PATIENT SATISFACTION IN PRIMARY HEALTH CARE
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IN
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by

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Patient Satisfaction in Primary Health Care

Declaration of Authenticity

I, the undersigned, declare that this dissertation is my own original work and was carried out under the supervision of Dr Sandra Buttigieg.

Dr Andrew Agius MD MMCFD
To my wife Rachael

and to my mother and father
I would like to start by thanking my supervisor, Dr Sandra Buttigieg MD PhD (Aston) FFPH(UK) MSc MBA MMCFD, for her help, encouragement and support.

Special thanks go to my wife, Rachael Agius MSc (London), currently doing her PhD, for her great help and guidance throughout the study.

I would also like to thank Dr Philip Sciortino MD, MSc, MRCGP, Dr Anthony Azzopardi MD, MMCFD, Dr Shirley Farrugia, MD, MMCFD and my father, Dr Godfrey Agius MD for helping me with data collection in the private sector. A big thank you goes to Dr Neville Calleja MD, MSc (Malta), Msc (London), DLSHTM, GradStat, medical statistician, for his help and patience with my statistics.

Last but not least, I would also like to thank the Director of Primary Health Care for giving me permission to carry out a survey at the health centres, the health centre doctors and the research assistants who helped me with data collection in the public sector.
Abstract

The aims of this study were to identify the factors that are most likely to lead to patient satisfaction and to compare patient satisfaction between public and private sectors of primary health care in Malta. Four clinics in the public sector and four clinics in the private sector were chosen in representative areas of the island. A 32-item questionnaire was distributed in each clinic and a doctor from each clinic was interviewed to discuss perceptions of patient satisfaction in each clinic. The overall response rate was 99% in the public sector and 89% in the private sector. The factors most likely to lead to patient satisfaction were factors related to clinical care and communication skills. The difference in patient satisfaction between public and private sectors of primary health care was mainly due to the large differences in the doctors' communication skills between the two sectors. Doctors working in the private sector are highly satisfied because of good doctor-patient relationships and good continuity of care. Due to doctors' stress, disrespect and low job satisfaction, both patients and doctors in the public sector are dissatisfied. In order to improve doctor and patient satisfaction in the public sector, radical changes need to be made, based on factors which have been identified in this study.
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1. Introduction

1.1 Introduction

Quality of care is a complex and multidimensional concept and has been extensively studied to improve our understanding and practice of primary health care (Maeseneer & Sutter, 2004). Williams and Calnan (1991) claim that patient satisfaction is an increasingly important issue in the evaluation and shaping of health care. They found that high levels of patient satisfaction depend on the quality of doctor-patient relationships, as well as on doctors' professional values and good communication skills.

According to Robertson and colleagues (2008), confidence and trust in the doctor are the most important factors in determining patient satisfaction. Longer consultation times and good team working are also key factors in providing high quality care (Campbell et al., 2001; Cilia, 2007).

In 2003, Asciak et al. found that primary health care in Malta had a higher rate of patient satisfaction in the private sector than in the public sector. Azzopardi and Dixon (1999) stated that the Maltese public health service lacks continuity of care and a good doctor-patient relationship. Since health centres are chronically understaffed, this has adversely affected the provision of high quality care and development in the public sector (Abela et al., 2003). As a result, the private sector in Malta now
accounts for two-thirds of the workload in primary health care (Abela et al., 2003; Azzopardi & Dixon, 1999).

1.2 Statement of the problem

In this study, it is postulated that the better the quality of health care delivered in a primary care setting, the higher the levels of patient satisfaction achieved. This study seeks to investigate the factors in the doctors’ practice that are associated with patient satisfaction.

1.3 Research Questions

The main research questions that guided this study are:

- Which factors are associated with patient satisfaction in primary health care?
- Is there a difference in patient satisfaction between public and private sectors of primary health care?
- Is the level of patient satisfaction achieved from a consultation perceived differently by patients and doctors?

1.4 Aims and objectives

The aims of this study are:

1. To identify the characteristics of a family doctor most likely to lead to patient satisfaction.
2. To compare and contrast characteristics of family doctors in public and private sectors of primary health care
3. To compare patient satisfaction between public and private sectors of primary health care.
Introduction

The following six objectives are set:

1. To identify the perceptions of patients in the government health centres of their doctors’ personality traits, professional values, duties and responsibilities, communication skills, and clinical care.

2. To identify the perceptions of patients in the private primary health care sector of their family doctors’ personality traits, professional values, duties and responsibilities, communication skills, and clinical care.

3. To identify the perceptions of patients in both public and private sectors of primary health care on the most important characteristics of a family doctor that lead to patient satisfaction,

4. To compare patient satisfaction between public and private sectors of primary health care,

5. To identify the perceptions of family doctors as regards critical factors in their practice associated with patient satisfaction,

6. To provide feedback on the results of the study to doctors in various sectors of primary health care.

1.5 Background to the study

The delivery of good quality healthcare has been studied for many years and it has been shown that improvements can be made by analyzing feedback from patients and adapting the practice to meet the patients’ needs and expectations (Zemencuk et al., 1999)
1.5.1 The global context

Patient satisfaction surveys have been used in several countries all over the world to rate the level of patient satisfaction. The National Health Service (NHS) in the U.K. sends out regular surveys to users of the service to assess the level of patient satisfaction in various sectors ('GP patient survey: national results', 2007). Grol et al. (1999) found that patients from various practices in eight different countries all had the same expectations from their family doctor; they all wanted to be given enough time with the doctor, clear explanations for their complaints and being ensured confidentiality. However, according to Campbell et al. (2001), the level of satisfaction experienced by patients in different centres may vary significantly depending on the quality of the service provided.

1.5.2 The local context

The Health Interview Survey (Asciak et al., 2003) that was 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 & O'Callaghan, 1998).

1.5.2.1 The research setting

Malta is a small island situated in the centre of the Mediterranean Sea with an estimated population of 410,290 (National Statistics Office, 2008). Primary health care is provided by two main sectors. The private sector, which accounts for two-
thirsd of the workload, consists mainly of solo family doctor practices although, over the last few years, some family doctor group practices have been evolving in various parts of the island. The public sector consists of nine regional health centres and forty-seven district clinics which provide 24-hour comprehensive health care services, which are free for all at point of delivery.

Figure 1.1 Map of Malta (U.S. Department of State, 2008)
1.5.2.2 The public sector

Azzopardi and Dixon (1999) identify several reasons for doctor dissatisfaction in the public primary health care system. The workload at the health centres is very high and most of them are relatively understaffed. The health centre doctor’s work consists mainly of repeat prescriptions, verifying sick leave and treating minor illnesses. These doctors earn a monthly salary which is not rewarding enough for all the work that they do. The patients that attend usually visit the doctor who is available at the time, resulting in a poor doctor-patient relationship. This leads to a high rate of dissatisfaction in both patients and doctors. If doctors are unhappy with their position as health care providers (Sammut, 2007), they are unlikely to provide a good quality service to patients.

1.5.2.3 The private sector

The majority of the Maltese population prefers to use the service of a private family doctor rather than attend the health centre (Azzopardi & 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. It is possible therefore that 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 Significance of the study

This study is the first of its kind in Malta that actually looks into specific aspects of care considered to be important when providing a family doctor service. Locally, not enough importance has been given to patient satisfaction surveys and therefore no feedback is available to doctors to help them adjust the way they practice. If a difference in patient satisfaction between private and public sectors of primary health care is identified, this can be used as a means to work on areas which are causing dissatisfaction and need improvement.

McKinstry and colleagues (2006) claim that doctors are not very good at predicting the level of patient satisfaction from a consultation. Evaluation of the differences between doctors’ and patients’ perceptions of patient satisfaction can be useful to provide feedback and improve quality of health care in both public and private sectors of primary health care.

1.6.1 Research gaps

Previous local research identifies the difference in patient satisfaction between public and private primary health care systems (Asciak et al., 2003). In this study, the causes for this difference are identified and discussed. No research has been carried out yet
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about the factors which potentially lead to patient satisfaction. By means of patient satisfaction questionnaires, these factors can be identified.

Some research about doctor satisfaction has been carried out by Sammut (2007). In the current research, this is analyzed further using a qualitative approach. The perceptions of Maltese doctors about patient satisfaction achieved from a consultation will be explored for the first time. In this way, one can fill in the research gaps from previous research and pave the way for further similar research in the future.

1.7 Outline of the study

In this study, patient satisfaction in the public and private sectors was measured using a patient questionnaire. Triangulation of data was achieved by capturing both quantitative data from the patient questionnaires and qualitative data from doctors' interviews on their perceptions of patient satisfaction.

1.7.1 Framework of the study

The study is divided into six chapters. In the first chapter, the subject is introduced. The aim, objectives and research questions are provided, and the significance of the study discussed. The following chapter, the literature review, discusses previous research about patient satisfaction, including local data, and doctors' perceptions of patient care in different parts of the world. Various methods on how patient satisfaction can be measured are identified. The difference between private and public sectors is researched and compared with the local scenario. In chapter three, the
method of how 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 patient questionnaires from both public and private sectors are presented and compared. The results from the qualitative analysis of the doctors' interviews are also included. These findings are discussed in detail in chapter five; these are compared with previous research outlined in the literature review. Chapter six highlights the main findings and uses these to propose ways of improving quality of care and thus increase patient satisfaction in primary health care.

1.8 Conclusion

In this introduction, the importance of patient satisfaction in primary health care has been highlighted. It has been shown that Malta has not been involved in much research involving patient satisfaction surveys. The literature review in the next chapter will discuss international research into the use of patient satisfaction surveys which have been used to improve health care delivery in various countries.
2. Literature Review

2.1 Introduction

Research on patient satisfaction dates back to the 1950s (Pascoe 1984) and has grown rapidly over the last 30 years. It has shown to be a valid indicator of quality of health care and to explain health-related behaviour. This chapter describes the findings of scientific literature related to patient satisfaction and primary health care. It is divided into seven main sections:

- An overview of primary health care
- The local context
- Quality of care and patient satisfaction, including the theory of the doctor-patient relationship, factors affecting patient satisfaction and how it is measured
- Doctors' perceptions of patient care
- Doctor satisfaction
- The public sector vs. the private sector
- A theoretical framework for the current research

A systematic review of the literature was carried out using the keywords “patient satisfaction”, “service quality”, “primary health care”, “public vs. private” and “doctor satisfaction”. The following electronic databases were searched: MEDLINE, Cochrane, Pubmed, CINAHL, Google Scholar and Sage Journals Online. Several
studies on patient satisfaction in various parts of the world, including local studies, were retrieved. These identify and discuss factors influencing patient satisfaction such as the characteristics of the doctor providing the service, age, gender and social class. Literature comparing private and public sectors was explored and doctors' views and perceptions about patient care were studied and compared in different countries.

