aims to determine the relationship between individual variables such as socioeconomic factors, gender, age and education in relation to how they affect the demand for primary health care services in Malta.

Fourthly, it aims to provide recommendations on how to ensure an equitable access to health care to help alleviate health inequalities.
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1.10 Thesis overview

The research study is divided into six chapters. In the first chapter, the subject is introduced. The aims and research questions are provided and the significance of the study discussed.

The second chapter presents the literature review and discusses the previous research concerning health services utilization, including local data and doctors' perceptions of health services utilization in the public and private sectors. The difference between private and public health services is researched and applied to the local scenario.

In chapter three, the methodology of the study was carried out is described in detail, including the difficulties that were encountered and how these were overcome. The tools used for data collection (questionnaire and interview method) are described and the methodological limitations identified and discussed.

In chapter four, the findings of the survey questionnaire from both public and private sectors are presented and compared. The results from the qualitative analysis of the doctors' interviews are also included.

The proceeding chapter discusses the findings of the field research and compares them to the previous research as outlined in the literature review. Chapter six uses these research findings to propose ways of ensuring equitable access to health care which may alleviate health inequalities and thus increase patient satisfaction in primary health care services utilization.
CHAPTER 2
LITERATURE REVIEW
Chapter 2: Literature Review

2.1 Chapter overview

This chapter illustrates the major findings in relation to the utilisation of health care services and primary care including the local context. In addition, evidence from current studies about the use of PHC services by different socio-economic groups will be presented. The literature review then proceeds with findings concerning how the utilisation and access of health services is measured within the population. The potential factors impacting the main determinants of uptake and utilisation of primary health-care services by different socio-economic groups are thus discussed. The theoretical models that have been used to understand and predict the utilisation of PHC services by different population subgroups will also be provided. Finally, a theoretical framework for the current research will also be presented.

Electronic databases that have been used for this study include MEDLINE, Cochrane, Pub-Med, Google Scholar, Sage Journals, and EBSCO Host search engine. Consequently, relevant studies and articles from 1972 to 2008 were examined. Several studies on health services utilisation conducted in various countries worldwide, including local studies on the utilisation of health services, were retrieved. These studies target and discuss key factors which influence the utilisation of health services, that is, social class, age, gender and level of education. Comparisons of the private and public sectors were carried out in various countries.

2.2 Health care services

Achieving equity in healthcare, in the form of equal use for equal need is an objective of many healthcare systems (Morris et al 2005). The beginning of interest in equity in health is difficult to pinpoint. Certainly, the issue of social disparities in health has a long history, dating back in modern history at least to the writings of Frederick Engels, who, in 1845 in The Condition of the Working Class in England, asked, "How is it possible . . . for the lower class to be healthy and long-lived?"
Chapter 2: Literature Review

Impetus to the policy relevance of social determinants of health was provided by the Black report (1980). This report titled Inequalities in Health (1980) described and analyzed the existing social inequalities and proposed government actions to overcome them. Populations of lower social class are subjected to the inverse care law. Enunciated by Hart in the early 1970s, this law asserts that populations most in need of health services are the least likely to receive them (Hart 1971). The availability of good medical care tends to vary inversely with the need for it in the population served. This inverse care law operates more completely where medical care is most exposed to market forces, and less so where such exposure is reduced.

Several studies have classified perceived health status or health-related quality of life (HRQOL) as a very important predictor of health service utilisation (Hulkka and Wheat 1985, Fernandez and Leon 1996, Dunlop et al 2000, Lam et al 2002, Chou and Chi 2004, Parslow et al 2004 and Morris et al 2005). Furthermore, many studies provided evidence that demographic characteristics also affect health care need and utilisation of health care services (Pappa and Niakas 2006). Specifically, women report poorer health and use primary health services more often than men. Women also have higher rates of hospitalisation and surgery and increased total expenditures, whereas men are less likely to receive preventive medical services (Parslow et al 2004, Viera et al 2006 and Redondo-Sendino 2006). A growing body of research has shed light on the degree to which socio-economic differences affect the use of health care services (Van der Meer et al 1996 and Van der Heyden et al 2003). Other studies have researched and explored the influence of ethnicity, race and community area on health care services utilisation (Fylkesnes 1993).

2.3 Primary health care

PHC is considered the major function and activity of a country’s health system, and it is the principal vehicle by which to deliver the majority of health care services (World Health Organization, 2003b). PHC has been defined by the World Health Organisation in 1978 as:
"an essential health care based on practical, scientifically sound and socially acceptable methods and technology. This made primary health care universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-determination".

Since the Declaration of Alma-Ata in 1978 (World Health Organization, 2003a), the health situation in many countries has changed considerably. PHC can also be described as the provision of basic healthcare built on technically sound and socially adequate approaches that are universally accessible and affordable to all individuals (Institute of Development Studies 2008). Over the past 25 years there have been major changes in the patterns of disease, demographic profiles, exposure to major risks and the socioeconomic environment. Governments have also substantially changed their roles and responsibilities in relation to public health and the organisation and delivery of health care, thereby changing the context for framing and implementing health policy.

In a regional conference entitled ‘Revitalizing PHC’ held by the World Health Organisation, Chunharas (2008) identified the three perspectives of PHC as being: - a package or set of activities that contains a minimum of eight elements that combine selective and comprehensive PHC; a provision of care at various levels – primary, secondary and tertiary; and an approach related to universal coverage, inter-sectoral collaboration, community participation and use of appropriate technology. The PHC system is the individual’s first contact with health care (Starfield 1992). This implies that the foundation of PHC lies in the adoption of a sound doctor-patient relationship as well as the continuity and adequate coordination of care. Strategies to promote health and disease prevention, thereby reducing the socioeconomic burden of preventable illness, need to be pursued. These can lead the way to work towards a vision which encourages promotes and
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fosters a healthy environment that will enable the Maltese population to make the right choices in order to attain a high level of health and well being (Cassar 2008). Furthermore, PHC in the local context is adopting a patient-centred approach where community participation and patient involvement in decisions and management relating to various types of treatment modalities are being emphasized.

2.4 **Primary health care in the local context**

Locally, PHC is provided by the state health service and by private family practitioners. The public sector consists of nine health centres and forty-seven district clinics whilst the private sector consists mainly of well established private general practitioner practices and a small number of group practices. These two systems of general practice function independently of one another. Azzopardi and Dixon (1999) estimate that the public sector accounts for one-third of the service provision whilst the private sector accounts for the rest. The European Health Interview Survey (2008) has provided the policymakers with a wealth of information on the health practices and preferences of the Maltese population. It gives a complete overview of the utilisation and consumption of health care services in both the public and the private sectors. This survey emphasizes the extent to which Maltese people trust their family doctors. The European Health Interview Survey (EHIS, 2008) revealed that Maltese patients prefer to visit their private family doctors than the government’s general practitioner. This situation is reversed when it comes to consultations with specialists which according to the (EHIS, 2008) are predominantly sought in the public sector. From this survey, very imperative, constructive and useful information on preventive care has been yielded particularly on current uptake of screening services such as mammography and cervical smear tests, as well as routine checkups, including glucose and cholesterol monitoring. An overview of the public and private sectors of PHC in Malta will be presented in the next section of this literature review.
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2.5 The public and private sectors of PHC in Malta

2.5.1 The public health sector

It is the primary responsibility of the Maltese government to provide public health care services that are patient-centred, coordinated and of the highest quality. The health centres developed from what were originally known as “polyclinics” (Azzopardi and Dixon 1999). These replaced the PHC service provided by District Medical Officers (DMOs). A number of health centres providing free emergency general practitioner services and various other health care services were established. PHC in the public sector is offered free of charge at the point of use (Azzopardi and Dixon 1999).

Family medicine is the medical specialty involved in primary care. An important aspect of family medicine is the need to adopt a patient-centred approach. Dealing with disease in the primary care setting is cheaper and more cost-effective when compared to secondary care (Starfield 2001). In addition, the effect of family medicine is quite strong when dealing with disease patterns. In response to such issues, guidelines are now starting to be issued for primary care physicians; emphasizing the increasing recognition and importance that family medicine is gaining worldwide (Abela 2007). Locally, family medicine has a public and private interface. Azzopardi and Dixon (1999) argue that within this system patients are not registered with their own general practitioner and are seen by the doctor who happens to be on duty at that particular time. This contributes to a lack of continuity of care and is not conducive to the development of a sound doctor-patient relationship which is one of the fundamental aspects of primary care. In turn, this leads to dissatisfaction for both the patients and the doctors. The system treats patients when something goes wrong and offers very little opportunity for health promotion and disease prevention interventions (Azzopardi and Dixon 1999). Abela (2007) argues that there is no registration system as in other European countries and people are free to use both the public and the private general practitioner service.
Traditionally and historically, Malta has been linked to the United Kingdom (Abela 2007). Locally, the Maltese government has been investing heavily in the healthcare services available for the Maltese population. However, generally speaking, PHC is not being given its due recognition in contrast to the situation prevalent in the United Kingdom (Starfield 2001). During these last few years, an important milestone has been achieved thanks to the opening of ‘Mater Dei Hospital, nevertheless, this has been detrimental to the development of primary care. To maximize the services offered at Mater Dei Hospital, services offered by the PHC system have to be effective and complementary to each other. According to Cassar (2009), an exercise has been initiated to expand the services offered within the primary health setting. A strong and supported primary care service is needed for the efficient running of Mater Dei Hospital. It is only with a primary care service which acts as a gatekeeper that this hospital can function effectively.

It must be noted that the Maltese health system is different from that of many other countries, such as the United Kingdom (UK), the United States (US) and Australia. For instance, a key element of the Australian health care system is consumer choice, where Australians have almost no restrictions on choice of a primary care provider or general practice, both of which are usually heavily subsidised through the universal health insurance systems. This undoubtedly contributes to the historically high level of patient satisfaction. On the contrary, in the United States of America, most managed care plans limit consumer choice to a designated panel of health care providers from whom consumers are allowed to seek reimbursed care (Duckett 2000). On the other hand, in the United Kingdom consumers must sign up to a general practitioner’s list and there are formal procedures to observe when transferring from one list to another. For the past years, Malta has operated a statutory health-care system that is funded via general taxation, and is free at the point of use. Pincock (2005) stated that:
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"this equitable system—Malta's miniature scale means problems of access to health care are almost non-existent".

Today within an increasingly fragmented society, technology is playing a crucial role. Locally, we are experiencing the direct effects of globalization as evidenced in the trends of irregular immigration. Further to this, the ageing population is also a crucial socio-demographic trend. The number of elderly persons living in Malta is expected to reach 74,000 (National Statistics Office 2008). Increased drug and device costs and a high incidence of chronic conditions are placing enormous financial pressure on the Maltese health care system. These factors are compounded by the current global financial turmoil. With these challenges facing our society, The Ministry of Health, the Elderly, and the Community has placed the improvement and consolidation of PHC as the foremost priority in health. The policy objectives remain those of enhancing access to care, promoting quality, and safeguarding sustainability. Locally, the Maltese government has established a task force which was set up in 2007 by the Ministry of Health, the Elderly and the Community to carry out a wide and thorough consultation process in this regard. The objective of this task force is that of formulating a strategy proposal to be adopted by the Maltese government; and these should incorporate:-

- Changes that the patient and their families expect to see;
- Strategic challenges facing community and PHC;
- Implications for an integrated approach.

The Ministry of Health, the Elderly and the Community (2008) declared that a socially inclusive community should engage in active promotion of health and in caring for the more vulnerable members, thus moving from the institutionalization paradigm to a new ethos of interdisciplinary care. This entails that the PHC system in Malta should improve the equity of access, provide high-quality care for socially disadvantaged groups, ensure access to PHC appropriate to various health-care needs, and develop universal and targeted policies that reduce inequalities.
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2.5.2 The private health sector

The private PHC service is provided by general practitioners mostly working in single-handed practices (Azzopardi and Dixon 1999). Also, a small number of group practices compose the private sector. Around 70% of primary care is driven and covered by the private family physician (Cassar, 2008). Moreover, in a study that compares patient satisfaction between private and public sectors of PHC, Agius (2010) found that 85% of public sector respondents have a private family doctor. This implies that the private family doctor model has also continued to be cherished as a valuable and focal point for family health. The patients consider the family doctor to be their friend, confidant and close advisor. Partnerships with the private sector, non-governmental organizations, and other governmental entities should be taken into account as these private sector organizations can contribute in a significant way by means of enriching and supplementing the spectrum and quality of health care services provided by the public sector (Cassar, 2009). The main objective in Malta is to enrich the service provided by the private family doctor while improving and strengthening the care provided in health centres. This will create an integrated process of care where both sectors would complement and support each other and the patient would move seamlessly from the family doctor health care visits to the health centre and if necessary on to hospital care (Cassar 2009).

2.6 Primary health care services use by population subgroups

2.6.1 Utilisation of primary health care services by gender

Population ageing poses significant challenges to PHC providers and policy makers (Redondo-Sendino et al 2006). PHC reform can mitigate the pressures, but these initiatives require clinical benchmarks and evidence regarding various health utilisation patterns and trends (Vegda et al 2009). In a period, where patient-centered care and disease-specific guidelines strive for greater consideration, an understanding of the current situation of chronic disease management in the PHC
context is required. This is because PHC is the most common setting for the provision of chronic disease care (Tinetti et al 2004, Ostbye et al 2008, Upshur and Tracy 2008). A number of previous studies have explored PHC services utilisation and morbidity patterns by age and gender (Bertakis et al 2000, and Redondo –Sendino et al 2006 and Schappert and Burt 2006).

For instance, Bertakis et al (2000) have shown that women use more PHC services than men. In their study, Bertakis et al (2000) used important independent variables, such as patient socio demographics and health status, to investigate gender differences in the use and costs of these services. Their use of health care services and associated charges were monitored for one year. Major findings from the study by Bertakis et al (2000) showed that women had significantly lower self-reported health status and lower mean education and income than men. Women had a significantly higher mean number of visits to their primary care clinic and diagnostic services than men. Bertakis et al (2000) concluded that women have higher medical care service utilisation and higher associated charges than men. In line with this, men appear to have lower health utilisation rates than women (Cameron et al 1998, Windmeijer and Santos 1997, and Winkelmann 2004).

Compared to men, women report greater morbidity and make greater use of PHC services. A cross-sectional study carried out by Fernando-Rodendo et al (2006) examines potential determinants of gender differences in the utilisation of PHC services among the elderly covering 3,030 subjects, representative of the non-institutionalized Spanish population aged 60 years and over. Potential determinants of gender differences in the utilisation of PHC services were classified into predisposing factors and need factors. Enabling factors were also included. One major finding from this study revealed that as compared to men, a higher percentage of women visited a medical practitioner. Further to this, the factors that best explain the greater utilisation of PHC services by elderly women versus men are the number of chronic diseases and health-related quality of life.
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(HRQL). However, much of the available information in this study classifies all those aged sixty-five and above as one homogeneous group; this study lacks a focus in primary care and has been predominantly disseminated to gerontology and geriatrics audiences. Moreover, it only examines only one health service and individual specific disease condition (Vegda et al 2009).

Although it is well known that utilisation increases with advancing age (Nie et al 2009), the study conducted by Vegda et al (2009) aims to add precision to the existing knowledge by using a large patient sample of all older patients in a family practice unit. The objective of this study was to investigate patterns of use of health services among patients aged 65 and over in a defined academic family practice setting. The study measured geriatric patients’ use of health services, number of health conditions and use of medications at the level of primary care practice, in an attempt to investigate age and gender-related utilisation trends. Overall, Vegda’s et al’s (2009) findings stressed that older patients had significantly more physician visits. Also, the oldest group made 46% more visits than the youngest group (Vegda et al 2009). In conclusion, the results presented in this study show a greater PHC interaction with advancing age. This could be due to a number of chronic diseases.

2.6.2 Utilisation of health services by immigrants

On the other hand, the health care services might be utilized by other population subgroups including immigrants. So much so, that the greater diversity of population resulting from migratory flows poses new challenges to national health care systems (Gardner 2007 and Anderson et al 2007). The number of immigrants is also growing almost everywhere in Europe according to the International Organization for Migration (2005) and the Eurostat (2006). In Malta, in the first ten months of 2005, more than 1,500 asylum seekers came from Africa (Sandford, 2005). The figures appear to be small when compared to the large numbers arriving in other countries of the European Union, but when one considers that
almost 410,290 (National Statistics Office, 2008) people live there making it the third most densely-populated country on earth health care issues become more pressing. In fact, the utilisation of health care services by immigrants has become a key and crucial international political and public health issue (Hargreaves et al 2006), especially taking into consideration the access to health services (Goddard & Smith 2001, Sundquist 2001, Stronks et al 2001).

Dias, in a study conducted in 2008 showed that among National Health Service users, 35.6% attended Health Centres, 12% used Hospital services, and 54.4% used both services. Among these study participants, 22.4% reported dissatisfaction with health services. As shown in other studies by Dubard & Massing (2007) and Fenta et al (2007), immigrant men underutilize health services. After adjusting for all variables, utilisation of health services among immigrant men continued to be significantly associated with length of stay, legal status, and country of origin. Among immigrant women, the use of health services was significantly associated with length of stay and country of origin (Dias et al 2008). Utilisation of health services by immigrant groups depends on various determinants (Hargreaves et al 2006), namely, on how a society is able to foster a user-friendly environment for immigrants (Lamkaddem et al 2008) and how it provides the means to overcome the socio-economic barriers that may limit access to health care (Scheppers et al 2006). Consistent with the literature, undocumented migrants are more likely to report lower utilisation (Torres-Cantero et al 2007). The results which have been attained by Dias et al (2008) are consistent with various other studies which emphasize inadequate support to warrant access to health services (McKee 2002). Ultimately, Dubard & Massing (2007) and Dias et al (2008) affirmed that there is a need to understand better how to guarantee access to health services and how to deliver adequate and integrated, coordinated health care to immigrants with greater attention to health promotion and prevention.
2.7 Socio-economic position, education and the use of PHC utilisation

Health services research typically concerns itself with issues of organization, financing, utilisation, and costs of health care. Over the past several decades researchers have increasingly documented that improving access to high-quality care will improve the population's health (Robert 1999 and Lurie et al. 2003). It is essential to pursue and target health strategies such as preventive approaches that will not exclude any socio-economic groups. However, an examination of the relationship between socioeconomic position (SEP) and utilisation of PHC services generally indicates that although the use of several different types of preventive health services is increasing, discrepancies related to socioeconomic characteristics still remain (Breen and Kessler 1994; Giles et al. 1993; Lorant et al. 2002, National Center for Health Statistics, 2004).

The research on health services utilisation is very limited (Wiggers and Sanson-Fisher, 1997). Nevertheless, there is a body of research that has examined such a relationship to other health issues namely immunisation, dental care, breast cancer screening and cervical cancer screening, all of which are relevant to the use of preventive health services by disadvantaged groups within a broader range of health services. In addition, other studies have examined other preventive aspects of health care utilisation. These are generally assessed using indicators such as SEP group, race or ethnic background and rural/remote residence. On the other hand, the inverse relationships between socioeconomic status (SES) and unhealthy behaviors such as tobacco use, physical inactivity, and poor nutrition have been well demonstrated empirically but constitute diverse fundamental causal and contributory mechanisms. According to Pampel (2010) the disparities in health behaviors involve something more than the ability to use income to purchase good health. Pampel (2010) explained that smoking, exercise and diet were evident among individuals who occupy low socioeconomic positions. The lack of clear support for any one explanation suggests that the literature on SES disparities in health behaviours can do more to design studies that better test for the importance
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of the varied mechanisms. Equity in access to healthcare has become an important issue for policy-makers (Wagstaff and Van Doorslaer 2000). For this reason, access to good quality health services will be discussed in detail in the following section.

2.8 Socio-economic status and the use of PHC utilisation across Europe

Over the years, improved access to health care services for the vulnerable has helped diminish health inequalities, notably differences in mortality. Socio-economic differences in health services utilisation may intensify existing health inequalities (Mackenbach 2005). Andersen (1995) emphasized that equitable health-care utilisation is only present when PHC allows the needs of users to take precedence over the users economic capabilities.

Grossman (1972) declared that the demand for health services is a function of the individuals’ perceived health status, age, income and the level of education. According to Grossman (1972), demand for health care services increases with age. In contrast, a negative relationship between the level of education and demand for health care services is anticipated. Dustmann and Windmeijer (2000) came up with a model to explain the demand for health care and this was based on the hypothesis that individuals resort to health care depending on the time available and the quality of the service offered. Generally, it could be argued that demand for health care is not decided solely by the individual. The decision-making process of health utilisation consists of two distinctive processes (Pohlmeier and Ulrich 1995 and Winklemann 2004). The first is the decision process (the contact decision which is stemmed by the patient) and the second is the frequency process (the intensity of the treatment which is significantly influenced by the doctor). On the other hand, Van der Heyden et al (2003) advocated that patient factors are more imperative in describing different utilisation of health care services.
Van Doorslaer et al (2004) concluded that different variables and components of the individual’s socioeconomic position influence various types of health care utilisation in various ways. According to Economou et al (2008), the demand for health-care services which are optional in nature is based on the individual’s priorities, as for instance, a visit to a medical or surgical specialist, and these are mainly described by social and enabling factors (Andersen 1995).

In another study, Economou et al (2008) report the effects of the individual’s socioeconomic status determinants on the healthcare demand utilizing Grossman’s (1972) and Andersen’s (1995) approach. This study focuses on the effects of unemployment, low income and hours of work on health-care utilisation, which one may argue represent an under-researched area in the literature. The study was carried out separately in nine European Union (EU) countries to investigate the differences in utilisation of health care services. One of the findings of this study relates to increased health care utilisation rates for the unemployed. The results were significant for five out of nine countries (Belgium, Denmark, Greece, The Netherlands and Portugal). Economou et al (2008) reported that an individual working more than forty hours weekly is strongly associated with less demand for health care services for all the EU countries investigated with the exception of Spain and Ireland. A growing body of research shows that horizontal inequity is dependent on individual socioeconomic status even when taking into consideration hospital services (Van der Heyden et al 2003 and Economou et al 2008).