2.2 Primary health care

Primary health care can be defined as “essential health care based on practical, scientifically sound and socially acceptable methods and technology made 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” (W.H.O. 1978). According to The World Health Report (2008), primary health care has become increasingly important in today’s world as it is a hub from which people are guided through the health system. It is where people present with all types of complaints, and where relationships between patients and clinicians develop. Patients participate in decision-making and are involved in management. Health promotion and disease prevention also take place at the primary health care level and are vital to minimize disease and improve the health care of a community.

Primary care is the patient’s first contact with the health care system. It is now becoming more patient-centred and more emphasis is being made on involving the patient in decisions and management (Speedling & Rose, 1985). The basis of good
primary health care is a good doctor-patient relationship with continuity of care (Azzopardi & Dixon, 1999). Patients should be given adequate time to express themselves and the doctor should empathize with them in order to achieve high rates of patient satisfaction.

2.3 The local context

Primary health care in Malta is provided by the state health service and by private family practitioners. The public sector consists of eight health centres and forty-seven district clinics while the private sector consists mainly of solo GP practices and very few group practices. These two systems function independently of one another. The public sector accounts for one-third of service provision while the private sector accounts for two-thirds (Azzopardi & Dixon, 1999).

Patient satisfaction in the public sector 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 & Dixon, 1999). Nevertheless, Camilleri & 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 primary health care was higher in the private sector (96.1%) than in the public sector (83.1%). These results outline a trend that shows that the service provided in the public sector has somewhat deteriorated from 1996 to 2002. When comparing these two studies, one should keep in mind the limitation that the tools used were different in each study. There could be many reasons for this 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). The absence of a good doctor-patient relationship and lack of continuity of care leads to dissatisfaction for both patients and doctors (Azzopardi & Dixon, 1999). This is resulting in an increasing shortage of doctors in the government health centres (Sammut, 2007) and is causing long waiting times and less contact time with the patients. In the Times of Malta (18th April 2009), it can be seen how the increasing number of patients and the decreasing number of doctors in the health centres is causing the conditions of work of these doctors to become unsustainable. Besides the shortage of doctors, lack of health promotion and disease prevention have also contributed to deterioration in service quality in the public sector (Azzopardi & Dixon, 1999). The following are some comments by dissatisfied patients who describe their experiences at the government health centres. These comments are taken from Times of Malta (18th April 2009):

“Yesterday I needed treatment because I couldn’t swallow with a bad sore throat and my GP wasn’t available and I was disgusted. I told the doctor I had bad sore throat, he got a normal torch and saw my throat, wrote antibiotics and I was out without any checkups in 20 seconds after 2 hours wait”

“Sometimes I really am disgusted by the behaviour of medics and paramedics towards patients in waiting rooms, as if they are invisible. The behaviour of some staff in some health centres should be questioned”

“When it comes to health centres much has to be done. I went to a clinic suffering abdominal pains one night. I waited 15 minutes for the so called doctor to wake up. He came down and sat on a chair in the corridor and I stood up!!!! He made a wrong diagnosis verbally because he never palpated me or did a check up and sent me to Mater Dei Hospital. Very, very unprofessional”
In contrast, some Maltese people are aware of the poor working conditions of the doctors and empathize with them:

"The doctors themselves know the system is not working but I would also want you to keep in mind the abuse, the ignorance, the arrogance that they face daily with their conditions and pay!!! Maybe you should spend a day with them at the health centre..."

In Sammut’s 2007 study about doctor satisfaction in the public sector, 41% of doctors felt unappreciated, neglected and disrespected; 39% experienced job dissatisfaction, stress and depression; while 31% felt verbally and physically used, misused and abused. These findings were based on quantitative data from doctors’ questionnaires and on qualitative data from focus groups/interviews with these doctors.

### 2.4 Quality of care and patient satisfaction

Quality of care is the degree to which services for individuals and populations increase the likelihood of desired outcomes (Campbell, 1975). Good quality of care in family practice is both hard to define and hard to measure (Howie et al., 2004). According to Robertson et al. (2008), the most important factors that lead to patient satisfaction are confidence and trust in the doctor, these factors being crucial for a good doctor-patient relationship. Service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis (Lewis & Booms, 1983).

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). Research has shown that satisfied patients are more likely to follow treatment instructions and medical advice because they are more likely to believe that treatment will be effective (Hardy et al., 1996). It is therefore imperative for family doctors to try their best to satisfy their patients if they want them to be compliant with the treatment they prescribe.

In 2006, Tahepold et al. found that biomedical aspects of care were considered to be more important than psychosocial aspects by patients, with over two-thirds of patients expecting an explanation for their symptoms. This was a strong study of 403 Estonian patients which was carried out using internationally-tested methodology and a highly representative sample. Similar results were obtained by Van den Brink-Muinen et al. (2000) who studied 3658 participants in six different European countries (Netherlands, Spain, United Kingdom, Belgium, Germany, Switzerland) where patients had to complete pre- and post-visit questionnaires. Patients preferred to discuss biomedical issues unless they presented with a psychosocial problem. Although what most patients want is an explanation of their symptoms, a good proportion of these patients may have psychosocial problems as a hidden agenda and it is therefore important to listen attentively throughout the consultation for any hidden and non-verbal cues which could alert the doctor to identify a problem which was not overtly presented by the patient (Kee & Wong, 1990).
According to Jung et al. (1997), family doctors are generally quite capable of assessing the expectations of their patients although some important differences between doctor and patient expectations do exist, and these signal potentially conflicting areas of patient care. Despite the differences in doctors' and patients' expectations, patients generally still receive what they ask for and manage to alter the behaviour and management of the doctors more than half the time (Sheri et al., 2007).

In 1999, Grol et al. studied the expectations of patients in various countries, which had much in common. They all wanted to be given enough time during the consultation, to be able to trust the doctor with confidential information, to be allowed to talk about their problems and to be told all they wanted to know about their illness. Zebiene et al. (2004) believe that the most important expectations to be met were understanding and explanation, followed by expectations of emotional support, while getting information was less important. In addition, Lam (1997) found that patients expected timely, professional and competent services from their healthcare providers.

By identifying aspects of care that influence patient satisfaction, one can make changes in health delivery systems, thus improving quality of care and achieving higher rates of patient satisfaction (Baker, 1990; Mandel et al., 2003). These changes should be focused on those areas that show high dissatisfaction in order to save resources and get better outcomes of patient satisfaction (Otani et al., 2003).
According to Weinberger et al. (1982), patient satisfaction depends on how well health care is delivered and on the congruence between doctors’ and patients’ perceptions of the consultation. With people-centred primary care, there is more focus on health needs, there is a good, lasting doctor-patient relationship and there is comprehensive, continuous care (World Health Report, 2008). These are all fundamental aspects of a healthy primary health care system (Azzopardi & Dixon, 1999). It was observed that listening and giving the patient the appropriate time and attention, being empathic and not getting distracted, all helped to build a better doctor-patient relationship and thus improve quality of care (Miettola et al., 2005; Williams & Calnan, 1991).

2.4.1 Patient satisfaction in different countries

There are many variables that affect the rates of patient satisfaction achieved. Most differences in patient satisfaction rates relate to the type and quality of the service delivered. When comparing rates of patient satisfaction in different countries, one must take into account the setting where the studies have been carried out, as there may be significant differences between public and private sectors of health care, for example.

Cultural backgrounds should also be kept in mind, especially where comparing countries in the Middle East, where certain religious and social factors may change perception of the health care services provided. A classical example of this can be seen in Afghanistan where female patients were highly satisfied when they were seen
by female doctors (Hansen et al., 2008). In this study, high levels of perceived quality of health care were also the result of good doctor-patient interaction and good communication with the patient.

High rates of patient satisfaction were noted in a study on patients waiting to visit the general practitioner in a primary health care centre in Poland (Miller et al., 2007). In this study, the majority of patients highly evaluated the quality of services given to them. The patients' needs and expectations were met and there were friendly staff that provided an efficient service. In another study in West Texas, USA, only 12.4% of the 4002 respondents were dissatisfied or barely satisfied with the service provided (Zhang et al., 2007). The reason for such high rates of patient satisfaction in this study was that the patients' perceived health status was studied and patients were given the appropriate amount of attention according to their needs.

Other studies show evidence that patients are not always satisfied with the service provided. In 1993, a study in Saudi Arabia found that 40% of the patients were dissatisfied with the service provided (Ali & Mahmoud, 1993). Some of the reasons for this high rate of patient dissatisfaction were the long distances travelled to access the clinic (also mentioned in Egyptian studies by Zaghloul, 2001, Gadallah et. al., 2003, and in the Afghani study by Hansen, 2008), long waiting times (also discussed by Ali, 1992), poor communication, including language barriers with the doctors and unsuitable working hours of the clinic. In Saudi Arabia, accessibility is usually poor due to long distances (Al-Sakkak et al., 2008). English-speaking doctors may not be
able to communicate with Arabic-speaking patients, resulting in poor satisfaction rates. Lack of continuity of care was another reason for patient dissatisfaction (Al-Sakkak et al., 2008).

A study in Kuwait Primary Health Care Centres (Al-Doghaither et al., 2000) resulted in particularly low rates of patient satisfaction with only 44.2% of the 301 respondents being satisfied with the service provided by the doctors. This was mainly the result of poor communication and of lack of empathy from the part of the doctor. Patients felt that they were not given enough time, the doctor didn’t listen attentively or give them enough attention. This study was carried out on 400 patients at five different primary health care centres representing various geographical areas of the capital and evidently shows that there is need for improvement in the primary health care sector in Kuwait.

Similar results were obtained by Abu Mourad et al. (2007), where only 41.8% of Palestinian patients were satisfied with the service provided by primary care physicians. The reasons for dissatisfaction were mainly difficulty in getting through to the clinic on the phone, being unable to speak to the physician on the phone, the long waiting times and again the lack of empathy and communication problems. The similarity of these last two studies could possibly relate to the fact that in these countries, the work load in primary health care is relatively high and the physician does not have time to spend with each patient, resulting in low satisfaction rates.
Table 2.1: Patient satisfaction in different countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Factors mentioned</th>
<th>Patient satisfaction</th>
<th>Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>Meeting patients’ needs, friendly staff, good conditions and treatment procedures</td>
<td>“high”</td>
<td>Miller et al. (2007)</td>
</tr>
<tr>
<td>West Texas, USA</td>
<td>Giving patients the appropriate time and attention according to their needs</td>
<td>88.7%</td>
<td>Zhang et al. (2007)</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>Good doctor-patient interaction, good communication, cultural aspects considered</td>
<td>“high”</td>
<td>Hansen et al. (2008)</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>Poor doctor-patient communication, long distances travelled, long waiting times,</td>
<td>60-64%</td>
<td>Ali et al. (1993), Al-Sakkak et al. (2008)</td>
</tr>
<tr>
<td></td>
<td>poor accessibility and continuity of care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kuwait</td>
<td>Poor communication, lack of empathy and attention, not enough time with patient</td>
<td>44.2%</td>
<td>Al-Doghaither et al. (2000)</td>
</tr>
<tr>
<td>Palestine</td>
<td>Poor communication, lack of empathy, poor doctor accessibility, long waiting times</td>
<td>41.8%</td>
<td>Abu Mourad et al. (2007)</td>
</tr>
<tr>
<td></td>
<td>poor doctor-patient relationship, no continuity of care (-ve)</td>
<td>34.5% (satisfied)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>continuity of care, empathy.</td>
<td>96.1% (private)</td>
<td></td>
</tr>
</tbody>
</table>

2.4.2 Measuring patient satisfaction

Over the last ten years, there has been increased interest in measuring patient satisfaction as an indicator of the quality of care (Grogan et al., 2000). Evaluation of service quality is considered a highly complex process (Carmon, 1990; Schwarz et al., 2000). Although there has been considerable progress as to how service quality
perceptions should be measured (Babukus & Boller, 1992; Cronin & Taylor, 1992), there has been little advance into what should be measured (Brady & Cronin, 2001). With the fast growth of consumerist movement, the measurement of patient satisfaction has become increasingly important for healthcare providers (Brown & Swartz, 1989; Parasuruman et al., 1988; Zhang et al., 2007). Healthcare providers strive hard to research what factors are important to achieve patient satisfaction and use results from patient surveys to provide a better service and thus achieve higher rates of patient satisfaction.

The development of validated tools to measure consumer satisfaction has changed the approach to the provision of health care. Parasuruman et al. (1985) developed the SERVQUAL scale to measure functional service quality across a broad range of services, namely retail banking, credit card, securities brokerage and product repair and maintenance. This scale can be used to measure the expected levels of a service as well as the perceived levels of a service. The difference between expected and perceived level of service provided results in the service quality. Lam (1997) found that the SERVQUAL scale is a valid and reliable scale to measure service quality in health care. In this study, it was used in Hong Kong to evaluate service quality in a hospital setting and to pinpoint areas that needed improvement. It showed that staff was not caring enough and that patients were not being given enough individual attention. In 2001, Zaghloul used most of the dimensions in SERVQUAL to validate a tool for measuring patient satisfaction in primary health care.
The SERVQUAL scale is based on five dimensions (Lam, 1997) namely:

- Tangibles: equipment, facilities and appearance of personnel;
- Reliability, in providing the service;
- Responsiveness: ability to provide prompt service;
- Assurance: ability to aspire trust and confidence;
- Empathy: caring for and giving attention to the customer.

The patient satisfaction questionnaire seems to be a useful tool to study patients' satisfaction with health care services (Miller et al., 2007). This is evident in a study which compared patient satisfaction between a resource-intensive clinic and a resource-thrifty clinic in the United Arab Emirates. As expected, there was a significantly higher patient satisfaction in the resource-intensive clinic compared with the resource-thrifty clinic, proving the usefulness of the patient satisfaction questionnaire as a quality assurance tool (Margolis et al., 2003). The questionnaire can, however, underestimate the extent of dissatisfaction experienced by respondents (Cohen et al., 1996) and responder bias tends to exclude patients with the worst health and the greatest need (Ehnfors & Smedby, 1993). It therefore has limitations about assessing quality of care (Ilife et al., 2008).

Focus groups can also be used to assess the complexity of patient satisfaction issues and engage patients in the process of improving quality of care. These groups involve unstructured interviews with small groups of people who interact with each other and the group leader. They have the advantage of making use of group dynamics to
stimulate discussion, gain insights and generate ideas in order to pursue a topic in greater depth (Bowling, 2002). Schwarz et al. (2000) showed how this method can be very useful to collect qualitative data about patients’ needs and expectations which can later be used to implement changes to the practice in areas which need improvement. However, this method is very complex and cumbersome to use, especially if a large number of patients need to be involved in the study.

2.4.3 Factors affecting patient satisfaction

Patient satisfaction is mainly determined by factors relating to a good doctor-patient relationship. The quality of the doctor-patient relationship depends mainly on good communication, empathy and continuity of care. The various factors that affect patient satisfaction, together with the literature where they are cited, are outlined in Table 2.2 below.
Table 2.2: The various factors that affect patient satisfaction

<table>
<thead>
<tr>
<th>Factors affecting patient satisfaction</th>
<th>Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being empathic; giving the patient time and attention</td>
<td>Parasuraman et al. (1988), Williams and Calnan (1991), Lam (1997), Grol et al. (1999), Zaghloul (2001), Howie et al. (2000), Mandel et al. (2003), Zebiene et al. (2004), Miettola et al. (2005)</td>
</tr>
<tr>
<td>Honesty, trustworthiness, able to keep confidentiality</td>
<td>Grol et al. (1999), Zaghloul (2001), Robertson et al. (2008)</td>
</tr>
<tr>
<td>Meeting the patients’ desires and expectations; congruence between doctor’s and patient’s perceptions of the consultation</td>
<td>Weinberger et al. (1982), Zemencuk et al. (1999), Anderson et al. (2007)</td>
</tr>
<tr>
<td>Easy accessibility</td>
<td>Zaghloul (2001), Gadallah et al. (2003), Anderson et al. (2007)</td>
</tr>
<tr>
<td>Quality of medical facilities</td>
<td>Parasuraman et al. (1988), Lam (1997), Gadallah et al. (2003), Anderson et al. (2007)</td>
</tr>
</tbody>
</table>

2.4.3.1 Factors relating to doctor-patient relationship

According to Anderson and colleagues (2007), the factors that lead to high levels of patient satisfaction are fulfilling the patients’ expectations, good communication between doctors and the patients, and good continuity of care. Robertson et al. (2008) state that the most important factors for achieving patient satisfaction are confidence and trust in the family doctor. Hansen et al. (2008) claim that patient satisfaction is
related to the interaction between the doctor and the patient, and not to other health facility characteristics, such as cleanliness, infrastructure, service capacity and the presence of equipment or drugs. In this study, the strongest determinants of the patient-perceived quality were found to be the way the family doctor takes the history, conducts the physical examination and communicates with the patient.

Anderson et al. (2007) concluded that patient satisfaction ratings are highly influenced by a core of communication and follow-up care. The doctor's personality, demeanour, access and communication, as well as the quality of medical care processes, continuity of care and quality of the healthcare facilities result in highly satisfied patients. On the other hand, poor interpersonal skills, barriers to access and poor communication skills result in negative ratings (Ali, 1992). This is particularly evident in certain Arab-speaking countries where there may be a language barrier between doctors and patients resulting in poor communication and low patient satisfaction. According to Ali (1992) and Sammut (2007), an overload of work for the doctor results in less time dedicated to the patient, leading to a poor doctor-patient relationship and dissatisfied patients.

In an Egyptian study carried out in 2001 by Zaghloul, accessibility, respect, humaneness and good patient care were considered to be contributing factors to good quality care. In a later study, also in Egypt, patient satisfaction was high for accessibility, waiting area conditions and performance of doctors and nurses
(Gadallah et al., 2003). In Egypt, accessibility is given importance as one may need to travel long distances to access a primary health care centre.

Mandel et al. (2003) and Howie et al. (2000) state that the size of the clinic is inversely proportional to the level of patient satisfaction achieved, that is, the smaller the clinic, the higher the level of patient satisfaction. This is not related to the workload at the clinic and may be explained by the fact that patients visiting smaller clinics are more likely to be seen by the same doctor, thus leading to a better doctor-patient relationship and therefore a higher level of patient satisfaction.

**The doctor-patient relationship**

A description of the doctor-patient relationship dates back to 1951 when Parsons came up with the Consensus Model where he analyzed the role of patients and doctors. He described the patient as taking a sick role where he or she had certain obligations to get better such as seeking professional help and certain privileges such as being allowed to take time off work. The doctor was described as having a professional role where he or she would use a high degree of skill and knowledge to make the patient better and fit to go back to work. Besides acting for the good of the patient, the ideal doctor should remain objectively and emotionally detached and respect the patient’s position of privilege. In return, the patient should want to get better quickly and co-operate with the doctor.
There are different types of doctor-patient relationships which range from the doctor taking the paternalistic approach and controlling the patient to leaving the patient in control of the consultation and management (c.f. Table 2.3). With the shift to patient-centred care, there has been a tendency to allow the patient to take part in decisions regarding management.

**Table 2.3: Types of doctor-patient relationships**

<table>
<thead>
<tr>
<th>Patient Control</th>
<th>Physician control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Default</td>
<td>Paternalist</td>
</tr>
<tr>
<td>Consumerist</td>
<td>Mutuality</td>
</tr>
</tbody>
</table>

Many years of research into patient's desires and expectations and patient satisfaction have shown that the quality of the doctor-patient relationship is very important to ensure patient satisfaction (Stewart et al., 1979). Engel (1997) describes how there has been a change in the approach to the management of the patient from the biomedical model, whereby the doctor only treats the medical problems, to the biopsychosocial model, whereby the doctor forms a relationship with the patient and investigates all aspects of patient care, including psychological and social aspects. It is this holistic approach and getting to know the patient well that is the basis of a healthy doctor-patient relationship and the crux of a good primary health care system (Azzopardi & Dixon, 1999). Good doctor-patient communication has been shown to
influence patient satisfaction (Bultman & Svarstad, 2000) as well as patient compliance to treatment and advice (Van Dulmen et al., 1997).

2.4.3.2 Sociodemographic characteristics

Although Gadallah et al. (2003) found no association between patient satisfaction and age, gender and level of education, other studies which are discussed below show that these factors may sometimes influence the way one rates patient satisfaction.

Zemencuk et al. (1999) found that patients' desires and expectations are not affected by their sociodemographic characteristics. This was a small study in two health centres with 119 participants in one health centre and 270 participants in another. Patients of different social classes had similar desires and expectations and their satisfaction depended on whether these desires and expectations were met, irrespective of social class.

Al-Doghaither et al. (2000) state that the most important predictors of patient satisfaction are gender, marital status, occupation and income with female, married, labourers and high income levels having the highest rates of patient satisfaction. Differences also exist between different ethnic groups with black, South Asian, and Chinese reporting lower rates of patient satisfaction than Caucasians (Campbell et al., 2001). In this cross-sectional survey on 7692 patients attending London clinics, Campbell et al. also confirmed the higher rates of patient satisfaction among more affluent. Al-Sakkak et al. (2008) confirmed the higher rates of satisfaction among
patients with lower education in a cross-sectional survey on 700 patients making use of primary care services in a military hospital in Saudi Arabia.

Gender

Most research shows that there is no difference between gender groups with respect to patient satisfaction (Campbell et al., 2001; Margolis et al., 2003). In the year 2000, a Norwegian study by Foss showed that the weak gender difference in patient satisfaction was mostly due to the age difference, and there was no gender difference in rates of satisfaction in patients over 35 years of age.