Billings et al (1993) state that income is the strongest indicator health services utilisation rates, including hospital services. In actual fact, individuals who are in the lowest income bracket, who are old, whose perceived health is poor and who suffer greater hospitalization risks consume the greatest share of health services provided (Schofield et al 2003). This is inconsistent with Gravelle et al (2003)’s findings concerning socioeconomic indicators for inpatient admissions in the United Kingdom. Nevertheless, Cameron et al (1998) and Deb (2001) state that
health status indicators seem to be more significant determinants of health-care use in comparison to demographic and socioeconomic status characteristics.


There seems to be a relationship between age and health care utilisation. In a study by Jochmann and Leon-Gonzalez (2004) a relationship was found between age and the number of visits to the general practitioner. Similar findings were made by Vegda et al (2009) and Jochmann and Leon-Gonzalez (2004) who reported that the number of visits to the doctor increases with advancing age, the latter becoming even more evident at around eighty-five years of age. Winklemann et al (2004) explain that individual socioeconomic characteristics are only important in explaining the need to contact a doctor. In other words, being a male, holding a high income and being well educated made an individual more likely to visit a general practitioner. Gerdtham (1993) points out that there is a positive relationship between income and the decision to visit a specialist. The emerging picture thus suggests that health care utilisation is dependent on the individual’s health status. The findings from the literature reveal a correlation between predisposing variables like age, gender, level of education and income. This level of pertinence is similar to the local context.

Economou et al (2008) found that employment status is a strong determinant of the number of visits to a doctor and in fact, in seven out of nine European Union countries (Denmark, Greece, United Kingdom, Ireland, The Netherlands, Portugal, etc.)
and Spain) unemployed persons were associated with an increased number of visits to a doctor in comparison to employed individuals. Unemployment was found to be a determinant of GP utilisation rates through its effect on psychological and physical health. This is indeed in line with the literature and findings of other studies Mathers and Schofield (1998), Harris *et al* (1998), Ferrie *et al* (2001) and Economou *et al* (2008). On the other hand, a study of the long-term unemployed conducted in Finland demonstrated a higher visit rate to PHC services during a six month re-employment period than during the period of unemployment that preceded it (Virtanen 1993). Additionally, Carr-Hill *et al* (1996) confirmed that higher rates of consultations were found in patients who were classified as unemployed. Carr-Hill *et al* (1996) also concluded that demographic and socioeconomic factors can act as powerful predictors of consultation patterns. The importance of the labour market is further confirmed by Virtanen *et al* (2006) who declared that the utilisation of doctor visits varies according to employment, being relatively low among the permanently as well the temporary unemployed. This under-utilisation of health care is emphasized when clinical need is taken into account.

Furthermore, Economou *et al* (2008) and Winkelmann (2004) found a strong effect of income on the number of doctor visits for European countries with the exception of Ireland, thus, indicating that the possibility of seeing a doctor increases with income. Similarly, there is a general consensus that visits to specialists are affected positively by the income situation (Economou *et al* 2008). Allin *et al* (2005) asserted that another socio-demographic variable depends on the level of education. In actual fact, Economou *et al* (2008) revealed that highly educated individuals in Denmark, Greece, Ireland, Italy, The Netherlands and Portugal have increased likelihood of visiting a doctor in comparison to individuals of the lowest educational level. In fact, education appears to be a more important cause of inequality in specialist care than in other health care services (Van Doorslaer *et al.*, 2004; Allin *et al.*, 2005).
Evidence based on the 2003 European Quality of Life Survey suggests that income-related inequalities in access existed in all current EU member states since access as such can rarely observed and measured, a range of indicators are used to measure its dimensions. Access hurdles are thus seen in terms of distance, delay, waiting times and cost factors. Differences are most pronounced as regards the proportion of people who indicated that their most recent visit to the doctor was made very difficult by cost factors (Anderson, 2004). The access to General Practitioner services seems fairly equally distributed across income. However, once people occupying the lower income brackets go to see their GP they are likely to consult him/her more often. In contrast, the level of pro-rich inequality as regards access to medical specialist increases with the total number of specialist visits (Allin et al 2005). Another study conducted by Busato and Kunzi (2008) used multivariate regression and hierarchical models to analyze the data of primary care service areas in Switzerland. Statistical models yielded contrasting results for various geographical, socio-demographic and cultural factors such as cost, distance and accessibility; thus indicating variation in utilisation and provision of health care resources in Switzerland.

Standardization is required in order to measure inequity in utilisation of health care so as to indicate differences in need (O'Donnell et al 2007). The literature indicates that qualitative aspects of access that may help understand inequalities however they tend to receive less attention. In fact, Allin et al (2007) remark that the need for services is often measured by levels of self-reported ill-health which is therefore limited and possibly unreliable. This approach is also reflected in the way access is measured within EU related frameworks.
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2.9 Factors impacting determinants of PHC’s uptake and utilisation

2.9.1 Access barriers

Even where universal access to health services is formally in place, individuals can face a range of barriers hindering the actual utilisation of that service. According to Busse et al (2006) if persisting inequities in access are to be addressed, it is necessary to look beyond the assumption of universal coverage. Barriers to access may stem from factors within the health system itself (i.e. at the supply side) or be due to patient-related (that is demand side) aspects. Supply-side barriers may be due to the following:

- gaps in population coverage of health insurance;
- scope of the public health benefit package (‘health basket’);
- financial factors such as cost-sharing;
- geographical factors such as distance;
- organisational factors, including waiting lists and opening hours;
- lack/appropriateness of information.

Inequality of access at the demand side is related to the characteristics of the potential service users, such as income, age, gender, cultural background, health literacy, or health beliefs. Other access hurdles have relatively more impact on disadvantaged groups than others (Tamsma and Berman 2004). Examples of these are costs and distance, as well as demand-side factors such as communication skills and health beliefs (Dixon et al 2003).

EU statistics on living and income from 2005 indicate that a social gradient for self-reported unmet need exists for primary healthcare systems across the EU. The line of efficiency of health systems is somewhat reflected in the absolute and relative importance of the various access hurdles. In contrast to organisational and geographical hurdles, costs appear to be the most important barrier to the utilisation of health services for the vast majority of EU member states.
Nevertheless, out-of-pocket payments have consistently increased across EU countries. This is due to the exclusion of certain types of health care from the public benefits package and to rises in co-payments. To compensate more vulnerable groups for these effects member states have introduced exemptions, pre-payments and expenditure ceilings (CEU 2007), thus mitigating the financial burden.

Extent and characteristics of financial hurdles are shaped by national health system characteristics and vary from country to country. Health services may be funded through taxation, social health insurance, private health insurance and/or private costs sharing. The latter includes direct user charges, or ‘out-of-pocket payments’. Evidence suggests that private health insurance impacts equity of access negatively. (Mossialos and Dixon, 2002; Tamsma and Berman, 2004).

Professional characteristics towards PHC practices impact on the use of health services, whilst general satisfaction might be either a cause or a consequence of higher use rates. Dutton (1986) discussed the idea that specialised training may encourage more intensive evaluation of patients, such as comprehensive diagnostic testing. The impact of general practitioners’ attitudes towards low-income patients on the use of health services has been observed. Despite higher rates of chronic disease and lower rates of preventive care uptake, socioeconomically disadvantaged groups receive fewer long general practitioner consultations than other groups (Furler et al 2002). Moreover, practitioners are more likely to discuss preventive care topics with patients of high educational or occupational status.

Research conducted in the USA reveals similar results. Riessman (1974), for instance, discussed the reason for lower utilisation of health services by the low-SEP groups in the United States and suggested two major explanations. One was the ‘culture of poverty’ influence on use of health services, ‘culture’ comprising a body of interrelated social, economic and psychological traits that are transmitted
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from generation to generation. Dutton (1978) also conducted an empirical study to explain the low use of discretionary health services (the number of preventive health examinations reported by respondents) by the socioeconomically disadvantaged. The results from this study suggested that neither financial access nor health education, without accompanying improvements in delivery systems, will eliminate income differentials in the use of health care. This signifies that it is not facilitated for better access.

2.10 Health care models

2.10.1 The Health Belief Model

The Health Belief Model (HBM) was one of the first, and has been one of the most commonly used theoretical frameworks to explain and predict health-related behaviours (Bowling, 2002; Glanz and Rimer, 1994; Glanz et al., 2002; Gochman, 1997; Nutbeam and Harris, 1999). It was originally developed by researchers in the 1950s to explain why people failed to participate in programs to prevent and detect diseases, for example health checks and immunisation programs. It has been substantially developed and modified for application to other types of health behaviours (Janz and Becker, 1984; Nutbeam and Harris, 1999). The model predicts that individuals will take action to protect or promote health if they perceive themselves to be susceptible to a condition or problem, and if they believe it will have potentially serious consequences, that is, if the perceived threat is high. The model also predicts that individuals believe a course of action is available that will reduce their susceptibility, or minimize the consequences; that is, the benefits of taking action outweighed the costs or barriers.

The model has been refined substantially by including factors such as additional personal characteristics, social circumstances and the concept of self-efficacy; collectively, these have improved the strength of the model in predicting behaviour change (Nutbeam and Harris, 1999). As mentioned above, the HBM has been most useful when applied to behaviours for which it was developed originally. On the
other hand, it has turned out to be less useful in predicting more long-term, complex and socially determined behaviours (Nutbeam and Harris, 1999). A critical review of the model by Janz and Becker (1984) pointed to the limitations of the HBM in predicting and explaining health behaviour: The ‘Health Belief Model’ is a psychosocial model; as such, it is limited to accounting for the variance in an individual’s health behaviour as can be explained by their attitudes and beliefs. It is clear that other forces influence health actions as well.’ These ‘other forces’ include social, economic and environmental conditions, which significantly shape the barriers to action which are fundamental to the model. For example, limited access to health care services and health resources can greatly impede effective health actions such as preventive check-ups, and will in turn impact on the individual’s perceptions of barriers and benefits that are integral to the model (Nutbeam and Harris, 1999).

2.10.2 PHC services utilisation models

Evolving out of the health belief model, Andersen’s Behavioural Model of Health Services Utilisation was proposed in the late 1960s (Andersen, 1968). This model was initially proposed and empirically tested in a series of studies to assist in understanding why families use health services, to define and measure equitable access to health care, and to assist in developing policies to promote equitable access. The Andersen model has made the following contributions to health services research.

First, it has helped to organise and integrate an array of correlates of health care behaviour from diverse literature sources in sociology, psychology, economics and medicine into predisposing, enabling and need predictors of families’ use of physician, hospital and dental services. Secondly, it has systematically characterised the array of predictors of health services utilisation. This includes independent variables such as demographic variables (age, sex and family size), social structure (employment, social class and occupation) and health beliefs as
predisposing factors, family and community resources as enabling factors, and
health status as need factors. Thirdly, it was delineated the indicators of health
services utilisation (dependent variables) according to the type of service such as
hospital, physician and dentist, and the reason for use (discretionary or
nondiscretionary). It also specified the hypothesized relationships between the
predictors and indicators of utilisation. Finally, it provided an integrated
theoretical and empirical approach that has been widely applicable to diverse
populations at international, national and local levels, and addressed important
health policy problems such as access and equity (Gochman, 1997).

Subsequently, Andersen's model was modified, expanded and applied to examine
the predictors of health service utilisation in relation to an array of health problems
and issues. Approximately ten years after Andersen's original model, Andersen
and Newman formulated an expanded model which added to and elaborated the
components in order to be more responsive to societal and policy changes
affecting health care, as well as to fully reflect the increasing complexity of health
care service delivery. The framework hypothesizes that societal determinants
affect individual determinants, both directly and indirectly, through the health
services system. Individual determinants have the most immediate influence on
people's decisions about the use of services. Individuals, rather than families,
were the units of analysis in the revised framework. The previous three
components, predisposing, enabling and need predictors, were incorporated as the
principal individual determinants of health service utilisation, and the framework
breaks out societal determinants and the health services system as important
aggregate determinants of individuals' health care-seeking behaviour. Importantly,
the revised framework emphasised a multifaceted concept of utilisation. As well as
the type of utilisation acknowledged in Andersen's original model, which refers to
the category of services rendered, it also includes the purpose and the unit of
analysis under the health services utilisation. The former refers to the reason care
was sought: for health maintenance in the absence of no or minor symptoms
(primary care), for the diagnosis or treatment of illness (secondary care) and for rehabilitation in the case of a long-term health problem.

2.10.3 Theoretical Model applied for this study: Socio-economic position model

Figure 2.1 below presents the model applied throughout this study.

Figure 2.1
Theoretical Framework for understanding the utilization of Primary Health Care Services (Source: Anderson 1987)

2.10.4 Other models of primary health care services utilisation

Building on Andersen's earlier model, Dutton (1986) explored some additional factors affecting health care utilisation. In her study, a survey of 3,058 family members and their utilisation was viewed as the product of patient characteristics plus provider and system attributes. The study incorporated Andersen's categorical terms such as predisposing, enabling and need factors. The dependent variables include patient-controlled use by children and adults, and use controlled primarily by doctors. For each measurement of use, an equation containing variables representing provider and system features plus various patient characteristics was estimated.
Dutton’s conceptual model of the factors affecting health care utilisation has paid more attention to the role of providers and system features; compared to most population studies it has focused on multiple determinants of utilisation rather than a selected set of factors. Additionally, many previous studies have been limited to one or two types of setting, but Dutton’s model has considered widely varying types of health services settings such as solo physicians, fee-for-services groups, prepaid group practices, public clinics and hospital clinics. Moreover, this model has been applied particularly to the study sample of low-SEP and minority groups. Based on this conceptual model, Dutton found that low-income groups and high charges were the most significant deterrents to use, followed by absence of private health insurances and distance to health care, limited hours and patient-sharing by physicians. Charges and distance had a disproportionate impact on the low-SEP groups.

2.10.5 Summary of the reviewed models
Based on the foregoing discussion, it can be concluded that all models are interrelated. Each has its merits and can contribute to health services research in different ways. Put simply, HBM emphasizes the role of perceptions, attitudes and beliefs in explaining individual behaviour. It is more useful for studies focused on health-related behaviours, but it is not so useful in predicting more socially or environmentally determined behaviours. Importantly, the expanded Health Services Utilisation models by Andersen et al (1995), as well as the model by Dutton, identify the multi-faceted and multi-level factors influencing different types of health services utilisation. Thus, these models more fully reflect the increasing complexity of health services utilisation. However, it is unclear whether the current health services utilisation models are appropriate for studying the mediators of the relationship between SEP and the use of primary health services.

Reviewing the literature examined in the previous section, there are three issues to be addressed. Firstly, the Health Services Utilisation models examine how these
individual factors influence, directly or indirectly, the various levels of different types of use of health services. Socioeconomic factors are only recognised as predisposing and enabling factors in the Health Services Utilisation models. Secondly, in this thesis, it is necessary to understand why different SEP groups vary in their use of health services and what individual factors at the different levels mediate the relationship between SEP and the use of preventive health services.

2.11 Patient satisfaction in PHC services utilisation

2.11.1 Patient satisfaction within a global context

Patient satisfaction is an important way to evaluate service quality in health care (Baker, 1990; Mandel et al., 2003; McKinley et al., 1997; Zemencuk et al., 1999; Zhang et al., 2007) and is determined by whether patients' desires and expectations have been met. It is important for the doctor to identify these needs and expectations in order to achieve high levels of patient satisfaction (Evans et al., 2007; Schwarz et al., 2000; Zebiene et al., 2004; Zemencuk et al., 1999).

In a study on patients waiting to visit, the general practitioner in a PHC, centre in Poland by Miller et al. 2007 patients' high evaluation of the quality of services delivered to them resulted from an accurate perception of their care, the allocation of the appropriate amount of attention according to their needs. Furthermore, Hansen et al. (2008) stated that high levels of perceived quality of health care were also the result of good doctor-patient interaction and good communication with the patient.

2.11.2 Patient satisfaction in Malta

Patient satisfaction in a local public primary health care setting was found to be quite high when this was measured in 1996, with 60% claiming it was 'very good' and 34.5% claiming that it was 'good' (Azzopardi and Dixon, 1999). Nevertheless, Camilleri and O'Callaghan (1998) found that Maltese people expect a better
service from the private health care sector than from the public sector. A 2002 survey by Asciak et al. also showed that patient satisfaction in PHC was higher in the private sector (96.1%) than in the public sector (83.1%). Other studies revealed an increasing shortage of doctors in the government health centres (Sammut 2007) which is causing long waiting times and less contact time with the patients. Agius (2010) reported that public sector respondents are satisfied (75.7%) with the service the doctor provides within the primary setting. Also, Agius (2010) demonstrated that private sector respondents are extremely satisfied (98.2%) with the service the private family doctor provides. Hence, this implies that various reasons account for this major drop in patient satisfaction. Since health centres are chronically understaffed, there has been little opportunity for development and improvement of the services in the public sector (Abela et al. 2003). These results outline a trend that shows that the PHC service in the public sector has somewhat deteriorated from 1996 to 2002. As Azzopardi and Dixon (1999) stated, the absence of a good doctor-patient relationship and lack of continuity of care leads to dissatisfaction for both patients and doctors.

2.12 Chapter conclusion

This research will therefore attempt to verify whether the factors affecting access across European countries and which have been reviewed throughout this study are also key variables for the Maltese primary health care context. In particular, the effect of age, education, income and gender on health care utilisation and patient satisfaction will be studied. Conversely, doctors’ attitudes and level of satisfaction will be matched against patient responses to provide a realistic and accurate picture of the Maltese primary health care scenario.
CHAPTER 3

 METHODOLOGY
3.1 Chapter overview

In the previous chapter, literature relevant to this research project was reviewed. It served the purpose of justifying the study and defining the research problem and research questions. This chapter covers the methodology used in this research. It will outline the research methodology and describe the methods used to test the frame of reference empirically, thus providing answers to the research problem and research questions. This chapter outlines the methods and procedures used to measure the utilization of primary health care services amongst a sample population in Malta. It further describes the study design, analytical techniques, the research setting, the target population, the sampling technique and the tools used for data collection. The procedures undertaken to interview the doctors at their respective private clinics and government health centres are also provided. Besides this, an overview of the method of how the elite interviews with the Minister of Health, the Elderly and the Community and the Consultant for Public health were carried out is presented.

3.2 Research methodology – a theoretical approach

3.2.1 Exploratory, descriptive and explanatory research

Research is usually classified into three categories: exploratory, descriptive and explanatory. Exploratory research generally seeks to investigate phenomena that are not well understood (Marshall and Rossman, 1999) or deal with a problem in order to facilitate the development and formulation of a research problem. In such cases, the research commonly begins with an exploratory phase to assess what the study should involve, then, depending on the aim of the research, evolves into a descriptive or explanatory phase. In addition, exploratory research could be used to identify important categories of meaning or to generate hypotheses for further research (Marshall and Rossman, 1999; Yin, 2003).

The research purpose of this dissertation may be classified as mainly descriptive with elements of exploratory and explanatory approaches. It is exploratory
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because it explains basic facts, settings and concerns, descriptive because it provides a background of a situation and a detailed accurate picture, and explanatory since it elaborates, enriches and supports the theories through comparing the research's answers with research questions.

3.2.2 Qualitative and quantitative research

Researchers of research methodology discuss two general research approaches: quantitative and qualitative research. Quantitative research is commonly used when the purpose is to test hypotheses and generalise the results (Yin, 2003). Quantitative methods are generally concerned with quantifiable and numeric data, usually expressed in numbers and statistics, and associated with large amounts of samples and highly structured methods for data collection (Blumberg et al, 2008).

On the contrary, when there is limited knowledge of a phenomenon, a qualitative research approach is preferred, since it can be more exploratory and allows the researcher to be very descriptive (Marshall & Rossman, 1999). Therefore, when the focus is on providing a complete picture of the situation, aiming to discover and gain a deeper understanding of social processes and interrelations, qualitative research is more useful.

Both quantitative and qualitative data collection methods could be used to attain the study objectives. Qualitative research tries to understand the events and situations from the perspective of the individual concerned whereas quantitative data involves the systematic collection of numerical data that have been quantified. After considering the study design, it was concluded that the data collection methods should incorporate elements of both explanatory and exploratory approaches to meet the research objectives. Hence, comparison of both the quantitative data gathered from patient questionnaires and the qualitative data obtained from doctors' semi-structured interviews and from the two elite
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interviews conducted helped reduce possible bias and strengthen the overall research methodology.

3.2.3 Deductive and inductive research
Research can also be divided into deductive and inductive. Yin (2003) maintained that deductive research starts with existing theories and concepts and formulates hypotheses that are subsequently tested; its highest point is received theory. According to Yin (2003) inductive research, on the other hand, starts with real-world data; categories, concepts, patterns, models and eventually theories emerge from this input. Therefore it is pertinent to state that throughout this study investigation, the author identified the triangulation method as an appropriate approach for the in-field research undertaken. This is further described hereunder.

3.3 Research design
The research design refers to the overall structure or plan of the research (Bowling 2002). Research methods refer to the practices and techniques used to collect, process and analyze data and to determine the sample size and method of sampling and how the data will be collected, the choice of research tools and how the data will be processed and analyzed (Bowling 2002). This study sought to find answers to the research question and to gain insight through research objectives rather than test a hypothesis. A descriptive research design which incorporated elements of both exploratory and explanatory research methods were thought to be suitable since this subject area has not been investigated locally. Besides, Burns and Groves (1993) and Saunders et al (2009) asserted that this type of research aims to seek new insights into phenomena, to ask questions and to assess the phenomena in a new light. Hence, the data obtained from such a research design can be used to justify and assess current practices so as to recommend plans for further improvement (Bowling 2002).
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3.4 The telephone questionnaire

This study took place in two phases. The first phase involved the collection of quantitative data using a patient questionnaire. The telephone questionnaire process involved calls to a sample of the Maltese population to evaluate the impact on accessibility and demand of PHC services by different socio-economic groups. The quantitative data was analysed and was also used to study and to explore the relationship between individual socio-economic positions and the demand for both private and PHC services in Malta. This data was also used to compare the quality of health care in both the private and public sectors.

3.4.1 Adaptation of the European Health Interview survey questionnaire

The health services utilization questionnaire was adapted from the European Health Interview Survey in 2008 because it was the only questionnaire available at the point of undertaking the study.