Al-Doghaither and colleagues (2000) found that female Kuwaiti patients had higher rates of satisfaction than their male counterparts. They surmised that the reason for the higher rates of satisfaction among women is that Kuwaiti men have higher expectations than women when it comes to healthcare and that, overall, Kuwaiti patients are very critical of the service provided. In West Texas (Zhang et al., 2007), elderly women were found to be slightly more satisfied than elderly men with health care services in primary care. This study may have been confounded by the difference in perceived health status between the two sexes.

The differences in patient satisfaction between men and women may be due to the different aspects of health care that are important to men and women (Weisman et al., 2000). Men's overall satisfaction is more dependent on the personal interest shown in them by the health care providers while women's overall satisfaction is more
dependent on informational content, continuity of care and multidisciplinarity. In addition, income and additional insurance coverage affects the probability of satisfaction for women only (Kolodinsky, 1997). A study in Afghanistan showed that for female patients, being seen by a female provider is associated with higher perceived quality. This can be explained by the cultural and religious background of these Afghani patients. For male patients, time and money spent for travel to the health facility are negatively associated with perceived quality (Hansen et al., 2008).

**Age**

On the whole, older patients are more satisfied with services in primary health care than their younger counterparts (Al-Sakkak et al., 2008; Campbell et al., 2001). Although there is a large difference in the settings of these two studies, the former being a survey in a military hospital in Saudi Arabia, and the latter being a survey in London clinics, both studies showed a significant difference in patient satisfaction in older age groups.

Young adult patients are the least likely to be satisfied and do not understand the necessity of long waits. These patients are very difficult to please and it can be very difficult to build loyalty with such patients (Anon., 2007). Lee et al. (2008) also mention that older patients are more satisfied than younger ones with the hospital care received after myocardial infarction. Again, these younger patients seem to be more critical of the service provided and therefore are less likely to be satisfied.
2.4.3.3 Health status of patients and patient satisfaction

According to Al-Mandhari et al. (2004) and Zhang et al. (2007), the level of patient satisfaction is directly related to the self-rated overall physical and mental health. Both these studies involved large samples covering wide geographical areas. Al-Mandhari et al. (2004) performed a study on 1226 patients from six health centres in Oman. Each patient was given a patient satisfaction questionnaire and a perceived health status questionnaire. Zhang et al. studied 5000 elderly (65 years and over) patients from health centres in West Texas. Again, health status was related to patient satisfaction. Both studies gave similar results. The higher one rated his or her overall health status, the higher was the patient satisfaction achieved. In addition, patients with emotional or psychiatric problems were more likely to be unsatisfied than patients with no similar problems. These results can be explained by the fact that patients with complicated physical or mental health problems can be more difficult to manage and their needs and expectations may not always be fulfilled.

The presence of psychiatric conditions can greatly influence the level of patient satisfaction. Schizophrenia is a very common condition affecting around 1% of the population in the United Kingdom. These patients are often excluded from patient satisfaction surveys even though they use the primary health care services frequently. Even though this condition is incurable and these patients are rarely satisfied, if one acknowledges the tension experienced by this group of patients and gives them hope for recovery, this would most likely lead to higher rates of patient satisfaction in this group of patients (Lester et al. 2003). The same applies to patients with physical
disabilities such as cerebral palsy, multiple sclerosis and spinal cord injury, who very often experience poor communication from the health care provider resulting in dissatisfaction in this group of patients (Kroll et al. 2003).

2.5 Doctors’ perceptions of patient satisfaction

According to McKinstry et al. (2006), doctors are not very good at predicting the level of patient satisfaction from a consultation. Merkel (1984) found that only two out of ten physicians could predict patient satisfaction with some precision. In both these studies, there was no significant relationship between the doctor’s predicted patient satisfaction and the actual response given by the patient. Doctors were asked to complete a questionnaire to state their predicted level of patient satisfaction. This was compared to a satisfaction questionnaire answered by the patient. Similarly, Hall et al. (1999) also confirmed that there is a substantial discrepancy between physicians’ and patients’ perception of the consultation. This study explored the various areas that could possibly explain these findings by having specific questions in the doctor and patient surveys. It was found that the main reason for the difference between physicians’ and patients’ perception of the consultation is poor doctor-patient communication.

Mercer and Howie (2006), however, found that there was some congruence between the doctors’ and patients’ perceptions of the quality of care delivered. If doctors want to achieve high levels of patient satisfaction, it is important that they develop ways of recognizing dissatisfaction during the consultation so that they may identify and
address patients’ concerns (McKinstry et al., 2006). Donabedian (1992) believes that family doctors are responsive to the expression of their patients’ expectations and that by good care and continuing education, they can provide a better service which in turn leads to high levels of patient satisfaction.

2.6 Doctor satisfaction

The basis of a good consultation which results in satisfaction for both patients and doctors stems from a strong doctor-patient relationship where the doctor dedicates time and attention to the patient and the patient is compliant to treatment (Chahal et al., 2004). When both doctor and patient share similar expectations and communicate effectively, a successful consultation is achieved. Other factors affecting doctors’ satisfaction derived from consultations were the perceived outcome for the individual patient and the impact of the experience of the encounter on the doctor’s identity (Fairhurst & May, 2006). According to Borrell et al. (2001), the level of patient satisfaction achieved from a consultation is directly proportional to the level of doctor satisfaction (c.f. Figure 2.3)
The morale and career satisfaction of family physicians seem to have eroded in recent years and dissatisfaction is common (Shearer & Toedt, 2001). It was noted that a poor doctor-patient relationship and lack of proper continuity of care results in dissatisfaction for doctors as well as patients (Sammut, 2007).

When the doctor gives detailed explanations in terms that the patient understands, displays warmth and concern and discusses management with the patient, patients are much more satisfied and tend to recommend the doctor to their friends and family (Chahal et al., 2004). All these characteristics of the family doctor strengthen the doctor-patient relationship which, in turn, leads to higher rates of satisfaction for both patients and doctors. A family doctor’s personal values have been shown to affect practice satisfaction, with doctors who viewed benevolence as a guiding principle and
Literature Review

who spent time teaching medical students reporting high rates of professional satisfaction (Eliason et al., 2000). According to Weinberger et al. (1982), physicians were not satisfied when they had other commitments and did not have enough time for their patients, when their patients were not compliant and when they were forced to take a very active role. If a doctor is overworked and stressed out, he may not perform well and this, in turn, may lead to patient dissatisfaction (McKinstry et al., 2007; Sammut, 2007).

2.7 Public vs. private sectors in relation to doctor and patient satisfaction

Consumer satisfaction in the health sector has been studied extensively in developed countries and less in some developing countries (Chahal et al., 2004). A gap between expected service quality and actual service quality delivered has been identified in the public health care sector in developing countries (Chahal, 2002; Heiby, 1996). As a result of this, public medical care services have been noticed to be deteriorating over the last few years (Chahal et al. 2004).

According to Aryee (1992), professionals working in the private sector perceive a better quality of work experience than their public sector counterparts. In this study, a total of 550 questionnaires were sent to professionals in five private and five public sector organizations. Professional expectations were more likely to be fulfilled in the private sector and job satisfaction was higher than in the public sector.
According to Finnish researchers, one reason for the problems encountered in the public sector (health centres) is a shortage of permanent physicians in some areas of Finland. In addition, there is poor accessibility to medical care and no continuity of care (Mantyselka et al., 2007). These factors are fundamental to a proper primary healthcare system and, as a result, patients suffering from chronic diseases are not being managed appropriately in the public sector. As a result, some patients prefer to make use of a personal doctor system for better access and continuity of care.

As has been described earlier, the basis of a successful consultation which results in high patient satisfaction depends on a good doctor-patient relationship and continuity of care. Patient registration in the United Kingdom is a very efficient way of promoting continuity of care and a better primary health care system. In Malta, the lack of patient registration means that patients do not always frequent the same family doctor, especially in the public sector, where the patient is seen by the doctor who is on call at the time.

A difference in the type of doctor-patient relationship can be clearly seen between public and private sectors of primary health care in Malta. In the public sector, there is a higher level of physician control, with a more paternalist approach towards the patient who is getting a ‘free’ service from the doctor. On the other hand, in the private sector, where the patient pays for the service, the doctor-patient relationship is more patient-centred, with the patient taking a higher ‘consumerist’ level of control in the consultation (c.f. Table 2.3).
In Kenya, patient satisfaction is much higher in private facilities providing family planning services compared to the public sector counterparts. This is mainly due to the fact that the private sector facilities are more ready to provide a good service and to pay attention to the patients' needs (Agha & Do, 2009). A different situation is present in the Philippines where the use of private health care services is based on the ownership of a private insurance and the level of education of the patient. Patients with a higher education preferred to use the private sector rather than the public sector (Thind, 2003). Milch et al. (2006) found that private hospitals provide a better service than public hospitals even after adjustment for multiple patient demographic, clinical, and institutional factors. In Athens, where there is a mixed public-private health care system, women, well-educated patients and patients with a lower physical health status were more likely to visit private providers in primary health care (Pappa & Niakas, 2006).

The private sector is very often preferred to the public sector mainly due to the fact that private providers give a better service which includes easy accessibility, better doctor-patient relationships and continuity of care.

2.8 Theoretical framework for the study

Based on the factors affecting patient satisfaction outlined in Table 2.2 and the literature review discussed above, a theoretical framework for the current research is developed. In 2006, Lough designed a questionnaire for GP appraisal in Scotland. This research makes use of the questionnaire to explore various dimensions that affect patient satisfaction.
These include the doctor's:

- personality traits - having a nice attitude with the patient (good doctor-patient relationship), giving the patient time and attention, being empathic and polite;
- professional values – being honest, trustworthy, able to keep confidentiality;
- duties and responsibilities – being accessible and responsible;
- communication skills – able to listen attentively and explain appropriately, meeting the patients’ desires and expectations;
- clinical care – giving patients an explanation of their symptoms and treating appropriately based on personal knowledge and evidence.

The last section of the questionnaire asks if the patient is satisfied with the service the doctor provides. Since this questionnaire (Lough, 2006) explores all the factors that are important for patient satisfaction (c.f. Table 2.1), it can be used to analyze which of these factors are the most likely to lead to patient satisfaction. The following figure outlines the theoretical framework that drives the current research.
Figure 2.2: Theoretical framework for this study

- Being empathic; giving patient time & attention
- Being honest, trustworthy, able to keep confidentiality
- Being accessible and responsible
- Good communication skills, meeting patient’s needs
- Good clinical care, giving explanation of symptoms

Superior qualities of family doctor → Optimal doctor-patient relationship → High patient satisfaction
Therefore, by using Lough's questionnaire, one can study the various characteristics of a family doctor that are essential for the development an optimal doctor-patient relationship and which, in turn, lead to better patient satisfaction.

2.9 Conclusion

Through several years of research in family medicine, the quality of care delivered to our patients has improved dramatically as we now have a better understanding and practice of it (Maeseneer & Sutter, 2004). Health care providers continue to discover areas of service provision which need improvement and use this information to provide a better service, thus achieving higher rates of patient satisfaction. Locally, research in primary health care is still in its early stages, but as we explore the weaknesses of our health care systems and try to implement appropriate changes, we are sure to see evidence of improved satisfaction rates among our population in the years to come. The next chapter describes the methodological procedures used to implement the theoretical framework illustrated earlier.
3. Methodology

3.1 Introduction

This chapter outlines the methods and procedures used to measure patient satisfaction in four government health centres and in four private clinics in the same geographical areas. It also includes the procedures undertaken to interview the doctors at the respective clinics, as well as a description of the analytical techniques used in the study. The tool used for data collection is described and a theoretical framework of the study is given. The study population and sampling method are described and the limitations are identified.

3.2 Research hypothesis and research questions

The research hypothesis of this study is that patient satisfaction is associated with the quality of healthcare delivered, and that the quality of service varies between the private and public sectors.

The main research questions that guided this study were:

- Which factors are associated with patient satisfaction in primary health care?
- Is there a difference in patient satisfaction between public and private sectors of primary health care?
- Is the level of patient satisfaction achieved from a consultation perceived differently by patients and doctors?
3.3 Aims and objectives

The aims of this study were:

1. To identify the characteristics of a family doctor most likely to lead to patient satisfaction.

2. To compare and contrast characteristics of family doctors in the public and private sectors of primary health care.

3. To compare patient satisfaction between public and private sectors of primary health care.

The following six objectives were set:

1. To identify the perceptions of patients in the government health centres of their doctors’ personality traits, professional values, duties and responsibilities, communication skills, and clinical care.

2. To identify the perceptions of patients in the private primary health care sector of their family doctors’ personality traits, professional values, duties and responsibilities, communication skills, and clinical care.

3. To identify the perceptions of patients in both public and private sectors of primary health care on the most important characteristics of a family doctor that lead to patient satisfaction.

4. To compare patient satisfaction between public and private sectors of primary health care.

5. To identify the perceptions of family doctors in both sectors of primary health care as regards critical factors in their practice that lead to patient satisfaction.

6. To provide feedback on results of the study to doctors in primary health care.
3.4 Research setting

The study was conducted in four of the nine regional government health centres and in four private clinics owned by family doctors. The four health centres that were chosen represent most of the island’s public sector primary health care system. The private clinics chosen were located in the same geographical areas as the health centres (c.f. Figure 3.1).

Figure 3.1: Locations of the clinics in private and public sectors where the study was conducted
The chosen health centres were:

- Mosta Health Centre, which represents the northern part of the island,
- Paola Health Centre, which represents most of the southern part of the island,
- Gżira Health Centre, which represents the densely populated eastern coastal area of the island.
- Qormi Health Centre, which represents a large geographical area in the central and western regions of the island.

The private clinics that were chosen to represent the private sector are located in the same geographical areas as the above mentioned health centres. These are: Mosta in the North, Paola in the South, San Ġwann, which is very close to Gżira in the Eastern part of the island and Żebbuġ, which is very close to Qormi in the Central / Western region.

Table 3.1: Clinics that will be compared in the public and private sectors

<table>
<thead>
<tr>
<th>The Public Sector</th>
<th>The Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosta Health Centre</td>
<td>Mosta private clinic</td>
</tr>
<tr>
<td>Paola Health Centre</td>
<td>Paola private clinic</td>
</tr>
<tr>
<td>Gżira Health Centre</td>
<td>San Ġwann private clinic</td>
</tr>
<tr>
<td>Qormi Health Centre</td>
<td>Żebbuġ private clinic</td>
</tr>
</tbody>
</table>
3.5 Research design

The study took place in two phases. The first phase involved the collection of quantitative data using a patient questionnaire, described in detail in Section 3.8 on page 52, which rated the level of patient satisfaction in various sectors of primary health care. The quantitative data were analyzed and used to study the relationship between quality of health care and patient satisfaction. These data were also used to compare private and public sectors of primary health care. In the second phase of the study, qualitative data were obtained by carrying out semi-structured interviews on a number of doctors who were responsible for the delivery of health care in the clinics under investigation. The data were used to study the views and perceptions of these doctors.

By using a mixed methodology, data from patients and doctors about the consultation were triangulated and this enhanced rigour in the research process and credibility of results. Triangulation refers to an approach to data collection in which evidence is deliberately sought from different, independent sources and often by different means (Mays & Pope, 1995). Comparison of the quantitative data gathered from patient questionnaires and the qualitative data from the doctors' semi-structured interviews helped to reduce bias and strengthen each research method.

3.6 Population and sampling

The sample size required for this study was calculated using an online sample size estimator (Lenth, 2006-9) and based on a difference between two proportions. The
Methodology

proportion of patients reporting satisfaction with their general practitioner in the public and the private sector was extracted from the National Health Interview Survey 2002 report (Asciak et al., 2003) and used for the sample size calculation. According to this report, 83.1% of Maltese patients were satisfied with the public service (government health centre/casualty/out-patients) consultations while 96.1% were satisfied with private family doctor consultations. According the online computer software (Lenth, 2006-9), the sample size required for this study was estimated at a minimum of one hundred patients in the private sector and another hundred patients in the public sector. In order to increase the statistical power of the study, it was decided to recruit one hundred and twenty patients in each sector.

Based on convenience sampling, thirty patients attending each clinic were chosen to take part in the study. Eight clinics were involved in the study, four in the private sector and four in the public sector. This resulted in a total of two hundred and forty patients. Since non-random convenience sampling does not ensure representation of the underlying population, every attempt was made to strengthen the quality of the chosen sample. The patients were chosen on different days, three to four patients per day, until a total of thirty patients per clinic had been chosen. An effort was also made to balance male and female participants. In order to be able to participate in the study, the patients that were chosen had to fall within certain inclusion criteria. In the public sector, this was ensured by the research assistants who, after introducing themselves and briefing the patients about the study, asked the patients their age and nationality, if they could read and write and if they had attended the clinic before. In the private sector,
sector, eligibility to take part in the study was ensured by the family doctors. Patients had to be:

1. literate,
2. Maltese citizens,
3. aged between thirty and seventy years of age and
4. frequent attendees (at least twice previously).

Patients with the following conditions were excluded from the study:

1. severe physical or mental disability,
2. uncontrolled psychiatric disorder and
3. severe visual problems.

3.7 Data collection

Before starting data collection, a pilot study was carried out in the first week of November 2008. This was followed by the first phase of data collection which involved distribution of the questionnaires. The second phase of the study, which involved conducting semi-structured interviews with doctors, took place at a later stage.

3.7.1 Pilot study

The questionnaire used was adapted from a questionnaire by Murray Lough entitled *Developing MSF (Multi-Source Feedback) for GP (General Practitioner) appraisal in Scotland* (Lough, 2006), which was designed to evaluate health care delivery in Scotland. Since it was developed for the Scottish population and since it was
translated into Maltese, it was necessary to pilot the tool prior to its use in the study. Six patients who attended the private clinic in Paola were each given a questionnaire in English and one in Maltese. Three patients answered the English questionnaire first and the other three answered the Maltese version first. All patients then answered the questionnaire in the other language one week later. This was done to test reliability of the back-translated questionnaires (c.f. Section 3.8.1). The English and Maltese versions of the questionnaires were found to be highly correlated ($\rho=0.825$). Another six questionnaires, three in each language, were distributed at the health centre in Paola. Questionnaire distribution at the private clinic and at the health centre was carried out according to the method described earlier. The twelve patients that were involved in the pilot study were asked to give their feedback on the following:

1. The method used for data collection
2. The structure of the questionnaire
3. Clarity of language used (English and Maltese)
4. Ease of completion of the questionnaire
5. Bias related to differences in data collection in private and public sectors

The suggestions were used to make some slight alterations to the questionnaire to ensure that the survey can take place without any problems.

**3.7.2 Research assistants**

Data collection at the health centres was carried out by research assistants. These were recruited by sending an e-mail to university students in the medical and
paramedical fields. The email explained the purpose of the research and requested the voluntary participation of a number of research assistants for data collection. Three medical students and three paramedical students chose to take part. A two-hour workshop was organized whereby the research assistants were given an outline of the study as well as formal training on the procedures and how to administer the questionnaire. All students were asked to sign a consent form (Appendix 7) and were given the necessary documents. The Senior Nursing Officers at the respective health centres were informed about the study and the presence of research assistants. They were also notified about the approval obtained from the Director of Primary Health Care (Appendix 11).

3.7.3 The public sector

It is standard procedure that patients at the health centres are provided with a ticket at the reception in order to wait their turn to visit the doctor. The tickets that were issued on the day when data collection was taking place were placed in a container and two were selected at random. The patients who had the numbers on the chosen tickets were approached in the waiting area.

Once the research assistants ensured that the patients were eligible to participate in the study, a patient information leaflet was provided. This leaflet gave a detailed explanation about the purpose of the study and what it involved. It was compiled in two languages: the English version (Appendix 1) was printed on one side and the Maltese translation on the other side (Appendix 2).
A questionnaire was then distributed to the participants in their language of choice (English or Maltese; Appendices 3 and 4). The consent form (Appendix 16/17) which included the patient’s name, surname and telephone number had to be signed by the patient, thereby giving his/her consent to participate in the study. This was kept by the research assistants. The questionnaire was then completed while the patient was waiting to be seen by the doctor. The patient was asked to post the questionnaire into a large transparent plastic container which was available in the waiting area. This procedure was repeated once on that day, that is, four patients per day were selected. Data collection in the same health centre was then continued on another day. This procedure was followed for all participant health centres.

3.7.4 The private sector

The patients from the private sector were chosen during their visit to their family doctor’s clinic. After ensuring that the patient was eligible to take part in the study, the patient was then briefed about the study and given a patient information leaflet.

The patient was asked to complete a questionnaire in whichever language he/she preferred: English (Appendix 5) or Maltese (Appendix 6). The consent form, signed by the patient, was kept by the family doctor to hand over to the researcher at a later stage. The patient was also given a self-addressed envelope and asked to fill in the questionnaire in his/her own time and post it once it had been completed. The patient was called after one week to make sure that the questionnaire had been posted.
3.7.5 Semi-structured interviews

Patient satisfaction is a subject area which can be investigated in greater depth by the use of qualitative methods (Britten & Fisher, 1993). In the second phase of this study, semi-structured interviews were conducted with the doctors that work in the clinics where the patient questionnaires were distributed. The objective of these interviews was to find out what family doctors think is important in their practice to provide a good service and to establish what these doctors feel is important to achieve patient satisfaction.

These kind of 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 (Britten, 1995). In this way, the interviewees can give their opinions in full about the questions asked and provide rich and quotable material which helps to enliven the final research report (Bowling, 2002). The interviewer can probe for more detailed responses and any ambiguities can be clarified throughout the course of the interview.