A number of steps are important in the development of a satisfactory questionnaire (Bowling 2002, Boyce 2002, Oppenheim 1992). The author identified the main elements of the EHIS questionnaire and converted this into a Health services utilization questionnaire consisting of the following components:

- Socio-economic variables including the income, education, age and gender.

- Accessibility to primary health care services including transport means to access primary health care, travel time, monetary costs of seeing a general practitioner and specialist, waiting time, consultation time and the participants’ perception of general practitioners’ attitudes towards care.

- Regular visits to general practitioners and specialists were also taken into account.
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• A section on individual level of attitudes and beliefs in the context of primary health care services was added. This was sought from the Behavioural Model of Families' use of Health Services (1975), the European Health Interview Survey (2008) and National Health Survey Research (2002).

• The Individual Level included the value of general practitioners, the value of health care and the value of good health.

Based on the review of existing relevant scales and measures a number of issues arose. Although health services utilization models have been applied for a number of years, it could be argued that no progress has been made in developing valid and reliable scales for measuring concepts and variables. For instance, to measure health-related attitudes Dutton (1978) utilized a health belief scale which was based on three questions ranking from 1 (the Lowest) to 4 (the Highest). On the other hand, Shankar (2000) used an “agree or disagree” scale whilst Andersen used a 5-point format response including “strongly agree, tend to agree, tend to disagree, strongly disagree and non-applicable”. Moreover, there is no standardized research tool that measures health determinants in relation to primary health services utilization.

Most of the questions of the telephone questionnaire were closed-ended structured questions that were followed by a list of possible answers. Questions were numbered and clearly labelled. The survey also contained a series of opinion statements concerning issues whereby the respondents had to state the extent to which they agreed or disagreed with the respective statements.

3.4.2 The adapted version of the telephone questionnaire

The questionnaire which addressed the main objectives of the study consisted of structured questions. It was back translated and proofread and was available in
both the Maltese and English languages. The back translation was done in order to ascertain that the initial EHIS version had not undergone any changes. The approval to use the European Health Interview Survey was given by the Director of Health Information and Research Department, Dr. Neville.Calleja. This research tool was modified and adapted to ensure that it fits the Maltese scenario and reflects the outcomes of the study objectives to be achieved. The modified research questionnaire has been adapted to match the Health Services Utilization Questionnaire.

Questions were categorized by topic and subject. The questionnaire was divided into two sections. Section A consisted of the demographic data. These were placed in the beginning of the questionnaire because of the ease of answering them and because they encouraged the respondents to continue answering the questionnaire (Frankfort-Nachmias and Nachmias 1996). Section B consisted of closed and open-ended questions and where the respondents had to choose the correct answer ranging from ‘strongly agree’ to ‘strongly disagree’. The questionnaire consisted of thirty-six questions. The complete questionnaire can be referred to in Appendix 1 (for the English Version) and Appendix 15 (for the Maltese Version).

3.4.3 Telephone questionnaire: target population and sampling technique

Cormack (1996) defined the target population as the entire group in which the researcher is interested and to which the results of the research will apply. The target population includes Maltese residents, stratified by age groups in order to explore the variances or differences in the patterns of utilization of PHC services. A sample of two hundred participants was selected. The following selection criteria were established to determine which respondents could be interviewed for the survey:

(i) Respondents were sufficiently literate to complete the telephone questionnaire;
(ii) Respondents had a fixed home telephone line;
(iii) Respondents were over 18 years of age and residing in Malta.

On the other hand, the exclusion criteria incorporated the following:
- Adults who found it difficult to understand the complexity of the questionnaire;
- Residents living in Gozo;
- Individuals with severe mental disability;
- Individuals with uncontrolled psychiatric disorders;
- Individuals who did not have a landline.

Every effort was made to maintain confidentiality. Each respondent was assigned a unique identification number, thus no names appeared on the telephone questionnaire sheet. Following completion of the study, all surveys will be destroyed. Two-hundred and fifty page numbers from the local telephone directory were generated by a computer programme after which the researcher selected the first name and (the associated telephone number) from each page. Of the sample of two-hundred and fifty individuals, eighteen individuals could not be reached and thirty-two individuals refused to participate. These fifty individuals were not replaced. Thus, the final number of individuals who participated in the telephone questionnaire was two-hundred \((n=200)\). This sample size was deemed adequate in terms of representativeness and power for the study. The telephone questionnaire conferred a response rate of 80\% which is out of the sample of two-hundred and fifty participants.

In some cases participants were not eligible for one of the following reasons:
- The telephone numbers extracted from the directory were no longer in use or valid;
- Participants were not Maltese citizens;
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- Participants passed away or were living abroad. Therefore the researcher had to replace a participant if he/she fell under the corrected mentioned limitations. In such cases, the second name (in place of the first) from the telephone directory page was chosen to replace ineligible/untraceable participants. Therefore, the sample replacement criteria had no impact on the study.

3.4.4 Justification for using telephone interviews

The researcher made use of telephone interviews instead of self-administered mailed questionnaires which according to Bowling (2002) appear to have equal accuracy rates to face-to-face interviews in relation to information pertaining to data collection on general health status. The main advantage of using telephone interviews is that in theory the method is economic in relation to time and resources. Further to this, telephone interviews are easily rescheduled and offer more flexibility to the researcher since it is not necessary to host the respondent. Easterby Smith et al (2003) stated that telephone interviews prove very effective in the context of real-time and process-based research. Conversely, the main disadvantage is that there is a potential for sample bias; it is expensive as a research method and is only suitable when the researcher makes use of brief questionnaires on non-sensitive topics (Bowling 2002). Others, such as Burns and Grove argue that telephone questionnaires do not allow researchers to explore in-depth responses from the respondents and probing strategies cannot be used.

However, the disadvantages mentioned above were mitigated for by the researcher by taking appropriate measures to minimize their impact. The telephone calls were not costly at all because they form part of a telephone package system which charges fixed rates irrespective of the number of calls per month. Also, the questionnaire was brief and easy to understand and the researcher ensured that she did not ask very sensitive questions. In-depth responses where still achieved as opposed to the statement by Burns and Grove.
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Another reason why the researcher used a telephone questionnaire was that the majority of the Maltese do not follow written requests for mailed surveys and may be reluctant to speak openly during the personal interviews.

3.4.5 The pilot study on the telephone questionnaire

A pilot study is imperative prior to commencing the study to determine the unforeseen problems and improve the research tool so as to ensure the design is feasible (Saunders et al. 2006). Since the research tool had been translated into Maltese, it was necessary to pilot the tool prior to its use in the study. Three individuals were randomly selected and answered the English questionnaire version whilst another three answered the Maltese version. These six individuals then answered the questionnaire in the other language one week later. This was done to test the reliability of the back-translated questionnaires. The English and Maltese versions of the questionnaires were found to be highly correlated ($p=0.825$). The individuals that were involved in the pilot study were asked to give their feedback on the following:

- the method used for data collection;
- the structure of the questionnaire;
- the clarity of language used (English and Maltese);
- ease of completion of the questionnaire;
- bias related to differences in data collection in private/public sectors.

The suggestions were used to make some slight alterations to the questionnaire to ensure that the survey could take place without any problems. The interview schedule was piloted on three doctors who were conveniently selected by the researcher. Since most of the questions were used in the questionnaire and pilot testing had already been done, no further changes were needed at this stage.
3.4.6 Data reliability of telephone questionnaire

Ten individuals were selected from the telephone directory to test the reliability of the answers by asking them to reply to the same set of questions and checking whether they were consistent with their first answers. The results obtained were inputted into the Statistical Package for the Social Science (SPSS) system, cleaned and cross-checked with the corresponding individual previous results. A measure is considered reliable if the same responses are obtained over and over again assuming that what is being measured is constant. The correlation co-efficient test was the test selected to test for the reliability of this questionnaire. In statistics, this is considered to be the gold standard since it is a descriptive statistic that can be used when quantitative measurements are made on units that are organized into groups. All the questions reached a score of (0.8) or higher. This meant that the questionnaire was reliable and could be used on a large scale.

The data from each survey was entered into the dataset (Excel spreadsheet) against the individual code number and then transferred to the SPSS for data analysis. Each variable referring to a single item of the scales had been labelled before the data was analysed. Each code for each item remained the same as the code when the data was entered (e.g. Gender→ Male = 1; Female = 2).

3.5 Semi-structured interviews

In the second phase of the study, qualitative data was obtained by carrying out semi-structured interviews with a sample of four doctors (refer to Appendix 9 for details) working in government health centres and with a sample of four doctors working in their own private clinics. Doctors were handpicked by the researcher according to the geographical location of their practice and they were chosen to mirror the approximate catchment areas of the health centres that were included in the study. Doctors with extensive experience and a well-established practice were chosen in preference to other doctors in the same area. The qualitative data
findings were then used to evaluate the views and perceptions of the doctors in relation to PHC services utilization. In addition to this, two elite interviews (refer to Appendix 10 for details) were held, one with the Minister of Health, the Community, and the Elderly, and the other one with the Consultant of Public Health since she had done an independent analysis of the feedback of the primary health care reform which was launched at the time. These elite interviews were conducted to round up the study findings and thus to complete the triangulation.

3.5.1 Justification of the application of the semi-structured interview approach

Creswell (1997) defined qualitative research as “an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting”. This implies that qualitative researchers study things in their natural settings, attempting to make sense of and interpret phenomena in terms of the meanings people bring to them. Qualitative researchers rely on a few cases and many variables. In the third part of the dissertation the researcher presents the results of face-to-face interviews with general practitioners working in the private setting and in the public primary health centres to explore the patterns of health-care services utilization. The scope of this interview was to analyse whether the doctors’ perceptions of the efficiency of the two systems matched those of the telephone interviewees.

The qualitative investigator has the advantage of getting close to the research material, and can obtain a great deal of in-depth information that can be tested in quantitative studies if relevant and appropriate. The advantages of face-to-face interviews are that interviewers can probe for the responses and clarify any ambiguities; moreover, the response rates are generally higher (Creswell 1997). On the other hand, the disadvantages of face-to-face interviews are that they are expensive and time consuming and there is a potential for interviewer bias.
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(Bowling 2002). Despite the popularity of using face-to-face interview methods for health surveys, there is a growing body of evidence that these methods lead to under-reporting of health problems as opposed to the results obtained by postal approaches (Bowling 2002).

According to Creswell (1997), interviews consist of a mixture of open-ended and structured questions that define the area to be explored and from which interviewer or interviewee can diverge to explore an idea in further detail. In this way, the interviewees can give detailed opinions about the questions asked and provide rich and quotable material which helps to enliven the final research report (Bowling 2002). For this study, interviews were used as these were inexpensive since they were conducted outside working hours. Also, time was available and not a constraint. Both the interviewer and the interviewee were aware of the danger of being biased and therefore took measures to minimize this risk.

The interview technique allows areas of uncertainty to be clarified and avoid misinterpretations. Bowling (2002) argued that in interviews anonymity is lost. The researcher assured each respondent that the information gathered would be kept strictly confidential and used only for this study. One major disadvantage of interviews is the potential for interviewer bias (Saunders et al 2006). To have control over these limitations, the researcher conducted the interviews and asked the questions in the same sequence as they appeared in the interview schedule.

3.5.2 General practitioner interview questions

Most questions were open-ended, allowing the doctor to expand and give his/her opinion in detail and allowing the interviewer to probe accordingly. In the private sector, four family doctors that work in four private clinics and six doctors that work full-time in the health centres were first briefed about the study and the objective of the interview was explained to them. The interview questions can be referred to in Appendix 2. The researcher ensured that misunderstandings that
arose were duly clarified. Since some of the doctors were reluctant to be recorded, the interviewer took detailed notes of the interview sessions and did not record any of them.

The questions were presented in the same order as in the schedule and were read slowly. Any misunderstandings were clarified. The interviews were not recorded to enhance genuine responses and the researcher only listed and took note of what was spurred during the interview schedule. This information had been re-checked for verification. One must argue in fact that some information might have been lost due to this event. Content analysis of the data was used to analyse the doctors' perceptions of health utilization. Quotations were used to enrich the text and emphasize certain points.

3.5.3 The identification of locations to conduct interviews

The interviews with the general practitioners were conducted in Malta. Three out of nine regional government health centres were selected. Four private clinics owned by family doctors were further identified to support the field research as established in the methodological framework. The Mosta, Gzira and Floriana health centres were selected because they cover the major district areas on the island since patients from various catchment areas in the North, South and centre of Malta are allocated to them. This selection ensures a fair representation of the Maltese population. For instance, Mosta covers the catchment areas of Mosta, Naxxar, St. Paul’s Bay etc. In order to have consistency throughout the study, the private clinics owned by family doctors selected were located in the same geographical and district areas of the health centres: St. Paul’s Bay and Mosta (North); San Gwann (Centre); Qrendi (South). The General Practitioners practicing in these clinics where chosen for the interviews. Health centres doctors rotate and are therefore exposed to all geographical sections of the populations. The health centres chosen are representative of the Maltese population.
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The elite interview with the Minister of Health, the Elderly and the Community took place at the House of Representatives which is part of the Parliament of Malta. The interview with the Consultant of Public Health and Epidemiology took place at the Ministry of Health, Palazzo Castellania in Valletta.

3.5.4 Triangulation: definition and justification of use

Triangulation has been defined as:

"the use of different kinds of measures or perspectives in order to increase the confidence in the accuracy of observations."


Triangulation refers to an approach to data collection in which evidence is deliberately sought from different, independent sources and often by different means (Saunders et al 2006). Other scholars define triangulation as:

"The use of multiple methods to address a research problem."


Methodological triangulation would thus yield a stronger result than either method could yield alone which explains why this researcher has opted for methodological triangulation.

Using a mixed methodology enhanced rigour in the research process and credibility of results. Comparison of the quantitative data gathered from patient questionnaires and the qualitative data from the doctors' semi-structured
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Interviews helped to reduce bias and strengthen each research method. Dunbar et al (2001) stated that methodological triangulation can yield the benefits of “completeness”, “abductive inspiration”, and “confirmation”. The latter were the three main reasons for selecting methodological triangulation as the main research method. Completeness is achieved because quantitative methods can further develop findings derived from qualitative research. The methods complement each other, providing a richness that would be unavailable from one method alone (Dunbar et al 2001). Abductive inspiration is ensured since qualitative research is often used where a phenomenon is poorly understood. Additionally, qualitative research can also help organize quantitative data that has already been gathered. The final rationale for using methodological triangulation is confirmation.

Quantitative research by definition deals with quantities and relationships between attributes; it involves the collection and analysis of highly structured data in the positivist tradition (Bowling 2002). The order in which the respondents answer the question may affect the response rate whilst in interviews the question order is well controlled by the interviewer. This researcher chose to interview general practitioners as opposed to postal questionnaires because though they minimize interviewer bias, they tend to have low response rates and there is no opportunity to supplement them with observational data.

3.6 Data analysis

3.6.1 Interview questions
The qualitative data generated from the responses to open-ended questions in the elite and semi-structured interviews were analysed through content analysis. Easterby-Smith et al (2009) claimed that content analysis is a relatively deductive method of analysis where codes are almost all predetermined and systematically searched for within the data collected. The content of each question was evaluated manually to allow recurring themes to emerge. The responses were then categorized under appropriate themes and counted manually. The researcher was
extra cautious to remain as objective as possible when developing themes and categorizing responses to avoid subjective interpretations (Saunders et al. 2006).

3.6.2 Telephone questionnaires
The quantitative data yielded from a sample of the Maltese population from the telephone questionnaires was analysed. The close-ended questions and ranking questions were statistically analysed using both Microsoft Excel and the SPSS computer systems. The data is presented in the form of frequency tables, pie-charts, histograms, bar graphs and cross tabulations. Statistical tests have been used to analyse the quantitative data. The results were considered significant when a probability, p value of <0.05 was obtained.

3.6.3 Chi-squared test
In this study, this test is used to analyse whether an association exists between two variables. The purpose of this was to determine whether the observed frequencies (counts) markedly differ from the frequencies expected.

3.6.4 The non-parametric tests
If the data are skewed, the most appropriate non-parametric test is the Mann Whitney U test. This is the non-parametric equivalent of the independent groups t-test (Kirkwood 2003) which was used in this study since the data were skewed and in such cases, non-parametric equivalents are the alternative in order to assess significance amongst the variables.

3.6.5 Odds ratios
The odds ratio is the ratio of the odds of an event occurring in one group to the odds of it occurring in another group (Kirkwood 2003). The odds ratio, however, is a ratio of the odds, not the percentages. The word “odds” is not used in the colloquial sense, where it is often used to mean “chance” or “likelihood.” In statistics, the odds of an event occurring is the probability of the event divided by the probability of an
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event not occurring. In this study, the odds ratio was used to check the possibility of queries in relation to the participants’ educational background.

3.6.6 Interpretation of study findings
The following data interpretation instructions followed were:-
(i) P-Values less than 0.05 were considered a statistical significance due to small sample size.

3.7 Ethical considerations and approvals
Approvals to conduct this study were sought from the Health Services Management Board of Studies and the Faculty of Health Sciences Research and Ethics Committee after submission of written proposals (refer to Appendix 13). The relevant approvals to carry out this study were granted by the Director of Primary Health Care, and the Senior Medical Officer. Firstly, a Temporary Permit (refer to Appendix 11) to carry out interviews with general practitioners at the health centres was requested from the Director of Primary Health Care in Malta. Once this was granted a research proposal was submitted to the University Research and Ethics Committee (UREC) of the University of Malta. After approval from the Research and Ethics Committee, a Permanent Permit (refer to Appendix 12) from the director of Primary Health Care was granted. The Temporary Permit was necessary for approval by UREC and the Permanent Permit was necessary to start data collection in the public sector. The approval to use the European Health Interview Survey research tool was granted by the Director of Health Information and Research Department (refer to Appendix 14). Consent was also requested from the doctors in public and private sectors to carry out the semi-structured interviews and from the respondents of the telephone interviews. A covering letter (refer to Appendix 4) which explained the purpose of the study, the respondents’ rights and the concepts of anonymity and confidentiality were read to all the study participants that accepted to take part in the study. The consent was read to all the respondents prior to initiation of the questionnaire and if they agreed...
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to participate in the study, the researcher ticked yes (refer to Appendices 7 and 8). For the interviews the consent was given to the general practitioners on a separate document (Refer to Appendices 5 and 6). This allowed each respondent to make a free and informed decision to participate in the study in order to respect the issue of self-determination (Frankfort-Nachmias and Nachmias 1996, Bowling 2002, Saunders et al 2009).

A covering letter which explained the purpose of the study, the respondents’ rights and the concepts of anonymity and confidentiality was read to all the study participants that accepted to take part in the study (Refer to Appendix 4). Doctors provided a written consent while telephone interviewees gave a verbal consent. This was done because according to Creswell (1999), in order to gain support and full participation the qualitative researcher must explain and disclose to participants the purpose of the research study and must not engage in deception about the nature of the study. Any data that was generated by the study itself and other data concerning participants were kept in a safe place and destroyed after completion of the study. Any queries about the study or questionnaire that the participants had before or during the study were addressed by the researcher. It was important for the researcher to protect the anonymity of the informants by aliasing the individuals.
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3.8 Chapter summary

This chapter clearly demonstrated the in-depth research methods used to carry out the entire study and the justification of each process within this methodology was provided. The methodology is supported by theoretical frameworks and considerations and this supports the validation, accuracy and reliability of the study. Moreover, the limitations of the methods used were highlighted and any contingencies or solutions to minimize the negative effects were described. The entire process is thereby presented in Figure 3.1.
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Figure 3.1
Thesis Methodology Flow-Chart

- Start Thesis
- Definition of Scope and Objectives
- Literature Review
- Identify Data Required
- Primary Research of Quantitative Data including Telephone Questionnaires
- Qualitative Research including the Doctors and Elite Interviews
- Data Analysis
- Description of Findings and Results
- Conclusion
CHAPTER 4

RESULTS
Chapter 4: Results

4.1 Chapter introduction

This chapter presents an analysis of the data collected from a study of primary health care utilization in Malta. The quantitative data was obtained from telephone interviews of a sample of the Maltese population (n=200). Qualitative data was collated from the interviews with general practitioners (n=10) working in the private and public sectors and from two elite interviews. Since both quantitative and qualitative data were collected, different techniques were chosen to analyse it. Therefore, tables, figures, and graphs were used to clarify and contextualize the findings. Percentages were rounded to the nearest half percent (0.5%) to facilitate calculations.

The data were compiled using statistical packages such as Microsoft Excel spreadsheet and SPSS. The main statistical tests used were the Chi-squared test, the Mann-Whitney non-parametric test, the Kruskall- Wallis non-parametric test and the Kolmogorov – Smirnov non-parametric test, since the independent variables of the study did not follow a normal distribution. Besides, odds ratios, likelihood ratios and proportions were worked out for specific questions of the questionnaire. Statistical association or difference was considered significant when the probability obtained was equal to or less than 5% (p < 0.05). The qualitative data gathered was analysed manually through content analysis. The responses obtained were grouped under appropriately formulated themes. Where appropriate, results of questionnaires and interviews were presented concurrently.

This study analysed data derived from questions in the health services utilization questionnaire to present detailed information related to the utilization of primary health care services and to identify the determinants and patterns of primary health care service utilization in Malta. Variables measured included consultations with private versus government general practitioners and also parents’ consultations with general private and public practitioners and specialists concerning their children. The reported satisfaction with the use of primary health
Chapter 4: Results

care services and the general attitudes of the sample chosen towards sources of health information were also assessed. The socio-demographic characteristics of respondents were analysed to explore the utilization of primary health care in terms of gender, monthly household income, level of education, and age and also to study any inequities within the use of health care services.

4.2 Demographic data analysis

The demographic data from the first part of the questionnaire are presented below. These include age, gender, level of education and income. There is also data about the last time the study participants visited their own family doctor and the government doctor in the last year. The data about the number of times the family doctor or health centre doctor is visited in a four week period is also presented.