The questions asked (Appendix 8) dealt with the same topics that appeared in the patient questionnaire. Firstly, the doctor's age and area of practice were identified. Then, the doctor was asked if he/she practised in the private sector or in the public sector and if he/she practised in both sectors, what sector he/she practised mostly in. The doctor was asked how many hours per week were spent in the clinic where the
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study was being carried out and how much time he or she spends with each patient on average.

The doctor was asked about personality traits, professional values, duties and responsibilities, communications skills and clinical care. Most questions were open-ended, allowing the doctor to expand and give his/her opinion in detail and allowing the interviewer to probe accordingly. Since family doctors' satisfaction with their careers seems to have deteriorated in recent years (Shearer & Toedt, 2001), they were also asked if they felt satisfied with their practice and with their positions as family practitioners in their clinics.

In the private sector, the family doctors that worked in the four private clinics involved in the first phase of the study were interviewed. In the public sector, four doctors that work full-time in the health centres involved in the first phase of the study were first briefed about the study; the objective of the semi-structured interview was explained to them and they were asked to respond as if they were representing the typical doctor in that particular health centre. Qualitative data were analyzed using content analysis.

3.8 Data collection tool

The required data for the first phase of the study were measured using a patient questionnaire. This was adapted from a questionnaire by Murray Lough entitled *Developing MSF (Multi-Source Feedback) for GP (General Practitioner) appraisal*
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in Scotland (Lough, 2006). The reason this particular questionnaire was chosen is because it was developed as an instrument used to evaluate health care delivery in Scotland. In addition, it can be completed in a few minutes while safeguarding anonymity. The purpose of developing this questionnaire was to provide a GP with information for self-improvement (Lough, 2006) which is one of the objectives of this study. The various sections were developed in such a way so as to include all areas that are relevant to “what makes a good GP” and therefore the factors that lead to patient satisfaction.

The questionnaire is divided into seven sections and has 32 questions in total. Respondents are required to answer the questions by ticking a box which corresponds to the statements ‘strongly agree’, ‘agree’, ‘neither agree nor disagree’, ‘disagree’ and ‘strongly disagree’ on a scale of 5. The first section consists of five questions where the age and sex of the patient are asked, whether he or she has a private family doctor, how many times this doctor was visited in the last year and how many times another doctor was visited in the last year.

The subsequent five sections ask questions relating to the doctor’s:

- personality traits,
- professional values,
- duties and responsibilities,
- communication skills,
- clinical care.
The final section asks if the patient thinks that the doctor is a good family doctor and if he or she is satisfied with the service provided.

### 3.8.1 Translation of research tool

According to Sciriha and Vassallo (2001), Maltese is the first language of 98.6% of the population and English that of 1.2%. For this reason, the questionnaire and patient information leaflet were developed in both English and Maltese. This was done so that one could choose the preferred language to answer the questions, making sure that these were understood as best as possible.

The original questionnaire (Lough, 2006) was first translated into Maltese by a professional Maltese translator. This was edited several times until the questions were formatted in the language that was easy to understand. The Maltese version was then given to another professional translator and this was translated back into English. This version was compared to Lough’s version and edited to produce a final version that was most suitable for the participants who were going to undertake the survey. This peer review of the questionnaire was one of the methods used for checking the internal consistency of the tool. Reliability was assessed by carrying out inter-item correlations in order to obtain a value for Cronbach’s α for the tool.

The translation procedure was also applied to the patient information leaflet, which was originally developed in English by the researcher. Again, back translation helped to clarify any linguistic ambiguities and made reading of the leaflet as smooth as possible. The patient information leaflets were printed in English on one side and in Maltese on the other.
Maltese on the other side while the questionnaires were printed in one language, allowing the patient to choose which language he/she preferred to answer in.

### 3.8.2 Reliability and validity of research tool

Psychometric validation is the process by which an instrument is assessed for reliability and validity through the mounting of a series of defined tests on the population group for whom the instrument is intended (Bowling, 2002). Reliability refers to the reproducibility and consistency of the instrument. Validity is an assessment of whether an instrument measures what it aims to measure, how truthful the research results are (Joppe, 2000) and whether the means of measurement are accurate. Tests are said to be valid if they do what they are supposed to do. Reliability affects validity; an unreliable measure inevitably has low validity.

Nunnally (1978) has demonstrated that coefficient alpha can be derived as the expected correlation between an actual test and a hypothetical alternative form of the same length, one that may never be constructed. He recommends that instruments used in basic research have reliability of about 0.70 or better. Inter-item correlations were carried out on all factors affecting patient satisfaction in the pilot study. Cronbach’s alpha was found to have a value of 0.923 indicating that the instrument is a very reliable tool with high internal consistency and can be used for measuring patient satisfaction in this population.
The reliability of the questionnaire was also assessed using the split-half method. In this method, all items that purport to measure the same construct are randomly divided into two sets. The entire instrument is administered to a sample of people and the total score is calculated for each randomly divided half. The split-half reliability estimate is simply the correlation between these two total scores. 226 individuals completed the questionnaire. A split-half reliability of 0.803 was obtained indicating that the two halves produced similar results. Moreover the reliability of the questionnaire was measured item by item using the Guttmann Split-Half coefficient. Table 3.3 confirms the high reliability of this instrument for measuring patient satisfaction.

Reliability of the translated questionnaire was tested during the pilot study using the parallel forms reliability method. This method is used to assess the consistency of the results of two similar types of test (in this case, the patient satisfaction questionnaire in English and in Maltese) used to measure the same variable at the same time. This was done by allowing six patients to answer the questionnaire in both English and Maltese. Three patients answered the English questionnaire first while three patients answered the Maltese version first. The questionnaire was then answered in the other

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**Table 3.2: Internal consistency reliability estimates for the 32 items in the questionnaire**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha</td>
<td>0.923</td>
</tr>
<tr>
<td>Number of Items</td>
<td>32</td>
</tr>
</tbody>
</table>

---

Methodology
language one week later. Results were compared and reliability of the instrument was confirmed.

Table 3.3: Split-half reliability estimates for the 32 items in the questionnaire

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Part 1 Value</th>
<th>N of Items</th>
<th>Part 2 Value</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.781</td>
<td>16</td>
<td>.831</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman-Brown Coefficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal Length</td>
<td>.890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal Length</td>
<td>.890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guttman Split-Half Coefficient</td>
<td>.887</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. The items are: 1: Has a nice attitude with the patients, 2: Is polite to patients and staff, 3: Is enthusiastic about his/her job, 4: Stays calm under pressure, 5: Is arrogant, 6: Doesn't have enough time for you, 7: Looks professional in the way he/she dresses, 8: Able to demonstrate a sense of humour when appropriate, 9: Honest and trustworthy, 10: Able to keep confidentiality, 11: Able to maintain a healthy work/life balance, 12: Hindered in doing their job by their mental and/or physical health, 13: Willing to take responsibility for getting his/her share of the work done, 14: Willing to take responsibility for follow-up of patients where necessary, 15: Committed to continuing his/her studies, 16: Willing to learn from mistakes and recognizes his/her limitations.

b. The items are: 17: Poorly organised, 18: Easily accessible and able to be contacted where necessary, 19: Able to make the patient feel calm, 20: Willing to listen to patients and staff, 21: Able to keep medical records consistently for the patients he sees, 22: Able to write legibly, 23: Up to date with recent developments, 24: Capable of making the right diagnosis, 25: Unable to make appropriate decisions, 26: A safe prescriber even when drugs carry a certain risk, 27: Ready to refer patients to a specialist when necessary, 28: Willing to care for the terminally ill patient, 29: Able to face problems that arise in his work as a family doctor, 30: Ready to explain what is wrong before giving treatment, 31: How much do you agree that your doctor is a good family doctor, 32: I am satisfied with the service my doctor gives me.
3.9 Data analysis

The quantitative data from the patient satisfaction questionnaires were entered into the Statistical Package for Social Sciences (SPSS) version 17 and data analysis was carried out according to the aims and objectives of the study (c.f. Section 3.3).

Firstly, frequency tables for the demographic data were drawn up, followed by frequency tables for the characteristics of the family doctor listed in the questionnaire. The mean for each characteristic was worked out for public and private sectors to analyze the importance of each characteristic in both sectors. Scale means and internal consistency (Cronbach’s α) were also calculated for each of the five dimensions in the questionnaire. In this way, mean scores for personality traits, professional values, duties and responsibilities, communication skills and clinical care were obtained. Using these scale means, the various factors associated with the family doctor could be easily correlated to patient satisfaction and patient satisfaction in private and public sectors could be compared.

Q-Q plots were calculated for each of the variables and all of them appeared to be skewed. Therefore non-parametric tests were used for correlating the variables (as single items) to patient satisfaction and to compare public and private sectors. In fact, Spearman’s Rho correlations were computed in order to answer the first research question which asks which factors are associated with patient satisfaction. Patient satisfaction was asked about in the final question of the questionnaire: “Are you satisfied with the service your doctor provides?” The Mann-Whitney test for
independent samples was used to answer the second research question which asks if there is a difference in patient satisfaction between public and private sectors of primary health care. It was also used to compare each of the characteristics of the family doctor between public and private sectors.

Q-Q plots were also calculated for the scale means of each of the five dimensions in the questionnaire. These results were not skewed in this case and parametric tests could be used with the scale means. Pearson's correlation test was used to correlate each of the five scale means to patient satisfaction and T-tests were used to compare the scale means between public and private sectors.

The third and final research question which asks about the doctor's perception of patient satisfaction was answered using the analysis of the doctors' semi-structured interviews. The interview recordings were first transcribed and the data were then sorted logically. Content analysis of the data was used to discuss the doctors' perceptions of patient satisfaction and the doctors' job satisfaction. Quotations were used to enrich the text and emphasize certain points.

3.10 Methodological limitations

There are some important limitations which need to be considered when analyzing the results of this study. These limitations have to do with the issue of convenience vs. random sampling. Convenience sampling is a type of non-probability sampling which involves the sample being drawn from that part of the population which is close to
hand. The sample population is chosen because it is readily available and convenient. Generalizations about the total population cannot be made from such a sample as it would not be representative enough (Powell, 1997). Convenience sampling may result in low quality data that lacks intellectual credibility (Marshall, 1996).

In contrast, a random sample means that every member of the population that is being studied has an equal chance of being selected. This is usually done by selecting random numbers from a list. Random samples are an important foundation of statistics. Almost all of the mathematical theories upon which statistics are based rely on assumptions which are consistent with a random sample. This theory is inconsistent with data collected from a convenience sample.