4.3 Population responses

Every effort was made to maintain confidentiality. Each respondent was assigned a unique identification number, thus no names appeared on the telephone questionnaire sheet. Following completion of the study, all surveys will be destroyed. Two-hundred and fifty page numbers from the local telephone directory were generated by a computer programme after which the researcher selected the first name and (the associated telephone number) from each page. Of the sample of two-hundred and fifty individuals, eighteen individuals could not be reached and thirty-two individuals refused to participate. These fifty individuals were not replaced. Thus, the final number of individuals who participated in the telephone questionnaire was two-hundred (n=200). This sample size was deemed adequate in terms of representativeness and power for the study. The telephone questionnaire conferred a response rate of 80%.
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4.3.1 Private General Practitioner consultations

The bar graph below illustrates that a high proportion of the sample selected (47.0%) consulted their private medical doctor in the three months preceding their interview. This reflects the extent to which the Maltese trust their private family doctors. Figure 4.1 demonstrates the results of the last time a private GP was consulted.

**Figure 4.1**
The last time a private GP was consulted

![Bar graph showing the last time a private GP was consulted](image)

4.3.2 Government General Practitioner consultations

For public general practitioners' consultations the situation is dissimilar to private medical doctors' consultations. The bar-graph below in Figure 4.2 shows that there is a sharp increase in the number of respondents from the sample selected who never consulted a public practitioner. Figure 4.2 displays the results of the last time a government GP was consulted in comparison with the last time a private GP was consulted.
4.3.3 Gender distribution

The frequency table referred to in Table 4.1 clearly shows that the study participants were predominantly females. One hundred and twenty-six (63.0%) respondents were female and seventy-four respondents (37.0%) were male.

Table 4.1
Frequency Table of Gender Distribution

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>NSO (2009) Population percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>74</td>
<td>37.0</td>
<td>49.7</td>
</tr>
<tr>
<td>Female</td>
<td>126</td>
<td>63.0</td>
<td>50.3</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Chapter 4: Results

The distribution of gender for both males and females is not representative of the Maltese population when compared with the percentages issued by the National Statistics Office (2009). Figure 4.3 presents the results gender distribution.

**Figure 4.3**  
The Gender Distribution

In Malta, there are a number of housewives who work at home and this accounts for the high percentage of females who participated in the questionnaire. The low percentage of males could be explained by the fact that most men work full-time and could not be reached at the time the telephone interviews were carried out. However, to mitigate this, the researcher tried to conduct the telephone interviews in the evenings.
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4.3.4 The gender distribution of the last time a private / government GP was consulted. Figure 4.4 illustrates the private GP consultations by gender. A high proportion of females consulted their family doctor in the last three months. The issue of women’s health may reflect the fact that women are more health-conscious than men and/or have more time to consult their doctor.

**Figure 4.4**

*The last time a private GP was consulted by gender*

![Bar chart showing the gender distribution of the last time a private GP was consulted.](image)

Figure 4.5 depicts the government GP consultations by gender. A high percentage of females consulted the government GP in the previous three months. It should be noted that there is a sharp increase in the number of males and females from the sample selected who never consulted a government general practitioner.
From the above two figures it can be postulated that the family doctor is consulted more frequently when compared to the government general practitioner. This explains why the private family doctor model has continued to be cherished as a valuable and focal point for family health. Furthermore, over sixty percent of primary care in Malta is covered by the private family doctor (Cassar 2008).

4.3.5 Testing the significant difference in the mean number of times a private/government GP is consulted in the preceding four weeks by gender

First, the test variable was checked for normal distribution by Kolomogorov-Smirnov test and was repeated for males and females. Since one of the two
samples is not following a normal distribution, the Mann-Whitney non-parametric alternative test was used to check whether there is a significant relationship in the mean number of times a private GP was consulted during the four week period. The resulting p-value from the Mann Whitney test is $p<0.000$ which is less than the p-value of 0.05. This result implies that there is a significant difference in the mean number of times a private GP was consulted by gender. Table 4.2 shows the results of the Mann-Whitney test.

Table 4.2
Mann-Whitney test results of the last time a private GP was consulted by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Asymp.Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>70</td>
<td>77.82</td>
<td>5447.50</td>
<td>.000</td>
</tr>
<tr>
<td>Female</td>
<td>119</td>
<td>105.11</td>
<td>12507.50</td>
<td></td>
</tr>
</tbody>
</table>

For government GP consultations by gender, the test variable for the normal distribution of data was checked by Kolmogorov-Smirnov test and was repeated for males and females. Since one of the two samples did not follow a normal distribution, the Mann-Whitney non-parametric alternative test was used to check the resulting p-value from the Mann Whitney test. Since the p-value was $p<0.254$ which is more than the p-value of 0.05, implying that there is no significant difference in the mean number of times a government GP is consulted by gender. Means were derived by means of statistical test of non-parametric Mann-Whitney. Table 4.3 displays the results of the Mann-Whitney Non-Parametric Test.
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Table 4.3
Mann-Whitney test results of the last time a government GP was consulted

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Asymp.Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean number</td>
<td>Male</td>
<td>48</td>
<td>59.14</td>
<td>2838.50</td>
</tr>
<tr>
<td>of times a</td>
<td>Female</td>
<td>77</td>
<td>65.41</td>
<td>5036.50</td>
</tr>
<tr>
<td>government GP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>is consulted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in four weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3.6 Age

The persons who participated in the study had a mean age of 45.96 years. Age was subdivided into six ten-year age groupings with the youngest age group being between 20 years and 29 years old and the oldest age group being that of seventy years and over. From the sample chosen, the highest proportion of respondents originated from the 50-59 year age group as table 4.4 clearly represents.

Table 4.4
Frequency table of age categories

<table>
<thead>
<tr>
<th>Age Categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years – 29 years</td>
<td>38</td>
<td>19.0</td>
</tr>
<tr>
<td>30 years – 39 years</td>
<td>39</td>
<td>19.5</td>
</tr>
<tr>
<td>40 years – 49 years</td>
<td>34</td>
<td>17.0</td>
</tr>
<tr>
<td>50 years – 59 years</td>
<td>54</td>
<td>27.0</td>
</tr>
<tr>
<td>60 years – 69 years</td>
<td>20</td>
<td>10.0</td>
</tr>
<tr>
<td>70 years and over</td>
<td>15</td>
<td>7.5</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The number of respondents in the seventy years and over category was 7.5% which under-represents the geriatric population in Malta when one considers that Malta has an ageing population. Furthermore, Figure 4.6 represents the distribution of age of the respondents.

**Figure 4.6**
The distribution of age of the respondents

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years - 29 years</td>
<td>38</td>
</tr>
<tr>
<td>30 years - 39 years</td>
<td>39</td>
</tr>
<tr>
<td>40 years - 49 years</td>
<td>34</td>
</tr>
<tr>
<td>50 years - 59 years</td>
<td>54</td>
</tr>
<tr>
<td>60 years - 69 years</td>
<td>20</td>
</tr>
<tr>
<td>70 years and over</td>
<td>15</td>
</tr>
</tbody>
</table>

4.3.7 Testing the relationship of the number of times a government and a private GP were consulted in the preceding four weeks with age.

Kruskal-Wallis test was carried out to test whether there was a significant relationship between the mean number of times a government GP was consulted
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in a period of four weeks and age. There was a highly statistical significance where the resulting p-value was $p < 0.006$. This shows that there was a significant relationship between the number of times a government GP was consulted and age. The same test was carried out to test for a significant relationship between the number of private GP consultations and age. The resulting p-value of $p < 0.05$ confirms that there is a highly statistical significance in the number of times a private GP was consulted and age.

As expected age was a significant determinant of GP consultation rates in both the private and the public sector. Likelihood ratios were calculated by dividing the percentage attendance to a private GP in the previous four weeks by the percentage attendance to a government GP in the same time period. With this ratio one can quantify the extent to which a patient uses one health care service as opposed to another. An individual is two times more likely to attend a private GP consultation as opposed to a public one.

4.3.8 Education

Overall, a high proportion of respondents (34.5%) claimed that they had a secondary level of education. This was followed by sixty – three respondents (31.5%) who stated that they had tertiary level education. Since the questionnaire targeted private residences, one may infer that a high proportion of persons with a tertiary level of education work at home. This is not representative as in Malta according to the NSO (2006) the two largest segments with regards to education are those at the primary and secondary levels. Figure 4.7 shows the level of education amongst the study participants.
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4.3.9 Level of education and incidence of chronic disease

It seems that from the sample selected the variability in the number of times a GP was consulted due to chronic disease when tested statistically was higher in respondents with a primary and secondary level of education. This box plot also revealed that the variability in the number of times a GP was consulted due to chronic disease was lower in respondents with a tertiary level of education. Also, the data from the respondents who have a post-secondary level of education is the most compact and this may be due to the small sample size. The box-plot in Figure 4.8 outlines the number of times a general practitioner was consulted by the level of education.
Figure 4.8
Number of times a GP was consulted due to chronic disease and education

4.3.10 Checking for the statistical relationship between education and consultations with private and government GP’s.

A Pearson Chi-square was used to test this variable. The resulting p-value from this test was \( p < 0.005 \) where the p-value is less than 0.05 and thus there is an association between education and the last time a private GP was consulted. Those with secondary and tertiary education reported the highest percentages of private GP usage. Table 4.5 displays the results of the Chi-square test including education and the last time a private GP was consulted.
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Table 4.5
Chi-square results of education and the last time a private GP was consulted.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>34.424</td>
<td>16</td>
<td>.005</td>
</tr>
</tbody>
</table>

Similarly, a Chi-squared test result confirmed that there is an association between education of the respondents and the last time a government GP was consulted since the p-value was $p<0.000$. Table 4.6 presents these results. Those with tertiary and secondary education reported the highest percentage of never consulting a government GP.

Table 4.6
Chi-square test result of education by the last time a government GP was consulted

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>42.749</td>
<td>16</td>
<td>.000</td>
</tr>
</tbody>
</table>

4.3.11 Number of times a government/private GP was consulted in the preceding four weeks was tested against level of education. Kruskal-Wallis test was carried out to test whether there is a significant relationship between the mean number of times a government GP was consulted and level of education. The resulting p-value of $p<0.02$ (for government consultations) and $p<0.015$ (for private consultations) confirms that there is a statistical correlation between the number of times a GP is consulted and level of education.
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4.3.12 Income distribution

From the sample selected, a significant number of respondents (28.5%) asserted that their monthly household income is average, that is, between Euro 1251 – Euro 1751. On the other hand, 28.0% of the respondents declared that their monthly income falls under the low income bracket. Figure 4.9 demonstrates the income distribution of participants.

Figure 4.9
The income distribution of the study participants
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One must argue that the Maltese have the tendency to under-declare their income that can be seen in terms of a cultural tradition (Farrugia & Debono 2007). This statement is also supported by NSO studies (2010). For this reason, this research could not focus on monthly income. It might be worth questioning whether the tendency to under-declare income is also common outside Malta. There does not seem to be any documentation on this phenomenon, however, irrespective of the latter, this researcher acknowledges that reliance on data furnished by respondents can in fact be a limitation. Thus, when categorizing the monthly household income according to the socioeconomic strata of the Maltese population this does not reflect representativeness. Within the Maltese culture, income is a private matter that should not be divulged to the general public. Another reason justifying why the Maltese keep this information secret might be due to tax reasons. There is no reason to assume that this phenomenon is not more widespread.

4.3.13 Occupation and the number of times a government/private GP was consulted in the preceding four weeks

For private and government GP consultations, the resulting p-values of (private \( p<0.064 \)) and (government \( p<0.085 \)), showed that there were no significant relationships between the aforementioned consultations and occupation.

4.3.14 The patterns of utilisation of private and government GP consultations of parents when their children fall ill

A high percentage of 87.6% asserted that if their children fall ill they are likely to consult a private medical doctor for assistance. However, some differences were evident amongst parents in relation to private medical doctor consultations. In fact, 71.88% of females stated that if their children require medical assistance they consult a private medical doctor, whereas, only 28.1% of males stated that they would consult a private general practitioner. This possibly reflects the fact that females usually deal with the health of their children. Conversely, both men
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(83.33%) and women (81.63%) with a secondary and tertiary level of education were equally unlikely to consult a public general practitioner if their children were unwell. This could be attributed to the fact that parents with a tertiary level of education are more likely to have higher incomes and can therefore afford private medical treatment more readily. A high proportion of females (66.67%) claimed that they do not consult a government GP if their children fall ill.

4.3.15 Analysis of the relationship of private and government general practitioner consultations concerning children

The relationship to be tested is whether there is a significant difference in proportions of those parents who consult a private general practitioner for their children and those parents who consult a government general practitioner for their children. Proportions which are not tested by the SPSS were used to test this hypothesis.

This proportion showed that there is a significant difference in proportions of those who consult a private general practitioner and of those who consult a government practitioner for their children. The researcher decided to test whether the proportion of persons who consult a private GP is greater than proportion of those who consult a government GP in the case of children. In actual fact, the proportion of those who consult a private general practitioner for their children is higher than the proportion of those who consult a government general practitioner for their children. The researcher further tested whether there is an association of the education of parents when consulting a private GP if their children fall ill. A chi-squared test was used to test this association. The resulting p-value from this test was \( p > 0.762 \) where the p-value achieved is greater than 0.05 and therefore, this signifies that there is no association between education and private general practitioner consultation in the case of children. On the other hand a chi-squared test was employed to test whether there was a significant association between education and public GP consultations. The resulting p-value from this test was
p<0.029 which entails that there is an association between parents' education and the consultations with government general practitioner. Table 4.7 displays the result of the Chi-square test for education and public GP consultation concerning children.

**Table 4.7**

Chi-square test result of the association between parents’ education and GP consultation

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.145</td>
<td>8</td>
<td>.029</td>
</tr>
</tbody>
</table>

### 4.4 Private and government specialists consultations

The next test was to check whether there is a significant difference in the mean number of times a private/government specialist is consulted in the previous four weeks by gender. First, the Kolmogorov – Smirnov was used to check for normality of the variable i.e. the last time a private specialist was consulted. The data is not following a normal distribution. Therefore, the Mann-Whitney non-parametric test was used. The resulting p-value from the Mann-Whitney test is 0.084 which is greater than a p-value of 0.05. There is no significant difference in the last time a private specialist was consulted by gender. Table 4.8 displays the results of the Mann-Whitney non-parametric test.
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Table 4.8
Mann-Whitney test results of the last time a private specialist was consulted by gender

<table>
<thead>
<tr>
<th></th>
<th>The last time a private specialist was consulted by gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>4001.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>12002.500</td>
</tr>
<tr>
<td>Z</td>
<td>-1.730</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.084</td>
</tr>
</tbody>
</table>

For government specialist consultations, the Kolmogorov – Smirnov test was used to check for normality of the variable i.e. last time a government specialist was consulted. Since one the independent samples did not follow a normal distribution, the Mann-Whitney non-parametric test was used. The resulting p-value from the Mann-Whitney test was 0.351 (which is greater than the p-value of 0.05). There is no significant difference in the last time a government specialist was consulted by gender. Table 4.9 displays the results of the Mann-Whitney test.

Table 4.9
Mann Whitney test results of the last time a government specialist was consulted by gender.

<table>
<thead>
<tr>
<th></th>
<th>The last time a government specialist was consulted by gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>4323.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>12324.500</td>
</tr>
<tr>
<td>Z</td>
<td>-.933</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.351</td>
</tr>
</tbody>
</table>
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4.4.1 Analysis of last time a private specialist and government specialist were consulted with age
Kruskal-Wallis test was carried out to test whether there is a significant relationship between the last time a private specialist was consulted and age. The resulting p-value from this test was 0.167 which is greater than a p-value of 0.05 and this confirms that there was no relationship between the last time a private specialist was consulted and age. On the other hand, a significant relationship (p<0.000) was achieved when testing the last time a government specialist was consulted by age.

4.4.2 Analysis of last time a private specialist or a government specialist was consulted with level of education
Given that there was more than one category in relation to education to test this variable one can use the one way ANOVA test (parametric) or the Kruskal-Wallis test (non-parametric). As described earlier, the choice whether to use the parametric or the non-parametric alternative depends on whether the data follows a normal distribution or not. One of the samples was not following a normal distribution therefore the Kruskal-Wallis test is used to test whether there is a significant relationship between the variable under test and level of education. The resulting p-value from the Kruskal-Wallis test was p<0.099 which is greater than p-value of 0.05 and confirms that there is no significant relationship between the last time a private specialist was consulted and education. On the other hand, a significant relationship was achieved when testing the last time a government specialist was consulted by education. In fact, the resulting p-value from the Kruskal-Wallis test reveals a p-value of 0.000 which is less than 0.05 and indicates that there is a significant relationship between education and government specialists’ consultations.
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4.4.3 Analysis of last time a private specialist and or a government specialist was consulted with occupation

Given that occupation was categorized in various categories and also one of the samples was not following a normal distribution, the Kruskal-Wallis non-parametric test was used. As described earlier, the choice whether to use the parametric or the non-parametric alternative depends on whether the data followed a normal distribution or not. The last time a private specialist was consulted was tested with occupation. The resulting p-value of $p>0.613$ is greater than $p$-value of 0.05 and thus implies that there is no significant relationship between the last time a private specialist was consulted and occupation. On the other hand, when analyzing whether there is a significant relationship between government specialist consultations and occupation, the p-value of $p<0.009$ signified that there is a significant relationship between occupation and consultations with state specialists. Table 4.10 displays the results of the Kruskal-Wallis test.

Table 4.10
The last time a government specialist was consulted and occupation.

<table>
<thead>
<tr>
<th>The last time a government specialist was consulted and occupation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>24.951</td>
</tr>
<tr>
<td>df</td>
<td>11</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.0009</td>
</tr>
</tbody>
</table>

4.4.4 Respondents' satisfaction with their private and government family doctor.

Table 4.11 below revealed that most patients have a positive opinion about the family doctor with over half the respondents strongly agreeing that the family doctor has a kind attitude and makes use of effective communication skills when
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It comes to consultation times. This underpins a strong doctor – patient relationship. The high percentages achieved for the family doctor explain that patient satisfaction is higher in the private sector. However, when the respondents were asked about the consultation times and the doctors’ attitudes in the public sectors the results were different. An extremely small proportion of respondents rated the consultation time in the primary public setting as very good.

This clearly demonstrates that respondents are dissatisfied with doctors’ attitudes and with the health care service delivery at the health centres. Furthermore, some of the respondents during the telephone interviews claimed that “they were dissatisfied with the service as most of the doctors’ who work within the public primary health care settings demand patients to consult their private medical doctor and if they see the patients they only allocate few minutes for the consultation which can be attributed to various factors like chronic staff shortages and increased workload” “Another respondent asserted that “Within the primary public setting one cannot be followed up by the same medical doctors.” This shows that there is no continuity of care. Table 4.11 presents the results of respondents’ satisfaction with their private family doctor and government doctor.

Table 4.11
Respondents’ satisfaction with their private family doctor and government doctor.

<table>
<thead>
<tr>
<th>Patient satisfaction</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private medical doctor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of time doctor spends with you</td>
<td>52.0</td>
<td>27.5</td>
<td>13.5</td>
<td>1.0</td>
</tr>
<tr>
<td>The doctor’s patience with your questions</td>
<td>54.5</td>
<td>26.0</td>
<td>13.5</td>
<td>.5</td>
</tr>
<tr>
<td>The doctor’s caring and concern to you</td>
<td>56.0</td>
<td>23.0</td>
<td>15.0</td>
<td>.5</td>
</tr>
<tr>
<td>Public medical doctor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of time doctor spends with you</td>
<td>8.5</td>
<td>17.5</td>
<td>25.5</td>
<td>14.0</td>
</tr>
<tr>
<td>The doctor’s patience with your questions</td>
<td>10.5</td>
<td>17.0</td>
<td>24.0</td>
<td>14.0</td>
</tr>
<tr>
<td>The doctor’s caring and concern for you</td>
<td>9.5</td>
<td>16.0</td>
<td>25.5</td>
<td>14.5</td>
</tr>
</tbody>
</table>
4.4.5 General attitudes towards health

Table 4.12 outlines the percentages of respondents that answered the various questions relating to health attitudes. A high percentage of the sample selected (sixty-five percent) strongly agreed to the statement that even if a person is healthy he/she should have regular medical checkups. Further, a high proportion of respondents (sixty-one percent) also stated that they were satisfied with the quality of health care delivered by doctors.

<table>
<thead>
<tr>
<th>Table 4.12</th>
<th>Percentages of respondents who agreed or disagreed to the following statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To what extent do you agree or disagree with the following statements?</strong></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>If you wait long enough you can get over almost every disease</td>
<td>15.0</td>
</tr>
<tr>
<td>I only go to the doctor if there is no option</td>
<td>23.5</td>
</tr>
<tr>
<td>Even if a person is healthy he/she should have an annual health checkup</td>
<td>65.0</td>
</tr>
<tr>
<td>The care I received from doctors has been satisfactory</td>
<td>61.5</td>
</tr>
</tbody>
</table>

In relation to this, the respondents were asked what sources they use to obtain information on health. When comparing 2002 and 2008 data, there was a sharp increase in the number of people acquiring information on health from the Internet (19.3% in 2002, 40.7% in 2008 to 69.5 % in 2010). On the other hand, there was a decrease in the amount of people obtaining health information from other health care professionals (26.0%). This finding does not correlate to the data achieved in 2002 and 2008 which reveals an increase in the number of people acquiring information from this source. Figure 4.10 illustrates the results. Further, when considering the sources of health information in terms of gender,
both males and females in this study achieved similar percentages in relation to acquisition of health information from internet and general practitioner.

**Figure 4.10**

**Sources of health information**

Furthermore, the major sources of health information for all age groups are general practitioners, the internet and the media. The use of internet as a source of health information is most common amongst the young age group (20-29 years) up till working class age group (50-59 years of age).
4.4.6 Testing whether there is an association between gender and health information from the Internet
To further test whether there is an association between gender and health information from the internet a chi-squared test was adopted. The resulting p-value from this test was $p > 0.637$ which is greater than 0.05 thus, indicating that there is no significance between gender and acquiring health information from the Internet. On the other hand, a chi-squared test was employed to test whether there is an association between education and health information from the internet. Indeed, there was a significant association since $p < 0.000$ which is less than the p-value of 0.05. This means that level of education has an effect on whether a patient seeks information from the internet or not. Table 4.13 displays the results of the chi-square test between education and health information from the Internet.

<table>
<thead>
<tr>
<th>Table 4.13</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chi-square test result of the association between education and internet health information</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pearson Chi-Square</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27.441a</td>
<td>4</td>
<td>.000</td>
</tr>
</tbody>
</table>

4.5 Assessing normality
In order to assess if the variables in the questionnaire have a normal distribution, Q-Q plots were calculated for all the socio-demographic indicators and the socio-demographic variables of the questionnaire. When the individual variables were tested as single items, all the Q-Q plots appeared to be skewed. Furthermore, the variable number of times a private and government GP and specialist could not be treated as a continuous variable as the values that were obtained from the respondents were actually counts. Question 17 (Refer to Questionnaire in
Appendix 1), for example, the answer each person (that is eligible to answer the question) is giving us a count of how many times he/she went to a GP. The answers we are obtaining from each person are not values that resulted from some instrument but they are obtained through a mental counting process of the respondents. Since data is categorical, the researcher cannot use ANOVA statistical test, Pearson correlation test and regression analysis. Furthermore, because of the type of questionnaire (not dealing with trying to measure different concepts) the researcher cannot use Cronbach's alpha to check for the internal consistency reliability of the dimensions of the questionnaire as Cronbach's alpha may be used to provide an estimate of internal consistency reliability based on all possible correlations between all items within the scale and scales were not included in this questionnaire. Moreover, since all the variables in the data are strictly categorical, regression analysis could not be carried out. Regression assumes that we are dealing with continuous data which follows the normal distribution (QQ plot would in fact be used in this case to check whether resulting 'residuals' seem like they follow the normal distribution or otherwise. Furthermore, a generalized linear model was not possible either in this study as very high residuals resulted. Therefore, an acceptable generalized linear model was impossible for this study. Besides, data did not follow a normal distribution. Through the modeling process, the researcher also tried removing the variable occupation from the modeling procedure but again relatively high residuals resulted and an acceptable model could not be achieved. Finally, the researcher tried to limit the model to Level of Education from secondary upwards but again this resulted in high residuals. Thus, following statistical advice the researcher was advised to avoid using any models for data analysis especially since if a model is adequate for one particular dependent variable (say for example number of times you consulted a public GP in the past four weeks) then it would seem odd that you're not showing a similar model for the question 'the number of times you consulted a private GP in the past four weeks'. So modeling was avoided in this case. However, the researcher was advised to use Mann-Whitney test due to
non-normality to test for difference in mean number of times you consulted a private GP (or a government GP) due to gender. The Kruskal-Wallis test was used to check whether there is a difference in mean number of times you consulted a private GP (or a government GP) due to level of education, occupation and age group. If one was testing for differences of means between more than two independent samples whose distribution may be reasonably approximated by the normal distribution, Anova statistical test could be used. In this study, however, since non-normality was present in the testing variable (number of times a private GP is consulted in a period of four weeks) of at least one group Anova test was not used. The Kruskal – Wallis test was the non-parametric alternative. This statistical non-parametric test checks the same things as ANOVA but does not assume normality.

4.6 Comparative analysis between the private and public GP consultations

An analysis of the factors that influence the utilisation of health care services in relation to private GP consultations and government GP consultations was done. The financial cost of seeing a doctor was probably one of the factors that most strongly impacts private doctor consultations. In actual fact, when testing whether there is an association between the financial cost and a private medical doctor consultation the resulting p-value from the Chi-squared test was $p<0.000$. This implies that monetary factors affect a person’s decision on whether to consult a private or a public doctor. Table 4.14 presents the results of the chi-square test.

Table 4.14
Chi-square test result of financial cost and the effect on private doctor consultation

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>24.672*</td>
<td>4</td>
<td>.000</td>
</tr>
</tbody>
</table>
Chapter 4: Results

Another factor which had an effect on private medical doctor consultations was fear associated with diagnostic investigations and treatment. Chi-square test was used to test whether there was an association between fear and private doctors' consultations. The resulting p-value from this test was p<0.012 which is smaller than 0.05. Thus, there is an association between fear and private consultation. Table 4.15 presents the results.

Table 4.15
Chi-square test result of fear of doctors and the effect on private doctor consultation

<table>
<thead>
<tr>
<th>Pearson Chi-Square</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19.539</td>
<td>8</td>
<td>.012</td>
</tr>
</tbody>
</table>

4.6.1 Factors which do not influence private doctor consultations

Table 4.16 clearly shows the factors which have no effect on private medical doctor consultations.

Table 4.16
Chi-square tests results of the factors which do not influence private doctor consultations

<table>
<thead>
<tr>
<th>Factors that do not influence private doctor consultations</th>
<th>Value</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The waiting time to see a doctor</td>
<td>5.837a</td>
<td>.665</td>
</tr>
<tr>
<td>The transport needed to visit a doctor</td>
<td>3.534a</td>
<td>.897</td>
</tr>
<tr>
<td>Did not have time because of work</td>
<td>5.133a</td>
<td>.743</td>
</tr>
<tr>
<td>Too far to travel</td>
<td>8.559a</td>
<td>.381</td>
</tr>
</tbody>
</table>
Chapter 4: Results

The resulting p-values from the Chi-square tests were greater than 0.05 which signifies that there is no association of any of these factors with private GP consultations. In conclusion, the two most important factors that affect health care services utilisation in terms of private GP consultations were monetary factors and fear where the p-value was 0.001 which is associated with medical examination and treatment.

4.6.2 The impact of cost in relation to private GP utilisation in four weeks.

The relationship to be tested was whether there was a significant difference in the mean number of times a private GP was consulted in a four week period and financial cost. To test this relationship one can use the independent sample t-test (parametric test) or the Mann-Whitney test (non-parametric test). The choice whether to use the parametric or the non-parametric alternative depends on whether the data follows a normal distribution or otherwise. The test which shall be used to check for normality is the Kolmogorov- Smirnov test. This latter test gave a resulting p-value of \( p<0.009 \) which is less than the p-value of 0.05. Therefore, there is a significant difference in the mean number of times respondents deemed cost as a main reason not to visit the private GP versus the mean number of times respondents who do not consider cost as main reason not to visit a private GP.

4.7 Doctors' perceptions of the utilization of Primary Health Care

This section analyses the doctors' interviews and presents the doctors' perceptions in relation to the utilization of primary health care in Malta. It also investigates the level of job satisfaction experienced by the doctors working in the clinics that were studied. Further detailed content analysis of these doctors' interviews can be found in Appendix 9.
Chapter 4: Results

Semi-structured interviews were carried out on doctors working in selected government health centres and on all the doctors working in the private clinics. In the first part of the interview, personal information about the doctors was obtained, such as age and the number of years that they have been practicing as a GP. The doctors were then asked whether they work privately or with the government or both. Doctors were also asked about the time, on average, they spend with each patient. It was very clear from the doctors’ attitudes that the doctors at the health centres were rather hurried. The general feeling expressed by these doctors was one of tension and stress. On the other hand, the private family doctors had a more relaxed attitude and had more time to express themselves. All doctors agreed that the family doctor should be enthusiastic and have a nice, friendly attitude with his/her patients. All doctors mentioned honesty and trustworthiness as being very important, in fact they are “crucial” and “requisites” to achieve patient satisfaction. Being able to maintain patient confidentiality is the basis on which a good doctor-patient relationship needs to be built.

4.7.1. The patterns and trends of health services utilization by different population subgroups

The doctors were asked if they think that different population subgroups in Malta show various patterns of health services utilization in relation to general practitioner services in the private and public primary settings (Interview Question 1). Content analysis of their responses is presented in Table 4.17.
Chapter 4: Results

Table 4.17

The different patterns and trends of health services utilization by different population subgroups in the private and public primary health care setting as identified by the general practitioners.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income families</td>
<td>&quot;Low income families utilize the public primary health care services more for day to day cases including emergency services, but all populations groups use the health care services to a certain extent.&quot;</td>
</tr>
<tr>
<td>Low social class and low educational levels</td>
<td>&quot;These two prevailing factors, coming from a low social class and not being highly educated lead to greater utilization of health services.&quot;</td>
</tr>
<tr>
<td>Greater utilisation of health care services at the extreme stages of life</td>
<td>&quot;There is greater utilization of general practitioner services at the extreme stages of life &lt;5 years old and &gt; 70 years old. Also there is greater utilisation by females of childbearing age.&quot;</td>
</tr>
<tr>
<td>Patterns of health services utilization in the health centres are dominated by illegal immigrants.</td>
<td>&quot;European countries including Malta, are becoming multicultural societies, and national health systems have progressively adapted following their political and historical peculiarities. Overall, sick, immigrants with regularised administrative status are able to use health services in equal terms than people from the host country. Legal immigrants have a poorer health status and worse living conditions than the host population, and consequently, this results in even have a higher utilisation of health services.&quot;</td>
</tr>
</tbody>
</table>
4.7.2. The key factors that influence the utilization of health care services in both the private and public primary health care settings

The doctors were asked to mention the key potential factors that influence the utilization of health care services in the private and the public sectors (Interview Question 2). Content analysis of their responses is presented in Table 4.18.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Excerpt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary factors relating to direct user charges, or ‘out-of-pocket payments’ to general practitioners</td>
<td>“Evidence suggests that private health insurance and especially costs sharing most negatively impact equity and utilization of health care services.”</td>
</tr>
<tr>
<td>Barriers to access may stem from factors within the health system itself can influence health utilisation</td>
<td>“Supply side barriers may be due to geographical factors such as distance, organisational factors, including waiting times and opening hours and lack/appropriateness of information.”</td>
</tr>
<tr>
<td>Barriers to access may be due to patient-related aspects</td>
<td>“Inequality of access and utilization at the demand side is related to the characteristics of the potential service users, such as income, age, gender, cultural background, health literacy, and health beliefs.”</td>
</tr>
<tr>
<td>Characteristics of the health-care professionals</td>
<td>“The professional characteristics such as gender, age, training, experience and attitudes towards health care and patients may influence the use of health services.”</td>
</tr>
</tbody>
</table>
Chapter 4: Results

4.7.3. The factors that will determine the patient’s choice for private versus public health care services utilization

The doctors were asked to mention the main factors that will explain the patients’ choice for health services utilization in the public and private sectors (Interview Question 3). Content analysis of the responses will be explained in Table 4.19 and Table 4.20 and are presented in terms of private and public health care services.

Table 4.19

Content analysis of the factors which determine the patients’ choice for private health care services utilization.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary factors</td>
<td>“Out of pocket payments determine the patient’s choice of healthcare.”</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>“The fact that you are followed up by the same medical doctor will lead to continuity of care.” “Patients have to trust one GP as demand for health care services increases with advancing age.”</td>
</tr>
<tr>
<td>Sound Doctor Patient Relationship</td>
<td>“Being followed up by the same private medical doctor helps to develop a sound doctor patient relationship.”</td>
</tr>
<tr>
<td>Less Waiting time</td>
<td>“Waiting for long hours at the health centres frustrates patients and so they will opt to consult private doctors to be seen quickly.”</td>
</tr>
</tbody>
</table>
Chapter 4: Results

Table 4.20

Content analysis of the factors which determine the patients' choice for public health care services utilization.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free of charge: Income</td>
<td>&quot;The fact that the services provided in the public sector are free of charge attracts more people.&quot;</td>
</tr>
<tr>
<td>Embarrassment Issues</td>
<td>&quot;People may choose the public health sector for sensitive issues.&quot;</td>
</tr>
<tr>
<td>Comprehensive health care service</td>
<td>&quot;In the public sector services are free, comprehensive and available 24 hour a day. Plus they provide basic emergency services example nebuliser treatment, sutures which some private GP’s cannot provide.&quot; People will not go to their private GP for things they consider trivial.&quot;</td>
</tr>
<tr>
<td>Sick Certificates and Prescriptions</td>
<td>&quot;People tend to use the public services for repeated prescriptions and for sick certificates.&quot;</td>
</tr>
</tbody>
</table>

4.7.4. The Local Context: The private and public primary health care systems

The doctors were asked to disclose their views regarding the existing private and public primary health care system (Interview Question 4). Content analysis of the doctors’ responses is presented in Table 4.21.
Chapter 4: Results

Table 4.21

Doctors perceptions’ regarding the existing private and public primary health care systems in Malta.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Information Technology (IT) Services, Successful Networking</td>
<td>“We need better IT services between the public and the private sector which includes all services from patient record system up to digitalization of radiology in regional health centres.”</td>
</tr>
<tr>
<td>Reforms in the private sector</td>
<td>“The public health care system works well. Organisation of private health care services is needed.” “Ordering blood investigations, radiographs, issuing repeated prescriptions, referrals to specialists and physiotherapists would help decrease the additional work for public general practitioners.”</td>
</tr>
<tr>
<td>Reforms in the public sector</td>
<td>“The public primary health system seems to be balanced but some reforms need to be implemented especially in the number of doctors because the workload is far greater in the mornings.”</td>
</tr>
<tr>
<td>Establishing a personal doctor-patient relationship</td>
<td>“This would guarantee seamless care and sound doctor-patient relationships which would encourage continuity of care.”</td>
</tr>
</tbody>
</table>
Chapter 4: Results

4.8 Chapter conclusion
In the first section of this chapter, descriptive statistics of the socio-demographic variables under analysis were achieved. In particular, attention was directed towards the age, gender, income, and education. The second and third sections of this chapter dealt with various statistical tests performed to test the relationship of the factors which impact utilisation of health care services in relation to these indicators and with the patterns of health care utilisation of government doctors and private doctors in the primary health care setting. Additionally the variables affecting the utilisation of health care services were identified to be gender, age and education. Financial cost and fear were clearly the most prominent factors affecting the utilisation of health care. It would be interesting to see how the results obtained in this study compare with what has been deduced from earlier studies. This section also described the analysis of the doctors' interviews and discusses the doctors' perceptions of patient satisfaction and the patterns of utilization of primary health care in Malta. It also investigated the level of job satisfaction experienced by the doctors working in the clinics that were studied. The qualitative data of the doctors' interviews was summarized into a couple of thematic tables which were described in the aforementioned sections.

In the chapter which follows, the most important findings are discussed in conjunction with previous studies which were conducted in this field. The content analysis of the doctors' interviews and of the elite interviews with the Minister of health, the elderly and the community and the Consultant for public health in Malta will be presented in Appendices 9 and 10. The qualitative analysis and some excerpts from both elite and semi-structured interviews will be discussed and included in detail in the discussion chapter to enrich the data and to round up findings of the study in order to support the triangulation method.
CHAPTER 5
DISCUSSION
Chapter 5: Discussion

5.1 Chapter introduction

The primary purpose of this study is to determine whether different socio-economic groups in Malta show different patterns of utilisation of general practitioner services in the PHC setting and to clarify the key factors that influence this relationship. Furthermore, this dissertation aims to determine the relationship between individual variables such as gender, age, occupation and level of education and how they affect the demand for primary health care services in the local context. In this chapter the results of the questionnaire, analysis of qualitative interviews with the private and government general practitioners and the analysis of elite interviews will be discussed and compared with findings from the literature. Some excerpts from the qualitative analysis will be included to enrich the discussion.

5.2 Examining the relationship between the use of health services and socioeconomic position.

Most of the results examining the relationship between socioeconomic position and the use of health services in general practice were suggestive of socioeconomically disadvantaged people being less likely to utilise private and public health care services. This is consistent with other studies carried out by Van Doorslaer et al 2004, Allin et al 2005 and Economou et al 2008. One could argue that the overall picture emerging from this study is that richer, better educated people find their way to medical specialists more easily and more frequently, while people in the lower income brackets tend to use emergency services provided in the primary health care setting more. The findings from this present research study revealed that people with tertiary level of education recorded the greatest use of health care services mainly in the private sectors. The findings from the mediating factors between socioeconomic status and the use of health care services in the primary health care setting suggest that socioeconomically disadvantaged individuals as measured by both income and level of education are
Chapter 5: Discussion

more concerned with the cost of seeing a general practitioner. This study showed that respondents with a low level of education usually go to a health centre and are seen by the doctor who happens to be on duty so there is no pattern of continuity of care. Furthermore, the Consultant of Public Health affirmed that “the characteristics of the service user namely the income, gender, cultural background and the people’s attitudes towards health explain some of the variations in the use of health care services by different socio-economic groups.”

5.3 Government and private general practitioner consultations

It is now well established that people occupying low socio-economic positions experience poorer health than the rest of the population (Allin et al 2007). A growing body of research has demonstrated that low socioeconomic position individuals are less likely to make use of health services (O'Donnell et al 2007 and Allin et al 2007). The results of this present study revealed that there is a variance in the utilisation of GP services within the primary public and private health care setting. This study finding is consistent with the results of The European Health Interview Survey which was carried out in 2008 which also revealed that there are differences in the rates of consultation with private and public GP. The EHIS (2008) showed that an individual is three times as likely to attend a private GP consultation as opposed to a public GP consultation. Indeed, the results of this present study demonstrated that a high proportion of the sample selected (47.0%) consulted their private medical doctor less than three months ago. This shows that the Maltese population generally exhibits a high level of trust in their private family doctors. The Minister himself affirmed that the: "private family doctor model has continued to be cherished as a valuable and focal point for family health and that a significant proportion of the primary care in Malta is covered by the private family doctor".
For public general practitioners’ consultations the situation is different. The results of this study confirmed that there is a sharp increase in the number of respondents who never consulted a public practitioner. This finding is supported by other studies carried out locally who also found that respondents prefer consulting their family doctor instead of a government GP (EHIS 2008 and Asciak 2007). However, one has to mention that in primary health care, although patients prefer to consult a private general practitioner against a payment, they have the assurance that if they need an urgent general practitioner and they don’t find their own, there is a public-health doctor available (Cachia 2005). Another finding from this study revealed that differences were also evident in private and government GP consultations concerning children. The findings show that the proportion of those who consult a private general practitioner for their children is higher (87.6%) than the proportion of those who consult a government general practitioner for their children. This was supported by the doctors interviewed who stated that “there is greater utilisation of general practitioner services at the extreme stages of life that is less than five years old”.

However, it could be argued that the area of health services utilisation of children within the primary health setting is under-researched and no studies have been found to support this finding. The patterns of health care services utilisation by different social groups was not given much importance by doctors who work within the private sector although they affirmed that they did not encounter many patients who could not afford their general practitioner services.

5.4 Patterns and trends of primary health care services utilisation

All ten doctors interviewed were consistent in their assertion that “people occupying low socioeconomic positions and who are poorly educated utilize public primary health care services more”.
Chapter 5: Discussion

This result was not supported by the findings from elite interviews indeed the Consultant of Public Health asserted that "people with low socio-economic positions are less likely to access primary health care services". This is consistent with Allin's et al (2007) and Economou et al's (2008) finding. Another finding from this study showed that doctors working in the public sector claimed that "this category of people utilize the public service only for cases of emergency".

The thesis findings derived from the elite interviews confirms the trend in the use of primary health care services as stated by the Consultant of Public Health where she affirmed that "people occupying low socio-economic positions tend to utilize primary health care services more for day-to-day cases including emergency services". This finding correlates with other studies conducted by Lorant et al (2002) and Allin et al (2007) who also examined the relationship between socioeconomic status and the use of primary health care services and the results obtained from both studies concluded that people occupying low socio-economic positions are less likely to use health care services on a regular basis but only in cases of emergencies. This was consistent with results yielded from the telephone questionnaire where the majority of respondents claimed that "they use the public health care services mainly for emergency cases".

A growing body of research shows that there is an increased demand for health care services amongst the elderly. This finding was emphasized during elite interviews where the Consultant of Public Health affirmed that "The increase in health care utilisation with advancing age can be explained in terms of a high incidence of chronic conditions amongst these patients". The doctors' interviews also confirmed this finding.
Chapter 5: Discussion

Conversely, results from the questionnaire showed that with age there will be increased utilisation of health but since the study sample involved a small number of geriatric patients this conclusion could not be attained. Furthermore, the aim of the study was not to target the elderly population.

5.5 The demand of PHC services by illegal immigrants

Two doctors who work in the public sector specifically those on duty in the Floriana Health Centre asserted that "nowadays, the patterns of health care services utilisation are increasing drastically as a result of illegal immigration". Furthermore, these doctors asserted that "immigrants have poorer health status and worse living conditions than the host population and this results in greater demand for health care services utilisation."

This finding was supported by Hargreaves et al (2006) who stated that the utilisation of health care services by immigrants is becoming a key and crucial international political and public health issue especially taking into consideration access to health services. This finding was confirmed by (Goddard & Smith 2001, Sundquist 2001, Stronks et al 2001, Dias et al 2009) and showed that utilisation and demand for health services differ across socioeconomic groups. Furthermore, Lamkaddem et al (2008) and Dias et al (2009) showed that utilisation of health services by immigrants depends on various determinants, on how society is able to foster a user-friendly environment for immigrants and on its ability to overcome socio-economic barriers that may limit access to health care (Scheppers et al 2006). It could be argued that the patterns of health care services utilisation by illegal immigrants could not be studied in the quantitative study because illegal immigrants are not registered in the telephone directory. Also, this health issue was only highlighted by two doctors working in the health centres. It is also worth mentioning that the patterns of health utilisation by illegal immigrants was emphasized during the elite interviews.
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5.6 The relationship of gender on utilisation of health care services.

Previous studies have explored health services utilisation and morbidity patterns by age and gender (Bertakis et al 2000, and Redondo –Sendino et al 2006 and Schappert & Burt 2006). The results of this study revealed that women use more health care services than men which signify that women are more health-conscious. The resulting p-value from the Mann-Whitney test was \( p<0.003 \) which is less than 0.05 and shows there is a significant relationship between gender and the last time a private GP was consulted. On the other hand, there was no significant relationship between gender and the last time a government GP was consulted since the p-value achieved is greater than 0.05 (p-value of > 0.229). Similarly, Bertakis et al (2000) have shown that women use more health care services than men. This finding compares to the literature in which various previous studies have explored health services utilisation and morbidity patterns by age and gender (Bertakis et al 2000, and Redondo–Sendino et al 2006 and Schappert & Burt 2006). Men appear to have lower health utilisation rates than women even according to Cameron et al (1998), Winmeijer and Santos (1997), Bertakis et al (2000) and Winkelmann (2004).