In this study, it was not possible to obtain a random sample of the family doctors’ patient population as not all the family doctors had a complete list of their patients with all the demographic details. In addition, consent to obtain patient details from the health centre register was not obtained. Therefore, convenience sampling had to be used to select participants in both private and public sectors. There may be some bias associated with convenience sampling:

- Firstly, this kind of sampling may result in frequent attendees being chosen over less frequent attendees.
- Less frequent attendees may have visited the clinic on that particular day and therefore may have been included in the study.
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- On the other hand, frequent attendees may have not visited the clinic on those particular days when the study took place.
- Immobile patients were completely excluded from this study as they were unable to attend the clinic (Simon, 2002)
- The very young (<30 years old) were excluded as these patients would not usually have enough experience of doctors to be able to rate the service being given.
- The very old (>70 years) were excluded as patients this age have a higher percentage of visual problems and dementia, making it more difficult for them to give valid responses to the questions asked.
- Illiterate patients, which make up a good proportion of the population being studied, were also excluded from the sample as these would have been unable to read and complete the questionnaire.

Another source of bias in this study was the different methods of data collection between private and public sectors. In the private sector, the patient was given the questionnaire after the consultation with the doctor and was asked to fill it up at home and send it by post.

In the public sector, the patient was given the questionnaire while he/she waited to be seen by the doctor. The questionnaire was completed before visiting the doctor and posted into a large transparent container in the waiting area. In this way, the response rate was much higher than if the patient was required to send the questionnaire by
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post. The fact that the questionnaire was completed before the patient actually visited the doctor means that the patients' answers are based on their previous experiences with doctors at the health centres.

These sources of bias were inevitable as it would have not been possible to carry out the survey following the doctor's visit, since most patients wait for hours at the health centre and once they visit the doctor, all they want to do is leave the health centre. Any attempts at making them fill up a questionnaire at this stage would have undoubtedly been futile.

When selecting the doctors in the public sector to undertake the semi-structured interview, an important assumption was made by the researcher. This was that the chosen doctors were representative of the doctors who worked in that particular health centre and that their answers could be generalized to the other doctors working there. The doctor that was interviewed at the health centre may have been different to the doctor who provided a service to those patients who answered the questionnaire. In reality, the way different doctors practise at the health centres may be somewhat different, and this should be kept in mind when analyzing the qualitative data from the interviews.

The sample of patients from the public sector is demographically different to that taken from the private sector. In addition, patients in the public sector opt for a free service while those in the private sector are willing to pay. Therefore patients in the
private sector have higher expectations. The level of education was not included in
the patient demographic data and this is a limitation when comparing public and
private sectors.

3.11 Permissions, approvals and ethical considerations

Several approvals had to be sought prior to the initiation of this study. Firstly, a
Temporary Permit to carry out a survey at the health centres was requested (Appendix
9) from the Director of Primary Health Care. Once this was granted (Appendix 10), 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 (Appendix 12), a Permanent Permit (Appendix 11) 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. Permission to use the questionnaire designed by Murray Lough in the
current research was obtained at a later stage (Appendix 13).

In the private sector, consent was obtained from the private family doctors to carry
out a survey on their patients. Consent was also requested from the doctors in public
and private sectors (Appendices 14, 15) to carry out the semi-structured interviews.
Consent was also obtained from all the patients that took part in the survey
(Appendices 16, 17). They were assured confidentiality and anonymity. The research
assistants also signed a consent form before starting data collection at the health
centres (Appendix 7).
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Any data that was generated by the study itself and other data concerning participants were kept in a safe place by the researcher and destroyed at the end of the study. Any queries about the study or questionnaire that the participants had before or during the study were addressed by the researcher. The study ensured that no harm would be caused to any of the participants and that no confidential data would be disclosed without prior consent of the participants involved.

3.12 Time schedule

The study took place over a period of ten months, from June 2008 to March 2009. The letter to the Director of Primary Health Care was sent in June 2008. When consent was obtained, the research proposal was submitted to the University Research and Ethics Committee in July 2008. This was approved in August 2008. The literature review was performed during the months of September and October 2008. The questionnaire was retrieved from the internet and permission to use it in this study was obtained in October 2008. Towards the end of October, translation of the questionnaire and patient information leaflet into Maltese and back translation into English were performed and discussed with the professional translators.

In the beginning of November 2008, the pilot study at the private clinic and health centre in Paola was carried out to test the questionnaire. Once this was edited accordingly, data collection at the private clinics was started by the family doctors and data collection at the health centres was started by the research assistants. This
lasted until the end of December 2008. During January 2009, the results were entered into the Statistical Package for Social Sciences (SPSS) version 17 and later analyzed using this program. In February 2009, the semi-structured interviews with the family doctors at the various clinics were carried out. Transcription of the qualitative data obtained from these interviews was carried out in March 2009. After discussing the results with the supervisor, the final write-up of the study was carried out.

3.13 Conclusion

This chapter gave a detailed explanation of the methodology of this study. Details were given about how the various tools were used to collect data from the both public and private sectors and how these data were later analyzed. The limitations of the methodology were identified and their importance was described.
4. Results

4.1 Introduction

In this chapter, the analyses of data collected from the study of patient satisfaction in primary health care are presented. The chapter is divided into four main sections:

- Section 4.2 describes the demography of the study population and their involvement with the family doctor.
- Section 4.3 analyzes the factors that affect patient satisfaction.
- Section 4.4 compares patient satisfaction between public and private sectors.
- Section 4.5 presents the analyses of the doctor’s semi-structured interviews.

4.2 Demographic data analysis

The demographic data from the first part of the questionnaire are presented below. These include clinic locality and sector (public/private), age and gender. There is also data about whether the patient has a private family doctor and how many times he/she has visited his/her own family doctor or another doctor in the last year. A total of 240 patients were chosen to take part in the study. Out of these, 226 returned the questionnaire, a response rate of 94%. The response rate was higher in the public sector with 119 out of 120 respondents (99%) returning the questionnaire. In the private sector the response rate was 89% with 107 respondents returning the questionnaire out of a total of 120. This difference in response rate can be explained by the different methods of data collection, described in the Methodology chapter and by the absence of research assistants to help in data collection in the private sector.
Results

The response rate in both sectors exceeded the number estimated by Lenth (2006-9), thereby ensuring adequate sample size.

Figure 4.1: Response rates in public and private sectors

![Response rates in public and private sectors](image)

Figure 4.2: Response rates in each clinic

![Response rates in each clinic](image)

As can be seen in Figure 4.2, there were high response rates in all the participant clinics, especially in the public sector health centres (HC).

4.2.1 Age

The study population had an age range of 30-70 years. The participants were grouped into four 10-year age groups. There was no significant difference in age distribution
between public and private sectors (p=0.485). The distribution of patients in the various age groups is illustrated below.

Figure 4.3: Age distribution of participants

![Age distribution](image)

### 4.2.2 Gender

The patients who took part in the study were predominantly female. 55.8% of the respondents were female and 44.2% were male. There was no significant difference in gender distribution between public and private sectors (p=0.658).

Figure 4.4: Gender distribution of participants

![Gender distribution](image)
4.2.3 The private family doctor

In the first section of the questionnaire, following the demographic data, the patients were asked about their family doctor.

There were the following three questions:
1. Do you have your own private family doctor?
2. How many times did you visit your doctor in the last year?
3. How many times did you visit another family doctor (other than your own) in the last year?

As can be seen in the following figures, there were some differences between public and private sectors, as expected. While all the respondents in the private sector claim to have a private doctor, only 15% of patients accessing public sector services have their own private family doctor.

*Figure 4.5: Difference in number of patients having their own private family doctor between public and private sectors of health care*
Results

Figure 4.6: Number of patients visiting their own family doctor and/or another family doctor in the last year

How many times have you seen your doctor in the last year?

![Bar chart showing the number of times patients saw their doctor in the last year, with public sector and private sector data.]

How many times have you seen another doctor in the last year?

![Bar chart showing the number of times patients saw another doctor in the last year, with public sector and private sector data.]

The above two figures show how often the patients in the study visited their own family doctor and how often they visited another family doctor other than their own. It can be seen that the majority of public sector respondents visited their doctor less than five times, with a large proportion having never visited their own doctor in the last year. These respondents didn’t even visit another family doctor besides their own, which means most of them make use of the services at the health centres.
On the other hand, private sector respondents visit their own doctor frequently, with most of them having visited between one to ten times in the last year. These respondents are quite loyal to their doctor with the majority claiming to have never visited another doctor in the last year and most of the rest having visited another doctor one to five times, probably at times when their own family doctor was not accessible.

There is a highly statistically significant difference between public and private sectors in the number of times respondents visited their own doctor in the last year (p<0.001). Respondents in the private sector are less likely to visit other family doctors than those in the public sector. The difference between public and private sector respondents visiting family doctors other than their own in the last year is also statistically significant (p<0.05).

4.2.4 Summary of demographic data

Of a total of 240 questionnaires that were distributed, 226 were returned. These comprised 119 out of 120 (99%) in the public sector and 107 out of 120 (89%) in the private sector. 100 respondents (44.2%) were male and 126 (55.8%) were female. All the respondents in the private sector claim to have their own family doctor while just over 15% of respondents in the public sector claim that they have no personal family doctor. Of the respondents who claim that they have a private family doctor, the vast majority seem to be quite loyal to their family doctor, with most claiming that they never visited another family doctor in the last year. The respondents in the private
sector visit their own private family doctor more frequently than those in the public sector (p<0.001), and these public sector respondents tend to visit other doctors more than those in the private sector (p<0.05).

4.3 Factors affecting patient satisfaction

The patient questionnaires were divided into seven sections:

The first section asks about the patient’s demographic characteristics as has been discussed in the previous section.

The subsequent five sections ask questions relating to the doctor’s:

▪ personality traits,
▪ professional values,
▪ duties and responsibilities,
▪ communication skills,
▪ clinical care.

The final section asks if the patient thinks that the doctor is a good family doctor and if he or she is satisfied with the service provided.