Another conclusion from this study is that there were no significant relationships between gender and the number of visits to a private specialist. However, women prefer to consult private specialists as compared to men. The trends for other medical services, such as specialist usage, emergency room visits, hospitalizations, and surgeries have been mixed, with some results showing that men had greater utilisation (Dunnell et al 1998) and some showing no differences (Bertakis et al 2000). Locally, this finding corresponds to the results obtained by EHIS in 2008 where women were slightly more likely to report a private specialist consultation (\( p<0.05 \)). However, this is not consistent with findings by Vegda’s et al (2009) who demonstrated that women make fewer visits to specialists. Women have been previously shown to use more primary care and diagnostic services than men (Bertakis et al 2000, Redondino et al 2006 and Schappert et al 2001).
Chapter 5: Discussion

The results in this study suggest that the pattern of utilisation of the use of health care services for males and females is different. Men and women were not equally likely to report a public general practitioner consultation. In fact, this study revealed that men tend to consult the public general practitioner more as opposed to females. Further to this there was a significant relationship \((p<0.001)\) between the number of visits to a public service where males attend on average once in a four week period. The Consultant of Public health explained this health issue during the elite interview by stating that “in Malta there is a high prevalence of coronary artery disease amongst males which could account for more frequent public sector visits for repeated prescriptions and blood pressure monitoring and for certain blood investigations.”

Furthermore, the results obtained from the telephone questionnaire confirmed that the majority of respondents “use the public health care services mainly for free blood investigations, repeated prescriptions and for sick leave certificates.” The public health centre doctors’ perceptions supported this finding as they affirmed that “the Maltese use the public primary health care services because these services are free of charge, besides the health centres provide emergency services for example nebulizer treatment which some private GP’s cannot offer.”

This finding was further corroborated by the Consultant of Public Health when she stated that “to a certain extent all socio-economic groups make use of public health care at some point in their lives; for instance for free blood investigations and for repeated prescriptions because of the high incidence of chronic conditions amongst the Maltese people”. However, it could be argued that these findings were not supported by the literature and therefore more research is warranted in this field.
5.7 The relationship of age and utilisation of health care services.

The results of the qualitative analysis suggested "a greater utilisation of general practitioner services at the extreme stages of life i.e. less than five years old and more than seventy years of age". A growing body of research supported this finding and in fact various researchers stated that with advancing age the demand for health care services increases (Bertakis et al 2000, and Redondo –Sendino et al 2006 and Schappert & Burt 2006). Evidence-based research shows that there is an increased demand for health care services amongst the elderly. This finding was highlighted during elite interviews where the Consultant of Public health affirmed that "the increase in health care utilisation with advancing age can be explained in terms of a high incidence of chronic conditions amongst these patients".

The doctors’ interviews confirmed this finding where all doctors stated that "utilisation of health care increases with advancing age, the increase becoming more evident over seventy years of age." Vegda et al (2009) and Jochmann and Leon-Gonzalez (2004) supported this statement as they stated that the number of visits to the doctor increase with advancing age, the increase becoming even more evident at around eight-five years of age. As age increased the probability of a person attending a government GP consultation over a private GP consultation decreased. This could be due to mobility issues where the elderly may be restricted in their movements and require more home visits from the private medical doctor. It could be argued that the sample selected to participate in telephone questionnaires included a small proportion of geriatric patients and therefore, this conclusion could not be attained. Furthermore, the aim of the study was not to target the elderly population. The results of this study showed that a relationship was found between age and the number of times a private and public GP. This finding corroborated with the results of Jochmann and Leon-Gonzalez (2004) where they showed that this relationship existed. The results of this study show that there is a highly statistical difference between age and the number of times a private GP and a public was consulted. This finding corroborates with the results
Chapter 5: Discussion

of the study by Jochmann and Leon-Gonzalez (2004) where a relationship was found between age and the number of visits to the general practitioner.

However, in a study specific to individuals over 75 years old, age was not significantly associated with healthcare utilisation (Walter-Ginzburg et al 2001). The age demand for health care utilisation seems to be a part of quadratic relationship (Pohlmeier 1995, Cameron et al 1998, Deb 2001, Winklemann 2004.) One might argue here that the same factors that influence health care utilisation of the adult population persist for the elderly. Potential explanations for the declining use of physician services among the oldest adults include institutional substitution, informal substitution, losing a longstanding physician, developing stabilized regimens, the patient giving up, or the doctor giving up (Wolinsky et al 1988). A more likely explanation could be that those people surviving into the oldest age group were healthier and thus more likely to have been low users of health care services to begin with. This is further supported by the findings of this study pertaining to variability within age groups (Vegda et al 2009).

5.8 The relationship of income on utilisation of health care services.

Economou et al (2008) and Winklemann (2004) and Billing (1993) found a strong effect of income on the number of doctor visits for European countries thus, indicating that the possibility of consulting a doctor increases with income. This finding is consistent with the Consultant of Public Health statement where she asserted that “the income as a socio-demographic characteristic can explain some of the discrepancies in the use of health care services by different socio-economic groups.” All doctors interviewed asserted that “patterns of utilisation differ according to the general practitioner fees and socioeconomic status of the individual.” Young et al (2001) revealed that cost is a factor in determining whether people use health services. For instance, Young et al (2001) asserted that individuals in the low socioeconomic position were less likely to spend on out-of-pocket expenses per consultation leading to decreased use of health services
Chapter 5: Discussion

(Young et al. 2001). Therefore, out-of-pocket costs may affect how often consumers use health services.

A substantial proportion of respondents (28.0%) declared that their monthly income falls under the low income bracket. For this reason, this research could not focus on monthly income. One must argue that the Maltese have the tendency to under-declare their income which can be seen in terms of a cultural tradition. In fact, when the researcher attempted to test for a relationship between income and private general practitioner and/or private specialist consultation there were no significant relationships. This finding does not correlate with the results of the studies conducted by Economou et al. (2008), Winklemann (2004) and Billing (1993) and Gedtham (1993) who found a positive relationship between income and the decision to visit a general practitioner and a private specialist. For this reason, this research could not focus on monthly income. Van Doorslaer et al. (2004) found that after modifying the need differences, there seems to be only a negligible relationship between the income equity and the probability of visiting a general practitioner which supports the results obtained in this study.

It might be worth questioning whether the tendency to under-declare income is also common outside Malta. There does not seem to be any documentation on this phenomenon. This researcher acknowledges that reliance on data finished by respondents can in fact be a limitation. Thus, when categorizing the monthly household income according to the socioeconomic strata of the Maltese population it is difficult or even impossible to achieve representativeness. Within the Maltese culture, income is a private matter that should not be divulged to anyone. Another reason why the Maltese keep this information secret might be due to tax reasons. For public GP consultations in the period of four weeks the percentage of those reporting a consultation falls continuously as the income increases which further explains that public sector services are mainly used by people occupying the low income brackets. Furthermore, one could argue that closing down the health
centres in the public sector is certainly not an option since a proportion of the Maltese population fall within this group and therefore this could predispose to health care accessibility inequalities. However, according to Pampel (2010) the disparities in attitude towards health involve something more than the ability to use income to purchase good health. Pampel (2010) explained that smoking, sedentary lifestyle, poor diet were more evident among individuals who occupy low socioeconomic positions. One could therefore argue that if these individuals do not use the primary health care services efficiently in the primary care, then the severity of their diseases would warrant extensive treatment at the secondary care level.

Starfield (2001) asserts dealing with disease in the primary care setting is cheaper and more cost-effective when compared to secondary care. O’Donnell et al (2007) asserted that lower socio-economic status is associated with poorer health status. In a study which has been conducted by Van der Heyden et al (2003), the study showed that both educational level and income were considered to be significant components of individual socioeconomic position that affect the utilisation of health care services. In line with this, Fernandez-Olano et al (2006) affirmed that higher education has been associated with improved perceived health status and higher income.

5.9 The relationship of education on the utilisation of health care services

The results of this study revealed that there is a highly statistical difference between education and the number of times private (p-value of 0.015) and government general practitioners (p-value of 0.02) were consulted respectively. These findings are consistent with the studies undertaken by Van der Heyden et al (2003) who showed that both educational level and income were considered to be
significant components of individual socioeconomic position that affect the utilisation of health care services. In line with this, Fernandez-Olano et al (2006) affirmed that higher education has been correlated with improved perceived health status and higher income. Furthermore, Economou et al (2008) stated that highly educated individuals have increased likelihood of visiting a doctor in comparison to individuals of the lower educational level. The highest percentage of those who never attended a public GP was represented by highly educated individuals which, further explains that highly educated individuals seek private consultations as opposed to public. The majority of doctors interviewed were consistent in their assertion that “people occupying low socioeconomic positions and who are poorly educated utilise public primary health care services more”. However, it is worth mentioning that this issue was not given importance from the elite interviews.

5.9.1 The relationship of occupation on the utilisation of health care services

Economou et al (2008) found that employment status is a strong determinant of the number of visits to a doctor and in fact, in seven out of nine European Union countries (Denmark, Greece, United Kingdom, Ireland, The Netherlands, Portugal and Spain) unemployed persons were associated with an increased number of visits to a doctor in comparison to employed individuals.

Conversely, when testing occupation and the relationship between the number of times a private and government doctor is consulted; this study revealed that there was no significant relationship between occupations for private and government GP and specialist consultations. This could be attributable to the fact that level of education and income are not necessarily linked firmly together. Moreover, people within the same occupation do not necessarily possess the same level of education or income. Therefore, this might explain the lack of significance observed in the relationship between occupation and usage of primary health care. On the other hand, the relationship of occupation on the utilisation of health care services was
Chapter 5: Discussion

not mentioned during the elite interviews and during qualitative interviews with the doctors.

5.9.2 What are the key factors that influence the utilisation of health services?

The results of the present study indicated that the monetary factors, accessibility factors and fear associated with doctors and treatment were the most prominent factors that influenced the utilisation of health care services for private GP consultations. Similarly, qualitative results corresponded to this finding as doctors working in the private sector advocated "that monetary factors related to direct user charges and out of pocket payments to general practitioners impact the utilisation of health care services in the private setting."

These findings correlate to other studies where cost was cited as the factor why individuals do not consult a private GP (Tamsama et al 2004). The cost as a factor which influences the utilisation of health care had been given importance by the Consultant of Public Health and the Minister of health, the elderly and the community where they stated that "direct costs can be one of the access barriers to private health care utilisation as it can relatively impact people occupying low socio-economic positions". Therefore, policymakers have to take into account such important issues and guide policy on target groups to address the problem of socio-economic health inequalities and improve equity of access. All doctors working within government health centres asserted that "access barriers to health care may evolve from factors within the health system itself."

According to these doctors "geographical factors such as distance, organizational factors such as waiting times and opening hours and lack of appropriate information giving" are the prime factors that influence utilisation of health care in the public sector. All doctors working in the public sector stated that "personality traits, professional values and communication skills are factors which can hinder utilisation of health care."
This finding was confirmed by Dixon et al (2003), Tamsma and Berman (2004) and Tamsma et al (2009) as she emphasized that access barriers include costs and distance, as well as demand-side factors such as communication skills and health beliefs. This emphasizes the need to pursue targeted measures when aiming to tackle inequalities in access. The effect of individuals’ concerns about the accessibility to health care on the relationship between SEP as measured by education and income suggests that the cost of GP consultations and having to wait for a long time to see a doctor explain some of the variations in the use of health services by different people. In summary, the factors which influence the utilisation of primary health care utilisation could be explained in terms of monetary factors, accessibility and fear associated with doctors and treatment.

5.9.3 The importance of doctors’ professional characteristics

All doctors working in the private sector affirmed that “the family doctor should be enthusiastic and communicates effectively with his/her patients so as to build a strong-doctor patient relationship”. All doctors mentioned honesty and trustworthiness as being of prime importance; in fact they said “they are requisites to achieve patient satisfaction and to build a strong doctor-patient relationship”.

The importance of a good doctor-patient relationship for achieving patient satisfaction has been cited several times in the literature (Stewart at al., 1979; Azzopardi & Dixon, 1999; Howie et al., 2000; Mandel et al., 2003; The World Health Report, 2008; Hansen et al., 2008). The building of a strong doctor-patient relationship depends very much on the doctor’s personality traits. According to the results of the questionnaire, the attitude of the doctor is considered very important by patients and “having a nice attitude results in high patient satisfaction where patients want to feel as if they are talking to a friend, they want to feel welcome and they want the doctor to give them all the attention they require.”
Chapter 5: Discussion

They want to be respected and treated well (Zaghloul 2001) for them to be satisfied with the doctor and with the service provided. The importance of doctors’ professional characteristics on health care utilisation was highlighted by the Minister of health, the elderly and the community where he affirmed that “the Maltese trust their family doctor and consider their doctor as their friend, confidant and close advisor”. The Minister also stated that “a strategic approach is needed to enhance the continuity of patient care which is the foundation of a sound doctor-patient relationship”.

5.9.4 Patient satisfaction in Malta

Good communication is crucial during a doctor consultation. Major findings from the present study revealed that longer consultations and good communication skills were associated with higher patient satisfaction in the private sector. This had been supported by the findings of Howie & Hungin (2002), Parasuruman et al. (1988), Lam (1997), Bultman and Svarstad (2000), Anderson et al. (2007) and Hansen et al. (2008). All these researchers stressed that good communication is very important for a successful consultation. The telephone questionnaire revealed that “patients want to be listened to, want to be allowed time to express themselves and want the doctor to make them feel calm by empathizing with them”. This was consistent with findings from the literature by Anderson et al (2007) and Hansen et al (2008). Doctors working in the private sector have a good perception of their patients’ level of satisfaction. When asked if the doctors think their patients are satisfied, all the doctors interviewed in the private sector asserted “that they think the majority of their clients are satisfied; especially those who consult them frequently”.

On the other hand, a high proportion of doctors working in the public sector claimed that “patients are not satisfied as there is no continuity of care and patients cannot consult the same doctor.” The only reason why they choose this service is because “it is free at the point of use.”
Chapter 5: Discussion

When asked whether the doctors are satisfied with their work as a family doctor at the clinics where they were interviewed, all private family doctors claimed that "they were satisfied, some stating they were very satisfied". The continuity of care and strong doctor-patient relationships were important factors for doctors' satisfaction. However, doctors working in the public sector "are not satisfied in view of major contributing factors mainly stress, lack of staff, no continuity of care and inadequate doctor-patient relationships."

5.10 Chapter conclusion

An important conclusion which can be drawn from the present study is that significant correlations that was found between socioeconomic position and the use of health services in relation to primary care. Also, people occupying low socioeconomic positions are more affected by the accessibility to health care in terms of being able to find a GP, the cost of seeing a general practitioner. These individuals are less likely to have a regular place of care and regular care provider. A number of factors have been shown to influence the utilisation of health care services. In this chapter, the results from this research have been interpreted and discussed in detail. The implications of the findings and the recommendations for better practice, for further research and for policy-makers will be described in the next chapter.
CHAPTER 6

CONCLUSION
6.1 Chapter introduction

This is the final chapter of the dissertation and consists of three main parts. In the first part, the implications of the study are presented followed by a brief summary of the study. The second part consists of a list of findings. In the third part, recommendations for policy makers, better practice and future research are discussed.

6.2 Implications of the study: strengths and limitations

6.2.1 Study design and survey implementation

One of the main strengths of this study is that this study takes an in-depth analysis of the utilization of primary health care services in Malta. Although it was adequate to use a descriptive study design with elements of exploratory and explanatory in order to analyse the utilisation of primary health care services by different socio-demographic groups. It could be argued that such a study design is not able to attain any causal relationships between the socio-demographic variables examined. Therefore, further research needs to be carried out using the prospective longitudinal study designs.

The telephone directory has been used as a means to obtain a random sample of the telephone numbers of the respondents. The respondents of this study were predominantly females. This implies that the study sample is not representative and reflective of the general population specially when comparing the demographic analysis of gender of the present study with the classification of the Maltese population by the National Statistics Office (2010). The results analysis of the study sample representativeness in comparison with the National Statistics Office (2008) showed the respondents with a higher level of education were over-represented. The results of study need to be interpreted taking into account this limitation.
The results of this study also indicated that the majority of respondents were in the lowest income bracket (monthly household income below Euros 750). It could be argued that this may not correlate with the professional status. The income distribution pattern as a socio-demographic variable is not accurately reflected. Overall, it seems that the Maltese seem to under-declare the actual household income so the results of this study need to be interpreted with the consideration of this limitation. Telephone interviews were used as the main method of data collection. This method led to a satisfactory response rate of 80% and allowed data analysis for this research study. However, this method is time-consuming when compared to mailed surveys which are relatively quick and more cost-effective than personal telephone interviews. Further to this, sensitive issues and topics related to socio-demographic variables such as family income cannot be dealt with adequately during a telephone interview.

Nevertheless, every effort was made to adapt the Health Services Utilisation Questionnaire for the present study as the researcher did not find an appropriate research tool relating to health services utilisation. The structure of the questionnaire was constructed as simply and straightforward as possible to further facilitate a good response rate and to conduct pre-testing and pilot studies to prevent item non-response (De Leeuw 2001).

6.2.2 Study measurement
The socioeconomic position was measured on the basis of respondents’ educational level, family income. These socio-demographic variables were chosen in order to avoid a misleading picture of the disparities in the utilization of health care services that can arise if only one socio-demographic indicator is used. The socioeconomic position on the basis of the educational level is adequate in this study because the relationship between education and the use of health services is assumed to reflect the person’s ability to access and interpret health-related information. An individual who is highly educated may have broader knowledge
about health and is more likely to take action to prevent diseases and improve the health status (Galobardes et al 2001). This study showed a relationship between socioeconomic status and education.

Data was based on self-report which is a common method for the collection of data about individual’s health and risk-factor status (Newell et al 1999). Conversely, the reliability and validity of such data is questioned. This needs to be well-established. In the present study, respondents were required to recall consultations to general practitioners made in the last year and in the preceding four weeks prior the interview. This may have led to recall bias where respondents cannot recall when they last had their consultation with a GP or specialist in the private and public sectors. Alternatively, the respondents may have lacked the knowledge to answer the question which could have led to reporting bias.

6.2.3 Data analysis
The present study demonstrated that patterns of utilization of health care services varied by age, gender and education from a preliminary analysis. This analysis illustrated that consultations with general practitioner increased significantly with advancing age. The situation reverses when it comes to specialist consultations in the present study.

6.2.4 Generalisability of the study findings
Notwithstanding all of the above limitations the study findings are arguably quite generalisable to the Maltese population for the following reasons:-

- The researcher successfully conducted telephone interviews with a satisfactory response rate of 80 per cent from the responding population in Malta.
Chapter 6: Conclusion

- One of the main strengths of this study is that this study took an in-depth analysis of the utilization of primary health care services in Malta.
- The high percentage of people consulting their private general practitioner in the present study corresponded to the one attained by the European health Interview Survey (2008). This EHIS (2008) reported that 70% of the Maltese population consults their own private family doctor.

However there are also some limitations to the generalisability of the study findings because:-

- The results from the representativeness analysis indicated that the respondents with a higher level of education in the study sample were over-represented and the gender and education distribution were not reflective and representative of the general population.

- The research findings relate primarily to GP-based and specialist utilization of health care services and not to other health care services such as hospital care. The results of this study therefore only represent a partial utilization of health care services by the responding population.

6.3 Summary of the study findings
Socio-economic differences in health services access and utilisation across may exacerbate existing health inequities. Thus, understanding the extent of inequities in access is essential in understanding the broader goal of health equity (Allin et al 2005). The patterns and trends of health services utilization in the public and private sectors are different in Malta. Furthermore, this study showed that the pattern of utilization depends on the socioeconomic position of the individual.
Qualitative analysis of this study showed that greater utilization of health care services increases with advancing age. Even where universal access to health services is formally in place, individuals can face a range of barriers hindering the actual utilisation of that service. Therefore, one can argue that if persisting inequities in access are to be addressed it is necessary to look beyond the assumption of universal coverage. The findings of the present study indicate that barriers to access may stem from factors within the health system itself or be due to patient-related aspects. This study reports that the key factors that influence health services utilization include financial factors such as doctors’ fees and fear. These factors may explain the reasons why individuals make less use of health care services. On the other hand, this study emphasized that factors that have an effect on the demand side are related to the characteristics of the potential service users, such as income, age, gender, cultural background, health literacy, or health beliefs. In conclusion, this study revealed that some access hurdles have relatively more impact on disadvantaged groups than others for instance the costs and distance, as well as demand-side factors such as communication skills and health beliefs.

Most findings of the present study showed a positive relationship between the socioeconomic status and the use of health care services. Evidence-based intervention strategies for reducing socioeconomic health inequities are associated with changing social and economic policies. It is imperative that in order to improve equity of access in providing high-quality care and in enhancing access to primary health care, vulnerable groups need to be targeted (Harris et al 2004). The findings from this study showed that people’s attitudes towards health care also explain some of the variations in the use of health care services by different population groups. These factors need to be considered when policy makers and health providers promote health-care activities to reduce health inequities.
Chapter 6: Conclusion

The findings indicate that the factors that most likely lead to patient satisfaction are those associated with communication skills. The large difference in patient satisfaction between public and private sectors of primary health care is mainly due to the difference in the doctors' communication skills relating to the ability to make the patient feel calm and the willingness to listen to patients and staff. Doctors especially those in the private sector are very satisfied and believe that good doctor-patient relationships and continuity of care are the main reasons that their patients are also highly satisfied.

6.4 Recommendations for policy makers and for better practice

This study highlighted the important factors affecting the utilization of health care services and the main reasons for the difference in patient satisfaction between public and private sectors of primary health care. The findings of this study can be used to make recommendations for better quality in primary health care, especially in the public sector:

6.4.1 Continuity of care

By establishing a form of relationship that will eventually guarantee seamless care, increases the doctor and patient satisfaction, and enhancing the continuity of care by having better doctor-patient relationships. By having a system of appointments for non-urgent consultations, one can reduce excessive abuse of the public sector by patients who don’t really need the service.

6.4.2 Better access for vulnerable groups

This study revealed that some access hurdles have more effect on people occupying low socio-economic positions. So, targeted measures need to be implemented to improve inequalities of access. Also the general practitioners need to pay more attention to people who occupy low socioeconomic positions by providing longer consultation times and by addressing patient needs and actively offering information on health care. A strategic approach to implement health
education and health promotion programmes is needed to keep the community informed about the availability of health services. Health services should be made more accessible by providing an economically, geographically, and culturally accessible health care system through improved transport systems with regular connections to health centres.

6.4.3 Increasing access to investigations from the private sector

If doctors working in the private sector are allowed to request certain investigations, this would reduce the workload on doctors working in the public sector. It would also allow better quality of care for those patients who prefer to make use of the private sector.

6.5 Recommendations for further research

This study was limited by the fact that only three health centres in Malta were chosen for doctors to participate in the interviews regarding their perceptions on the utilization of primary health care. Future research should aim to explore utilization of health care in the district clinics and also in the island of Gozo. In this way, the findings would allow more generalisability and applicability. Research on utilization of health care should take place on a regular basis to monitor the quality of health care delivered. Findings should be used to implement changes and further studies can then be used to assess the difference in the utilization of health care after these changes have been implemented. Furthermore, future research in different health services may be needed to attain a whole picture of health care utilization. More empirical studies are required to test the theoretical framework for understanding health services utilization in terms of appropriateness for other different health care systems. In order to capture the full range of health services utilization a multi-method study needs to be considered. These recommendations would allow for a seamless and holistic approach between general practitioners and primary health care settings.
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References


References


References


References


References


References


Appendix 1

Health Services Utilisation Questionnaire

Part A: Personal Characteristics

Question 1: Gender
- Male
- Female

Question 2: How old are you?
- Age in years

Question 3: What is your country of birth?
- Born in Malta
- Born in another EU Member State
- Born in a non-EU country

Question 4: What nationality are you?
- Maltese National
- National of other EU Member State
- National of an non EU country
- Other (for example Dual Citizenship)

Question 5: What is your legal marital status?
- Single
- Married
- Widowed
- Separated
- Divorced
Appendices

Question 6: Which one of these statements best describe your current living arrangement?

- Single and living by yourself
- Single and living with family members
- Single parent living with one or more children
- Married and living with one or more children
- Married and living with no children
- Other (Please describe)

Question 7: How many persons live in the household?

Number of persons

How many individuals below the age of 18 reside at this address?

Number of individuals

Question 8: What level of education have you got?

- No formal education
- Primary education
- Secondary education
- Post-secondary education
- Tertiary Education

Question 9: What is the highest qualification you have achieved?

- Undergraduate Diploma
- Postgraduate Diploma
- Bachelor’s Degree
- Masters Degree
- Doctorate
- Apprenticeship
- Other
Appendices

Question 10: How would you define your current employment status?

- Full-time paid work
- Part-time paid work
- Unemployed looking for a job
- Student
- In retirement or early retirement
- Permanently disabled
- Fulfilling domestic tasks
- Other: Please specify: ______________________

Question 11: In your current job are you:

- Self-employed with employees
- Self-employed without employees
- Employee
- Other (Please specify): ______________________

Question 12: What is your occupation?

- Job title: ______________________

Question 13: Do you consider your combined monthly household income to be:-

- Low (<€750)
- Low to Medium (€751 - €1250)
- Medium (€1251 - €1751)
- Medium to High (€1751 - €2250)
- High (Over €2251)
- Don't know
- Refuse to answer
Appendices

Part B: Perceptions of Health and Utilisation of Primary Health Care Services

The next questions are about the perceptions of health and the utilization of primary health care services.

Question 14: How would you describe your health in general?

- Very good
- Good
- Fair
- Bad
- Very bad

Question 15: Do you have any long-term illness or chronic health problem?

- Yes
- No

{ Go to Question 18 }

Question 16: In the past 2 years, have you been told by your medical doctor that you have any of the following medical conditions?

a. Heart, Cardiovascular, Circulatory Conditions (including high blood pressure and high cholesterol levels)
   - Yes
   - No

b. Diabetes
   - Yes
   - No

c. Other serious health problems or disabilities
   - Yes
   - No

Question 17: Because of this chronic disease, how many times have you seen a general practitioner in the last twelve months?

- Number of times

The next questions are about consultations with your general practitioner or family doctor.
Appendices

Question 18: When was the last time you consulted a private family doctor on your own behalf?

- Less than three (3) months ago
- Less than six (6) months ago
- Less than 12 months ago
- 12 months ago or longer
- Never

Question 19: If your children become ill, do you usually:-

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Consult a private general practitioner for medical assistance?</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b) Consult a government general practitioner/ health centre doctor</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c) Consult a private specialist (paediatrician) for medical assistance</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>d) Consult a government specialist (paediatrician) for medical assistance</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Question 20: During the past four weeks, that is since March 2010, how many times did you consult private family doctor on your own behalf?

- Number of times

Question 21: When was the last time you consulted a government GP (general practitioner) or health centre doctor on your own behalf?

- Less than three (3) months ago
- Less than six (6) months ago
- Less than 12 months ago
- 12 months ago or longer
- Never

Question 22: During the past four weeks, that is since March 2010 how many times did you consult a government GP (general practitioner) or health centre doctor on your own behalf?

- Number of times

{Go to Question 25 and Question 26 if study participants never consulted a private family doctor or Government General Practitioner}
Appendices

Question 23: When you go to visit a private GP (General Practitioner), do you:

<table>
<thead>
<tr>
<th>Always</th>
<th>Most of the time</th>
<th>Sometimes</th>
<th>Rarely/Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Go to same general practice</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2) See the same medical doctor</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Question 24: When you go to visit a Government GP / Health Centre Doctor (General Practitioner), do you:

<table>
<thead>
<tr>
<th>Always</th>
<th>Most of the time</th>
<th>Sometimes</th>
<th>Rarely/Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Go to the same health centre</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2) See the same medical doctor</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Question 25: For what reason/s would you not consult a private General Practitioner?

- The cost of seeing a private medical doctor O
- The amount of time one has to wait to see a doctor O
- Transport needed to visit a doctor O
- Did not have the time because of work, care for children or for others O
- Too far to travel / no means of transportation O
- Fear of doctor / hospitals / examination / treatment O
- Didn’t need to consult a medical doctor O
- Other reasons O

Question 26: For what reason/s would you not consult a Government General Practitioner?

- The amount of time one has to wait to see a doctor O
- Transport required to visit the health centre O
- Did not have the time because of work, care for children O
- Too far to travel / no means of transportation O
- Fear of doctor / hospitals / examination / treatment O
- Not able to see my preferred doctor every time O
- Did not need to consult with a doctor O
- Other reasons O
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Question 27: According to your personal experiences of visits to your private family doctor, how do you rate the following?

{Go to Question 29 if study participants never consulted a private family doctor or Government General Practitioner}

<table>
<thead>
<tr>
<th></th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>The amount of time the doctor spends with you?</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>The doctor’s patience with your questions and concerns?</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>The doctor’s caring and concern for you?</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Question 28: According to your personal experiences of visits to the government/health centre doctor, how do you rate the following?

<table>
<thead>
<tr>
<th></th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The amount of time the doctor spends with you?</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b. The doctor’s patience with your questions and concerns?</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c. The doctor’s caring and concern for you?</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
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**Question 29:** To what extent do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. If you wait long enough you can get over almost any disease without seeing a doctor</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b. I only go to a doctor if there is no other option</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c. Even if a person is feeling healthy he / she should have a general health checkup every year</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>d. The care I received from medical doctors in the past year has been adequate and satisfactory</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

The next sets of questions are about consultations with medical or surgical specialists (Public and Private).

**Question 30:** For what reasons would you not consult a private medical or surgical specialist?

- Less than three (3) months ago
- Less than six (6) months ago
- Less than 12 months ago
- 12 months ago or longer
- Never
- Don’t know

O {Go to Question 31}  
O  
O  
O  
O {Go to Question 34}  
O  

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Question 31: During the past four weeks that is since March 2010, how many times did you consult a private specialist on your own behalf?

- Number of times

Question 32: For what reason would you not consult a government medical or surgical specialist?

- Less than three (3) months ago
- Less than six (6) months ago
- Less than 12 months ago
- 12 months ago or longer
- Never
- Don’t know

Question 33: During the past four weeks that is since March 2010, how many times did you consult a government specialist on your own behalf?

- Number of times

Question 34: What were the main reasons for not consulting a private medical or surgical specialist?

- Could not afford it (too expensive)
- Did not have the time because of work
- Too far to travel / no means of transportation
- Fear of doctor / hospitals / examination / treatment
- Didn’t know any good specialist
- Did not need to consult with a private specialist
- Other reasons
- Don’t know

Question 35: What were the main reasons for not consulting a government medical or surgical specialist?

- Waiting list
- No referral letter
Appendices

- Did not have the time because of work
- Too far to travel / no means of transportation
- Fear of doctor / hospitals / examination / treatment
- Did not need to consult with a government specialist
- Other reasons
- Don't know

Question 36: Where do you get your information about health?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>O</td>
</tr>
<tr>
<td>b)</td>
<td>O</td>
</tr>
<tr>
<td>c)</td>
<td>O</td>
</tr>
<tr>
<td>d)</td>
<td>O</td>
</tr>
<tr>
<td>e)</td>
<td>O</td>
</tr>
<tr>
<td>f)</td>
<td>O</td>
</tr>
<tr>
<td>g)</td>
<td>O</td>
</tr>
</tbody>
</table>

End of Survey Questionnaire
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Appendix 2
Doctors’ Interviews

Section A: Demographic Details

Gender:
Male □ Female □

Age Group:
25–30 years □ 31–36 years □
37–42 years □ > 50 years □

How many years have you been practicing as a GP?
0–1 year □ 2–5 years □
6–10 years □ 11–15 years □
More than 15 years □

Do you work: only privately □ only with the government □ both □

How much time (in minutes) do you spend with each patient on average?
2–5 □ 6–9 □ 10–14 □ 15 or more □
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Section B: Interview Questions

1. Do you think that socioeconomic groups in Malta show different patterns of utilization in relation to General Practitioner Services in the primary private and public health care setting?

2. In your opinion, what are the key factors that influence utilization of health care services’ in the primary health care setting?

3. What factors determine the patients’ choice for primary private health care services as opposed to public health care services?

4. What factors determine the patients’ choice for primary public health care services as opposed to private health care services?

5. What are your views regarding the existing public primary health care services?

6. How satisfied are you with the service you are providing as a family doctor/public health centre doctor?
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Appendix 3

Covering Letter for Doctors Interview

Dear Doctor,

As you may already know, we are constantly trying to ameliorate the health care services and the quality of care delivered to our patients. I am a nurse by profession and at present, I am working full-time at the CommCare Assessment Unit. At the moment, I am carrying out a study to explore the different patterns of utilization of primary health care services mainly General Practitioner Services within the primary health care setting. In this researcher study, I hope to identify the key factors that influence utilization of health care so that targeted measures will be pursued to address inequalities in the utilization of primary health care. This study is going to use three different research tools consisting of a descriptive study with elements of exploratory and explanatory aspects by a telephone questionnaire and interviews with the General Practitioners in the public and private sector to assess the perceptions of doctors in relation to the utilisation of health care. Elite interviews will also be carried out with the Minister of Health, the Elderly and the Community and with the Consultant of Public Health in Malta in order to round up the research findings. I would like to ensure you that permission to conduct this study was sought from the Faculty of Sciences Research Ethics Committee (FHC REC) and University Research Ethics Committee (UREC). Therefore, I would like to include you in my study. Your participation within this study will be very valuable to me.

I hope that with this study we would be able to know what patients want from us. In this way we would be able to recognize the importance of primary health care. Furthermore, investment in primary health care will reap benefits in the long run resulting in sustainable health care systems and healthier communities.

Thank you for your attention.

Yours Sincerely,

Felicity Sciberras
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Appendix 4

Covering letter for telephone questionnaires

Dear Sir/Madam,

As you may already know, we are constantly trying to ameliorate the health care services and the quality of care delivered to our patients. I am a nurse by profession and at present, I am working full-time at the CommCare Assessment Unit. At the moment, I am carrying out a study to explore the different patterns of utilization of primary health care services mainly General Practitioner Services within the primary health care setting. In this researcher study, I hope to identify the key factors that influence utilization of health care so that targeted measures will be pursued to address inequalities in the utilization of primary health care. This study is going to use three different research tools consisting of a descriptive study with elements of exploratory and explanatory aspects by a telephone questionnaire and interviews with the General Practitioners in the public and private sector to assess the perceptions of doctors in relation to the utilisation of health care. Elite interviews will also be carried out with the Minister of Health, the Elderly and the Community and with the Consultant of Public Health in Malta in order to round up the research findings. I would like to ensure you that permission to conduct this study was sought from the Faculty of Sciences Research Ethics Committee (FHC REC) and University Research Ethics Committee (UREC). Therefore; I would like to include you in my study. Your participation within this study will be very valuable to me.

If you agree to participate in the telephone questionnaire, you will be asked to give your verbal consent and to reply to the questions of the questionnaire which will approximately take ten minutes to complete. I hope that with this study we would be able to know what patients want from us. In this way we would be able to recognize the importance of primary health care. Furthermore, investment in primary health care will reap benefits in the long run resulting in sustainable health care systems and healthier communities.

Thank you for your attention.

Yours Sincerely,

Felicity Sciberras
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Appendix 5
Private family doctors consent form

The aims and details of the project on ‘Utilisation of Primary Health Care’ have been explained to me by Ms. Felicity Sciberras. I know that the information collected will remain confidential, and that it will be used only for scientific purposes. I also know that a written report of the study will be drawn up and that I will not be identified in any way in this report. I know that once the study is completed all the information collected will be destroyed. I therefore give my consent to the person responsible for the research to be interviewed. I am aware that I am under no obligation to do so and that I can withdraw my consent at any moment without giving any reason. In case of any difficulty during the study I can contact:

Ms. Felicity Sciberras
Mob: 99845705
E-mail: felicity.sciberras@gmail.com

Surname: _________________________

Name: __________________________
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Appendix 6
Health Centre doctors consent form

The aims and details of the project on ‘Utilisation of Primary Health Care’ have been explained to me by Ms.Felicity Sciberras. I know that the information collected will remain confidential, and that it will be used only for scientific purposes. I also know that a written report of the study will be drawn up and that I will not be identified in any way in this report. I know that once the study is completed all the information collected will be destroyed. I therefore give my consent to the person responsible for the research to be interviewed. I am aware that I am under no obligation to do so and that I can withdraw my consent at any moment without giving any reason. In case of any difficulty during the study I can contact:

Ms.Felicity Sciberras

Mob : 99845705

E-mail: felicity.sciberras@gmail.com

Surname: _______________________

Name: _______________________

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Appendix 7
Patients verbal consent form (English version)

The aims and details of the project on ‘Utilisation of Primary Health Care’ have been explained to me by Ms.Felicity Sciberras. I know that the information collected will remain confidential, and that it will be used only for scientific purposes. I also know that a written report of the study will be drawn up and that I will not be identified in any way in this report. I know that once the study is completed all the information collected will be destroyed. I therefore give my consent to the person responsible for the research to be interviewed. I am aware that I am under no obligation to do so and that I can withdraw my consent at any moment without giving any reason. In case of any difficulty during the study I can contact:

Yes I consent to participate

Ms.Felicity Sciberras
Mob : 99845705
E-mail: felicity.sciberras@gmail.com
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Appendix 8

Patients verbal consent form (Maltese version)

Formola ta Kunsens


Jekk ikolli xi diffikultà waqt l-istudju nista’ nistaqsi ghal:

Iva, naghti l-kunsens biex nippartecipa

Ms. Felicity Sciberras

Mob: 99845705

E-mail: felicity.sciberras@gmail.com
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Appendix 9
Doctors’ interviews analysis

Question 1:
Do you think that different socioeconomic groups in Malta show different patterns of utilization in relation to general practitioner services in the primary private and public health care setting?

The doctors were asked whether there is any pattern in the way Maltese population subgroups use private and public health care services. All doctors were consistent in their agreement that working class and poorly educated citizens demand higher primary health care utilization. However, sixty percent of respondents claimed that this category of people utilize the public service more frequently for cases of emergency. However, the respondents declared that to a certain extent, they think that all socio-economic groups make use of public health care at some point in their lives. Also, all doctors working at the health centres articulated that there is greater utilization of the general practitioner services at the extreme stages of life that is less than five years old and more than seventy years of age. This was evident in the literature review as various researchers stated that with advancing age the demand for health services increases. Only two doctors who were on duty in the Floriana Health Centre highlighted the fact that nowadays the patterns of health services utilization is increasing drastically as a result of illegal immigration. The rest of the doctors did not mention this issue. These doctors asserted that “illegal immigrants have a poorer health status and worse living conditions than the host population and consequently, this result in greater demand for health care services utilization”. It is however worth mentioning that the patterns of health care services utilization by different social groups was not given much importance by all the doctors who work within the private sector although they affirmed that they did not encounter many patients who could not afford their general practitioner services.
Question 2:

In your opinion, what are the key factors that influence the general practitioner services' utilization in the primary health care setting.

The second question asked to the respondents focused on the potential factors that influence the utilization of public and private primary health care services. The content analysis revealed that all doctors working at the government health centres asserted “that access barriers to health care may evolve from factors within the health system itself.” According to these doctors, “geographical factors such as distance, organizational factors such as waiting times and opening hours and lack of appropriate information giving” are the prime factors that influence utilization of health care in the public sector. All doctors working in the private sector advocated that monetary factors related to direct user charges and out of pocket payments impact the utilization of health services in the private setting.

All doctors interviewed agreed that the perceptions and attitudes of patients towards disease is also a factor that affects the utilization of health care services both in the private and public sector respectively. Consequently all the doctors asserted that “individuals in the lower income bracket are more likely to have negative attitudes and perceptions towards health care as compared to their counterparts and this leads to less use of health services”. All the doctors working in the public sector stated that personality traits, professional values and communication skills are factors which can hinder utilization of health care. Similarly, doctors working in the private sector affirmed that the family doctor should be enthusiastic and communicates effectively with his/her patients.
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**Question 3:**

*What factors determine the patient's choice for primary private health care services’ utilization in the primary health care setting?*

All the doctors working in the private sector asserted that monetary factors and continuity of care determine the patients’ choice for private health care. Twenty percent of doctors working in this sector asserted that “waiting for long hours at the health centres frustrates the patients so they prefer consulting a family doctor.” Another two doctors mentioned that “adequate documentation and record - keeping of patient records drives the choice for private health care utilization.” These are essential to maintain continuity of care. Doctors working in the private sector stated that people who have a private health insurance are likely to consult a private family doctor and prefer to be followed up by the same doctor. Another reason justifying the choice of private health care services is the availability of the family doctor.

**Question 4:**

*What factors determine the patient’s choice for primary public health care services’ utilization in the primary health care setting?*

The majority of doctors working in the health centres stated that the “fact that the public services are free of charge attracts more people.” Another reason justifying the choice of public health services is that “basic emergency services are provided for instance, nebulizer treatment which family doctors do not provide.” Two doctors from Mosta Health centre affirmed that another reason substantiating the choice of public health services is the fact that in “primary health care, although patients prefer to consult a private general practitioner and pay a fee, they have the assurance that if they need an urgent general practitioner at night and they don't find their own, there's a public-health doctor available.” All the doctors working in the public sector were consistent in their agreement that to a certain extent, they think that “all socio-economic groups, especially men make use of public health care services for repeated prescriptions and sick certificates”.

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Question 5:
What are your views regarding the existing public and private primary health care?

All doctors agreed that efficient information technology services are needed and should be coordinated well between the public and private sectors for the primary health care system to work seamlessly. All doctors were consistent in their assertion that “patient records are essential to maintain continuity of care and to remember certain details about the patient’s past history or treatment.” Some form of records, paper or computerized data is kept by all the private family doctors and these methods have also been introduced at the health centres in the last few years. Doctors asserted that a “significant segment of the population do not afford to pay for private services and indeed both systems need to work synergistically for the benefit of the patient.” Sixty percent of doctors agreed that the “public system is non-profit making so there is more awareness and control over funding.” The public system seems to be well-balanced but some reforms need to be implemented especially in the number of doctors employed because the workload is on the increase.

Question 6:
How satisfied are you with the service you are providing as a family doctor/ public health centre doctor?

Patient satisfaction is very high in the private sector. Doctors working in the private sector have a good perception of their patients’ level of satisfaction. When asked if the doctors think their patients are satisfied, all the doctors interviewed in the private sector asserted that they think the “majority of their clients are satisfied especially those who consult them frequently.” On the other hand, a high proportion of doctors working in the public sector claimed that “patients are not satisfied as there is no continuity of care and patients cannot consult the same doctor.” The only reason why they choose this service is because it is “free at the point of use.”

When asked whether the doctors are satisfied with their work as a family doctor at the clinics where they were interviewed, all private family doctors claimed that “they were
satisfied, some stating they were very satisfied”. “The continuity of care and strong
doctor-patient relationships were important factors for the doctors’ satisfaction.”
However, doctors working in the public sector “are not satisfied in view of major
contributing factors mainly stress, lack of staff, no continuity of care and inadequate
doctor-patient relationships”.

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Appendix 10

Elite interviews analysis

Question 1:
Can you define primary health care and what are your perceptions regarding the existing public and private primary health care systems?

We have come a long way in recognising the importance of primary health since the Alma Ata declaration. Primary health has become the cornerstone of many a health care system in the world and countries have long realised that investment in this key area will reap tremendous benefits in the long run, resulting not only in stronger and more sustainable health systems but also and more importantly, in healthier communities. The primary and family health care paradigm has become a central tenet throughout all the health system as empowerment of the public, of our families and of our patients is a driving force now shaping health policy towards a more participative and enriching experience for our population.

Question 2:
What are your perceptions regarding the existing public and private primary health care systems?

Seventy-eight percent of the Maltese prefer to visit their own private family doctor. As anticipated, the health services utilization questionnaire highlights the extent to which the Maltese trust their private family doctor. This is considered as the foundation and core of health care in Malta. Besides, patients consider their family doctor as their friend, confidant and close advisor. Consequently, the private family doctor model has also continued to be cherished as a valuable and focal point for the family health as over sixty percent of primary care in Malta is driven and covered by the private family doctor.

The Minister stated that this is one of the reasons justifying the reforms in the private sector in which Government would like to strengthen the private primary care sector
and allow these general practitioners to provide their patients with the holistic medical care they require. This strategic approach enhances the continuity and coordination of patient care which underpins a sound doctor-patient relationship. Furthermore, such a strategic approach to primary health care would decrease the burden on hospital and specialist services in the hope of allowing individuals to be less dependent on these hospital services as well as improving their quality of life. Both the private and the public system have to be in place as both systems need to work synergistically for the benefit of the patient. This emphasizes the relevance of targeted measures when aiming to tackle inequalities in access and utilization of health care services. This will eventually lead to a socially inclusive community engaged in active promotion of health and in caring for the more vulnerable members which moves to a new ethos of interdisciplinary care based on the dignity of the individual, respect for the family and the value of the community through “personalized, professional, evidence-based, quality and sustainable services that empower the individual change and privilege the health and psychosocial needs of the person.” (The Ministry of Health, the Elderly, and the Community 2008).

Thus, the objectives that will lead to the strengthening of primary health care services hinge upon a number of key elements which include a change in paradigm so that primary health care services are not seen as ancillary to hospitals but rather as the foundation for all health care. Furthermore, partnerships with key service providers will be established in service frameworks that clearly outline roles and responsibilities thereby allowing services to be provided without duplication and the organization will be best suited to provide them. Another important factor focuses on the awareness to identify and address health inequalities. These over-arching objectives will be accomplished to provide caring and supportive service environments, to enhance accessibility to health and social services and to promote quality of service provision and to safeguard future sustainability of the service.
Question 1:
What are your perceptions regarding the existing public and private primary health care systems?

Primary health care can be described as the provision of basic healthcare built on technically sound and socially adequate approaches that are universally accessible to all individuals. There are three perspectives of primary health care as being a set of activities that contains a minimum of eight elements that combine the selective and comprehensive primary health care - a provision of care at various levels primary, secondary and tertiary and an approach related to universal coverage, intersectoral collaboration and community participation. The primary health care system is the individual’s first contact with health care. The foundation of primary health care lies in the adoption of a sound doctor patient relationship with continuity and coordination of care. Strategies to promote health need to be pursued. These will reduce the socioeconomic burden of preventable illness and will lead the way to working towards a vision of encouraging, promoting and fostering a healthy environment which will enable the Maltese people to make the right choices to attain a high level of health and well being.

Question 2:
Do you think that different socio-economic groups show different patterns of health care utilization in relation to general practitioner services in the primary public and private health care setting? And how do socio-demographic characteristics (gender, age, monthly household income and education) influence this?

In this study, there was a significant relationship between education and private general practitioner utilization with the majority of highly educated individuals consulting the general practitioner four weeks prior to the questionnaire. The Consultant of Public Health asserted that it is well known and documented that people with low socioeconomic positions are less likely to access health services. Indeed, people occupying these socio-economic positions utilize the public primary health care services more for day to day cases including emergency services, but to a certain extent all
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socio-economic groups make use of public health care at some point in their lives; for instance, for free blood investigations and for sick certificates.

Moreover, a growing body of research shows that there is an increased demand for health care services in the public sector amongst small children and the elderly. This increased demand is explained in terms of an ageing population and a high incidence of chronic conditions like obesity and diabetes and heart problems in geriatric patients. All these chronic conditions are putting enormous financial pressure on the health system. On the other hand, the pattern of health service utilization is increasing drastically as a result of illegal immigration who have poor health status than the host population. It is well documented that even where universal access to health services is formally in place, individuals can face a range of barriers hindering the actual utilisation of that service.

Barriers to access may stem from gaps in population coverage of health insurance, monetary factors and accessibility problems. The characteristics of the service user namely the income, gender, cultural background, health beliefs and people’s attitudes towards health care explain some of the variations in the use of health care services by different socio-economic groups. These access barriers and hurdles have relatively more impact on people occupying low socio-economic groups. Thus, the policymakers have to consider such important issues and guide policy on target groups that require further investment in health services and programmes in order to provide caring and supportive service environments to enhance accessibility to health and social services and to promote quality and delivery of service provision.

Most findings of the present study showed a positive relationship between the socioeconomic status and the use of health care services. The Consultant of Public Health in Malta asserted that a strategic approach to address the problem of socioeconomic health inequalities demands changing social and economic policies. Yet far more needs to be done in order to pursue effective and sustainable policies that will help identify priorities and target groups requiring attention. Therefore, it is imperative to pursue and target strategies that help address and improve equity of access. This can be
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accomplished in terms of provision of high-quality care and in enhancing access to primary health care especially amongst people occupying low socio-economic positions.
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Appendix 11
Temporary permit from the Director of Primary Health Care

DIVIZJONI TA' SAVVHA PRIMARJA
3, San Hewx, Fgurana
PHM 4051
Website: http://www.health.gov.mt

PRIMARY HEALTH
7 Hanur Lane, Floriana
PHN 1691

Telephone: +356 21239093
Telefax: +356 21222856

19 June 2009

Ms Felicity Sciberras
4, John Kanu, Naxxar Jubilee Park, Naxxar

Re: Your request to carry out a research within the Primary Health Department entitled 'Utilisation of Primary Health Care Services in Malta'

Dear Ms Sciberras,

We are glad to inform you that your request to carry out the research within the department has been temporarily granted on the proviso that you furnish our department with a copy of the approval from the University Ethics Committee prior to the actual commencement of your study.

Following approval from the University Ethics Committee we will furnish you with a final permission and you may proceed. If the department does not receive a copy of the approval from the University Ethics Committee, this temporary permission to conduct the study/research will automatically be declared as void.

Kindly note that for data protection reasons we cannot provide you with personal contact details of general practitioners. The latter you have to ask personally for their participation or obtain their addresses from The Registers of the Medical Council which is available online.

You are also requested to provide us with your contact details and Identity Card number. These you can furnish us when you come to collect this permit.

Yours truly,

Dr M. Vella DBQ
Primary Health Department
Appendices

DIVIZJONI TAS-SAHHAA PRIMARJA

Appendix 12
Permanent permit from the Director of Primary Health Care

Website: http://www.health.gov.mt

Ms Felicity Sciberras
4, ‘John-Kate’ House,
Diamond Jubilee Square,
Mqabba

Re: Your request to carry out a research within the Primary Health Department entitled 'Utilisation of Primary Health Care Services in Malta'

Dear Ms Sciberras,

I am pleased to inform you that your request to carry out the research within the department has been fully approved.

May I inform you that as we have to abide to the Data Protection Law, we cannot provide you with a list of data subjects' contact details unless the data subjects and the researcher are both public officers. The data subjects also have to sign a consent form that also includes a data protection statement prior to participating (see E below). Any modifications of this approach would have to be first discussed with the data protection officer. Where statistics are involved, only data in terms of age, sex etc can be forwarded to you but not names of individuals.

May I bring to your attention that the researcher is obliged to apply necessary safeguards as a condition for carrying out this research, namely -

A. The personal data (of data subjects) accessed or given are only to be used for that specific purpose to conduct the research and for no other purpose;

B. At the end of the research, all personal data should be destroyed;

C. All references to personal data should be omitted in the report unless consent is specifically obtained from the person being identified in the research report;

D. Participation in the research being conducted should be at the discretion of the individual, and they can refuse any participation whatsoever if they so wish;

E. If data subjects (patients/staff) are going to be interviewed, video recorded or given a non-anonymous questionnaire to fill, a consent form should be signed by the participating data subject and a privacy policy statement read to them; Faces should be hidden or digitally modified as to conceal identity;

F. Any other measure deemed fit by the respective Head, depending on the research to be carried out.

The director also appreciates very much if he is provided with a copy of the research findings when it is concluded.

Yours truly,

Dr Mario Vella, DPO
f/ Dr D Vella Baldacchino, Data Controller, Primary Health Department
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To be completed by Faculty Research Ethics Committee

Appendix 13

We have examined the above proposal and advise

<table>
<thead>
<tr>
<th>Faculty of Sciences Research Ethics Committee Permission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance</td>
</tr>
</tbody>
</table>

For the following reason/s:

Signature [Signature]

Date 02.06.09

---

To be completed by University Research Ethics Committee

We have examined the above proposal and grant

| Acceptance | Refusal | Conditional acceptance |

For the following reason/s:

Signature [Signature]

Date 09.01.09
Appendices

DIPARTIMENT TA'
L-INFORMAZZJONI FUQ IS-SAHHA
U R-RIČERKA

Appendix 14

Permission from Dr. Calleja to use the European Health Interview Survey questionnaire

Our Ref:  
Your Ref:

18 June 2009

To Whom It May Concern:

This is to certify that Ms Felicity Sciberras (ID:613182M) has been granted authorisation to use and translate the European Health Interview Survey Questionnaire for her thesis project.

Dr Neville Calleja
Director Health Information & Research
95 G'mangia Hill
G'mangia PTA1313
MALTA
Tel  +356-25599000
Fax  +356-25599385
e-mail neville.calleja@gov.mt
Appendices

Appendix 15

Kwestjonarju Dwarf L-Uzu tas-Servizzi tas-Sahha Primarja F’Malta

PARTI A: KARATTERISTICI PERSONALI

Introduzzjoni

L- ewwelnett, nixtieq nistaqsik xi mistoqsijiet dwar din ir- residenza.

1. Kemm joqoghdu nies f’din ir- residenza?

   [_____] persuni

Mistoqsija 1: Sess

   - Ragel O
   - Mara O

Mistoqsija 2: Kemm ghandek zmien?

   - Eta’ [_____] sena

Mistoqsija 3: F’ liema pajjiz twelidt?

   - Malta O
   - Stat Membru iehor fl-Unjoni Ewropeja O
   - Stat iehor mhux fl-Unjoni Ewropeja O

Mistoqsija 4.: Ta’ fejn inti cittadin/a?

   - Malti/ja O
   - Stat Membru iehor fl- UE O
   - Stat iehor mhux fl- UE O

Mistoqsija 5: X’inhu l- istat legali tieghek?

   - Guvni / xebba O
   - Mizzewwga/eg O
   - Arzal/l O
   - Isseparat/a, O
   - Iddivorzjat/a O
Appendices

Mistoqsija 6: Liema wahda minn dawn id-dikkjarazzjonijet jiddiskrivu il-mod kif qed tghix bhalissa?

- Xebbha/Guvni u tghix wahdek
- Xebbha/Guvni u tghix mal-membri tal-familja
- Single Parent u tghix mat-tfal tieghek
- Mizzewga/Mizzeweg u tghix mat-tfal tieghek
- Mizzeweg/Mizzewega u m’ghandekx tfal
- Raguni Ohra  (Iddeskrivi)

Mistoqsija 7: Kemm joqoghdu nies f’din ir-residenza?

Numri ta’ persuni

Kemm hemm individwi li ghandhom inqas minn tmintax il-sens u li joqoghdu f’din ir-residenza

Numri ta’ individwi

Mistoqsija 8: X’inhi il-livell t’edukazzjoni li Iestejt?

- L- ebda edukazzjoni formali
- Edukazzjoni primarja
- Edukazzjoni sekondarja
- Edukazzjoni post-sekondarja
- Edukazzjoni terzjarja

Mistoqsija 9: X’inhi l-iktar kwalifikazzjoni gholja li ghandek?

- Undergraduate Diploma
- Postgraduate Diploma
- Bachelor’s Degree
- Masters Degree
- Dottoratt
- Apprenticeship
- Xi kwalifika ohra
Mistoqsija 10: Kif tiddeskrivi l-impjieg tieghek bhalissa?

- Impjieg Full-time
- Impjieg Part-time
- Bla xoghol
- Student
- Irtirajt,
- Tbati minn dizabbilita permanenti
- Mara/ragel tad-dar
- Ohrajn. Specifika: ____________________________

Mistoqsija 11: Fl-imjieg tieghek inti:

- Self-employed bil-haddiema
- Self-employed minghajr haddiema
- Haddiem/a
- Ohrajn. Specifika:

Mistoqsija 12: X’inhu ix- xoghol tieghek?

- Tip ta’ xoghol: ____________________________

Mistoqsija 13: Kemm tikkunsidra li huwa l-qliegh tieghek kull xahar?

- Baxx (<€ 750)
- Baxx ghal medju (€751 - €1250)
- Medju (€1251 - €1751)
- Medju ghal gholi (€1751 - €2250)
- Gholi (il-fuq minn €2251)
- Ma nafx
- Nurrifjuta li nwiegeb
Parti B: Taqsima Dwar L-Istat Tas-Sahha U L-Uzu ta’ Servizzi fis-Sahha Primarja

Mistoqsiija 14: Kif inhi sahhtek in generali?

- Tajba hafna
- Tajba
- Insomma
- Hazina
- Hazina hafna

Mistoqsiija 15: Tbati minn xi marda jew xi problema ta’ sahha kronika li ilek biha tul ta’ zmien?

- Iva
- Le

Mistoqsiija 16: Fl-ahhar sentejn, it-tabib teighek qalek li ghandek wahda minn dawk il-kundizzjonijiet medici?

<table>
<thead>
<tr>
<th></th>
<th>Iva</th>
<th>Le</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Problemi tal-qalb, cirkulazzjoni (inkluzi pressjoni ghlja u kolesterol gholi)</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b. Diabetes</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c. Problemi tas-sahha serji jew dizabiljita</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Mistoqsiija 17: Minhabba din il-marda kronika, kemm il-darba mort kellimt lil-tabib tieghhek f’dawn l-ahhar tmax il-xahar?

- Numri ta’ drabi

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Il-mistoqsijiet li jmis huma dwar konsultazzjoni mat-tabib tal-familja

Mistoqsija 18: Meta kienet l-ahhar darba li kellimt lit-tabib tal-familja l-ahhar (tabib privat), ghal xi bzonn tieghek?

- Anqas minn tlett xhur ilu
- Anqas minn sitt xhur
- Anqas minn tnax il-xahar ilu
- Tnax il-xahar ilu jew iktar
- Qatt

{Mur mistoqsija 20} {Mur mistoqsija 25}

Mistoqsija 19: Jekk it-tfal tieghek jimirdu, inti x’taghmel?

<table>
<thead>
<tr>
<th>Iva</th>
<th>Le</th>
<th>Ma Nafx</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

{Mur mistoqsija 22} {Mur mistoqsija 26}

Mistoqsija 20: F’dawn l- F’dawn l-ahhar 4 gimghat, jigifieri minn Marzu 2010, kemm-il darba kkonsultajt lit-tabib tal-familja ghal xi bzonn tieghek?

| drabi [QATT = 0] |

Mistoqsija 21: Meta kienet l-ahhar darba li kellimt lit-tabib tal-gvern (health centre) l-ahhar (tabib tal-gvern), ghal xi bzonn tieghek?

- Anqas minn tlett xhur ilu
- Anqas minn sitt xhur
- Anqas minn tnax il-xahar ilu
- Tnax il-xahar ilu jew iktar
- Qatt

{Mur mistoqsija 22} {Mur mistoqsija 26}

Mistoqsija 22: F’dawn l- F’dawn l-ahhar 4 gimghat, jigifieri minn Marzu 2010, kemm-il darba kkonsultajt lit-tabib tal-gvern (tabib tal-health centre) ghal xi bzonn tieghek?

| drabi [QATT = 0] |
### Mistoqsija 23: Meta tmur ghand it-tabib privat, inti:-

<table>
<thead>
<tr>
<th>Dejjem</th>
<th>Il-Bicca il-kbira</th>
<th>Hafna mid-drabi</th>
<th>Qatt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Tmur fl-istess klinika</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2) Tara l-istess tabib</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

### Mistoqsija 24: Meta tmur ghand it-tabib tal-gvern (tal-health centre), inti:-

<table>
<thead>
<tr>
<th>Dejjem</th>
<th>Il-Bicca il-kbira</th>
<th>Hafna mid-drabi</th>
<th>Qatt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Tmur fl-istess healthcentre</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2) Tara l-istess tabib</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

### Mistoqsija 25: X’inhuma ir-ragunijiet li ma tikkunsultax it-tabib privat?

- Minhabba il-hlas involut biex tara tabib privat  
- L-ammont ta’ hin li trid tistenna biex tara tabib  
- It-trasport li ghandek bzonn biex tara it-tabib  
- Ma kelliex cans minhabba ix-xoghol, u ghax niehu hsieb it-tfal  
- Il boghod wisq/ M’ghandix biex nasal  
- Nibza mit-tabib/sptarjiyet/li jkollu jezaminani/trattament  
- Ma kelliex bzonn nikkunsulta tabib  
- Ragunijiet ohra

### Mistoqsija 26: X’inhuma ir-ragunijiet li ma tikkunsultax it-tabib tal-gvern?

- L-ammont ta’ hin li trid tistenna biex tara tabib  
- It-trasport li ghandek bzonn biex tmur il-health centre  
- Ma kelliex cans minhabba ix-xoghol, u ghax niehu hsieb it-tfal  
- Il boghod wisq/ M’ghandix biex nasal  
- Nibza mit-tabib/sptarjiyet/li jkollu jezaminani/trattament  
- Mhux dejjem tara l-istess tabib fil-health centre  
- Ma kelliex bzonn nikkunsulta tabib  
- Ragunijiet ohra
Appendices

Mistoqsija 27: Skond l-esperjenzi personali tieghek meta tikkunsulta lit-tabib privat kif thares lejn dawn li se nghidlek?

<table>
<thead>
<tr>
<th></th>
<th>Tajjeb Hafna</th>
<th>Tajjeb</th>
<th>Imsomma</th>
<th>Hazin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Il-hin tal-konsultazzjoni li jaghmel it-tabib</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Il-pacenzja tat-tabib jekk issaqsih xi mistoqsija</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>L-attitudni tat-tabib mieghek</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Mistoqsija 28: Skond l-esperjenzi personali tieghek meta tikkunsulta lit-tabib tal-gvern (health centre) kif thares lejn dawn li se nghidlek?

<table>
<thead>
<tr>
<th></th>
<th>Tajjeb Hafna</th>
<th>Tajjeb</th>
<th>Imsomma</th>
<th>Hazin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Il-hin tal-konsultazzjoni li jaghmel it-tabib</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Il-pacenzja tat-tabib jekk issaqsih xi mistoqsija</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>L-attitudni tat-tabib mieghek</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
Appendices

**Mistoqsija 29: Kemm taqbel jew ma taqbilx ma dawn id-dikjarazzjonijiet?**

<table>
<thead>
<tr>
<th>hafna</th>
<th>Naqbel hafna</th>
<th>Naqbel</th>
<th>Ma Naqbilx</th>
<th>Ma Naqbilx</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Jekk tistenna</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>hafna tista ma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tarax tabib ghax il-marda</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tghaddi wahedha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Jien imur ghand</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>it-tabib fejn ma jkolliex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>triq ohra</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Anki jekk persuna thossha</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>B’sahhitha xorta ghandha/hu</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taghmel checkup kull sena</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Il-kura li iricvejt</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Minn ghand it-tobba</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fl-ahhar sena hija</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodisfaccierti</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mistoqsija 30: Meta kienet l-ahhar darba li kellimt lis-specjalista privat, ghal xi bzonn tieghek?**

- Anqas minn tlett xhur ilu                   O                     {Mur mistoqsija 31}
- Anqas minn sitt xhur                        O                     
- Anqas minn tnax il-xahar ilu                O                     
- Tnax il-xahar ilu jew iktar                 O                     
- Qatt                                       O                     {Mur mistoqsija 34}

**Mistoqsija 31: F’dawn l- F’dawn l- ahhar 4 gimghat, jigifieri minn Marzu 2010, kemm-il darba kkonsultajt lis-specjalista privat ghal xi bzonn tieghek?**

| drabi [QATT = 0] |
Mistoqsija 32: Meta kienet l-ahhar darba li kellimt lis-speċjalista tal-gvern, ghal xi bzonn tieghek?

- Anqas minn tlett xhur ilu
- Anqas minn sitt xhur
- Anqas minn tnax il-xahar ilu
- Tnax il-xahar ilu jew iktar
- Qatt

Mistoqsija 33: F’dawn l- F’dawn l- aħħar 4 gimghat, jijifli minn Marzu 2010, kemm-il darba kkonsultajt lis-speċjalista tal-gvern ghal xi bzonn tieghek?

_____ drabi [QATT = 0]

Mistoqsija 34: X’inhuma ir-ragunijiet li ma tikkunsultax l-ispeċjalist privat?

- Ma niflahx inhallas (ksultazzjoni gholja)
- Ma kelliex cans minhabba ix-xoghol
- Il boghod wisq/ M’ghandix biex nasal
- Nibza mit-tabib/sptarijiet/li jkollu jezaminani/trattament
- Ma kelliex bzonn nikkunsulta specjalista privata
- Ragunijiet ohra
- Ma Nafx

Mistoqsija 35: X’inhuma ir-ragunijiet li ma tikkunsultax l-ispeċjalist tal-gvern?

- Waiting list twila
- Ma kelliex referral min ghand it-tabib
- Ma kelliex cans minhabba ix-xoghol
- Il boghod wisq/ M’ghandix biex nasal
- Nibza mit-tabib/sptarijiet/li jkollu jezaminani/trattament
- Ma kelliex bzonn nikkunsulta specjalista tal-gvern
- Ragunijiet ohra
- Ma nafx
Mistoqsija 36: Minn fejn tikseb l- informazzjoni dwar sahhtek?

<table>
<thead>
<tr>
<th></th>
<th>Iva</th>
<th>Le</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) It-Tabib/a kuranti tieghek / Centru tas-Sahha</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b) Professjonisti ohra fil- kura tas- sahha</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c) Kampanji ta’ promozzjoni tas- sahha</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>d) Il- post tax-xoghol / l- iskola</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>f) Il- familja / hbieb</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>g) Il-Media (gazzetti, radju, TV)</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>h) L-Internet</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Tmiem ta’ L-Intervista