The following tables outline the percentage of patients in both public and private sectors that responded to the various questions asked about the characteristics of the family doctor. The questions are divided into the five sections mentioned above.
Table 4.1: Percentage of patients responding about the family doctor’s personality traits

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Has a nice attitude with the patients</td>
<td>51.3</td>
<td>36.3</td>
<td>8.4</td>
<td>2.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Q2: Is polite to patients and staff</td>
<td>50.4</td>
<td>41.6</td>
<td>6.6</td>
<td>0.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Q3: Is enthusiastic about his/her job</td>
<td>48.7</td>
<td>35.8</td>
<td>11.5</td>
<td>3.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Q4: Stays calm under pressure</td>
<td>42</td>
<td>42.9</td>
<td>10.6</td>
<td>3.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Q5: Is arrogant</td>
<td>2.2</td>
<td>2.7</td>
<td>8.8</td>
<td>36.3</td>
<td>50</td>
</tr>
<tr>
<td>Q6: Doesn’t have enough time for you</td>
<td>8.4</td>
<td>16.4</td>
<td>7.5</td>
<td>34.1</td>
<td>33.6</td>
</tr>
<tr>
<td>Q7: Looks professional in the way he/she dresses</td>
<td>39.8</td>
<td>46.9</td>
<td>8.4</td>
<td>4.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Q8: Able to demonstrate a sense of humour when appropriate</td>
<td>24.8</td>
<td>43.4</td>
<td>21.7</td>
<td>6.6</td>
<td>3.5</td>
</tr>
</tbody>
</table>

The table above shows that most patients have a positive opinion about the family doctor with over half the respondents agreeing strongly that the family doctor has a nice attitude and is polite. Half the respondents strongly disagree that the doctor is arrogant and most also disagree that he doesn’t have enough time for them. Most patients believe that the doctor looks professional in the way he/she dresses and is able to demonstrate a sense of humour when appropriate.
Table 4.2: Percentage of patients responding about the family doctor’s professional values

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Honest and trustworthy</td>
<td>54</td>
<td>35.8</td>
<td>8.8</td>
<td>0.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Q2: Able to keep confidentiality</td>
<td>54.9</td>
<td>35.8</td>
<td>8</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Q3: Able to maintain a healthy work/life balance</td>
<td>36.7</td>
<td>36.7</td>
<td>24.8</td>
<td>1.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Q4: Hindered in doing their job by their mental and/or physical health</td>
<td>4.9</td>
<td>10.2</td>
<td>20.8</td>
<td>29.2</td>
<td>35</td>
</tr>
</tbody>
</table>

Table 4.3: Percentage of patients responding about the family doctor’s duties and responsibilities

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Willing to take responsibility for getting his/her share of the work done</td>
<td>46.5</td>
<td>42</td>
<td>8.4</td>
<td>2.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Q2: Willing to take responsibility for follow-up of patients where necessary</td>
<td>42.5</td>
<td>43.8</td>
<td>9.3</td>
<td>3.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Q3: Committed to continuing his/her studies</td>
<td>26.5</td>
<td>36.3</td>
<td>36.3</td>
<td>0.9</td>
<td>0</td>
</tr>
<tr>
<td>Q4: Willing to learn from mistakes and recognizes his/her limitations</td>
<td>22.6</td>
<td>41.2</td>
<td>33.6</td>
<td>2.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Q5: Poorly organised</td>
<td>4.4</td>
<td>10.6</td>
<td>13.7</td>
<td>33.2</td>
<td>38.1</td>
</tr>
<tr>
<td>Q6: Easily accessible and able to be contacted where necessary</td>
<td>34.5</td>
<td>35</td>
<td>17.5</td>
<td>10.2</td>
<td>3.1</td>
</tr>
</tbody>
</table>
More than half the patients answering the questionnaire strongly agree that the doctor is honest, trustworthy and able to keep confidentiality. These are crucial professional values which every doctor should have. Just over half the respondents agree that the doctor is able to maintain a healthy work/life balance. There are mixed ideas about the physician’s health interfering with his job. The vast majority of patients believe that the doctor is willing to take responsibility for getting his/her work done as well as for following up patients. Most patients also agree that the doctor can easily be contacted when necessary and that he/she is organized in his/her work. There were mixed views about the doctor continuing his/her studies and about the doctor learning from his/her mistakes.

Table 4.4: Percentage of patients responding about the family doctor’s communication skills

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of respondents:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Q1: Able to make the patient feel calm</td>
<td>42.9</td>
</tr>
<tr>
<td>Q2: Willing to listen to patients and staff</td>
<td>41.6</td>
</tr>
<tr>
<td>Q3: Able to keep medical records consistently for the patients he sees</td>
<td>43.4</td>
</tr>
<tr>
<td>Q4: Able to write legibly</td>
<td>21.2</td>
</tr>
</tbody>
</table>

From the above table, it is evident that most patients believe the doctor is able to make the patient feel calm and is willing to listen. They also believe that the doctor is able to keep records but views about the doctor’s handwriting are varied.
Regarding the doctor's clinical care, patients' views are again mostly positive (c.f. Table 4.5), with the majority of respondents agreeing that the doctor is a competent clinician in most respects. From the responses to the final section (c.f. Table 4.6) of the questionnaire, it seems that most patients believe that their doctor is a good doctor and they are satisfied with the service provided.

Table 4.5: Percentage of patients responding about the family doctor's clinical care

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Up to date with recent developments</td>
<td>38.5</td>
<td>42.5</td>
<td>17.7</td>
<td>1.3</td>
<td>0</td>
</tr>
<tr>
<td>Q2: Capable of making the right diagnosis</td>
<td>34.1</td>
<td>50.4</td>
<td>11.1</td>
<td>3.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Q3: Unable to make appropriate decisions</td>
<td>4.9</td>
<td>16.2</td>
<td>14.8</td>
<td>36.3</td>
<td>27.9</td>
</tr>
<tr>
<td>Q4: A safe prescriber even when drugs carry a certain risk</td>
<td>36.7</td>
<td>46</td>
<td>13.3</td>
<td>2.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Q5: Ready to refer patients to a specialist when necessary</td>
<td>46.5</td>
<td>42</td>
<td>10.2</td>
<td>1.3</td>
<td>0</td>
</tr>
<tr>
<td>Q6: Willing to care for the terminally ill patient</td>
<td>31</td>
<td>43.8</td>
<td>24.8</td>
<td>0.4</td>
<td>0</td>
</tr>
<tr>
<td>Q7: Able to face problems that arise in his work as a family doctor</td>
<td>37.2</td>
<td>42.9</td>
<td>18.1</td>
<td>0.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Q8: Ready to explain what is wrong before giving treatment</td>
<td>42.5</td>
<td>47.8</td>
<td>5.8</td>
<td>2.7</td>
<td>1.3</td>
</tr>
</tbody>
</table>
Table 4.6: Percentage of patients responding about overall opinion

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of respondents:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: How much go you agree that your doctor is a good family doctor</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>34.1</td>
<td>9.7</td>
<td>0.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Q2: I am satisfied with the service my doctor gives me</td>
<td>54.9</td>
<td>31.4</td>
<td>7.5</td>
<td>4</td>
<td>2.2</td>
</tr>
</tbody>
</table>

4.3.1 Assessing normality

In order to assess if the variables in the questionnaire have a normal distribution, Q-Q plots were calculated for all the variables. When the individual variables were tested as single items, all the Q-Q plots appeared to be skewed. Therefore, when using the variables as single items to correlate factors relating to the family doctor with patient satisfaction and to compare patient satisfaction between public and private sectors, non-parametric tests need to be used.

Scale means were calculated for each of the five dimensions in the questionnaire, that is, personality traits, professional values, duties and responsibilities, communication skills and clinical care. The internal consistency (Cronbach’s $\alpha$) for each dimension was also calculated. This showed that communication skills and clinical care are reliable dimensions for measuring patient satisfaction as Cronbach’s $\alpha$ is more than 0.7 (Nunnally, 1978). However, personality traits, professional values and duties and responsibilities do not reach the threshold recommended by Nunnally. The low values...
may be explained by the fact that Cronbach’s alpha values are sensitive to the number of items (Pallant, 2005). Indeed, Cronbach’s alpha values tend to be low for scales with fewer than ten items. Briggs and Cheek (1986) recommend a mean inter-item correlation of 0.2 to 0.4 as being optimal. In this case, inter-item correlations for personality traits, professional values and duties and responsibilities were all within this range.

Table 4.7: Internal consistency reliability for each of the five dimensions in the questionnaire

<table>
<thead>
<tr>
<th>Dimension of factors affecting patient satisfaction</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality Traits</td>
<td>0.488</td>
</tr>
<tr>
<td>Professional values</td>
<td>0.444</td>
</tr>
<tr>
<td>Duties and responsibilities</td>
<td>0.538</td>
</tr>
<tr>
<td>Communication skills</td>
<td>0.764</td>
</tr>
<tr>
<td>Clinical care</td>
<td>0.715</td>
</tr>
</tbody>
</table>

Q-Q plots were also calculated for the scale means. These plots showed a normal distribution, that is, they were not skewed like the plots that resulted from the single items. Therefore when using the scale means, parametric tests could be used for correlation of the variables with patient satisfaction and for comparing public and private sectors.

4.3.2 Correlation between individual characteristics of the family doctor and patient satisfaction

By using Spearman’s Rho (ρ) to correlate the various characteristics of a family doctor which affect patient satisfaction to the last two questions which ask if the
patient is satisfied with the doctor and with the service provided, one can deduce which of the characteristics are most likely to lead to patient satisfaction. In all of the following correlations, the p value (level of significance) is less than 0.001 (p < 0.001). From the table and figure below, one can see that having a nice attitude with patients and being enthusiastic about the job are both highly correlated with patient satisfaction. Being polite and staying calm are also important characteristics of a family doctor. On the other hand, being arrogant and not giving the patient enough time are both negatively associated with patient satisfaction, with arrogance leading to high levels of dissatisfaction.

Table 4.7: Correlation between doctor’s personality traits and patient satisfaction

<table>
<thead>
<tr>
<th>Q1: Has a nice attitude with the patients</th>
<th>Correlation Coefficient</th>
<th>Q2: I am satisfied with the service my doctor gives me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2: Is polite to patients and staff</td>
<td>Correlation Coefficient</td>
<td>.596(**)</td>
</tr>
<tr>
<td>Q3: Is enthusiastic about his/her job</td>
<td>Correlation Coefficient</td>
<td>.498(**)</td>
</tr>
<tr>
<td>Q4: Stays calm under pressure</td>
<td>Correlation Coefficient</td>
<td>.556(**)</td>
</tr>
<tr>
<td>Q5: Is arrogant</td>
<td>Correlation Coefficient</td>
<td>-.356(**)</td>
</tr>
<tr>
<td>Q6: Doesn't have enough time for you</td>
<td>Correlation Coefficient</td>
<td>-.297(**)</td>
</tr>
<tr>
<td>Q7: Looks professional in the way he/she dresses</td>
<td>Correlation Coefficient</td>
<td>.334(**)</td>
</tr>
<tr>
<td>Q8: Able to demonstrate a sense of humour when appropriate</td>
<td>Correlation Coefficient</td>
<td>.442(**)</td>
</tr>
</tbody>
</table>

** p<0.001; N=226
The table below shows that the most important professional values are honesty and trustworthiness, as these are highly correlated to patient satisfaction. These are followed by the ability to maintain confidentiality. Other professional values such as being able to maintain a healthy work/life balance are considered to be less important. When the doctor is hindered by poor mental and/or physical health, this leads to patient dissatisfaction.

Table 4.8: Correlation between doctor’s professional values and patient satisfaction

<table>
<thead>
<tr>
<th>Q1: Honest and trustworthy</th>
<th>Correlation Coefficient</th>
<th>Q1: How much do you agree that your doctor is a good family doctor</th>
<th>Q2: I am satisfied with the service my doctor gives me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.552(**)</td>
<td>.592(**)</td>
</tr>
<tr>
<td>Q2: Able to keep confidentiality</td>
<td>Correlation Coefficient</td>
<td>.530(**)</td>
<td>.581(**)</td>
</tr>
<tr>
<td>Q3: Able to maintain a healthy work/life balance</td>
<td>Correlation Coefficient</td>
<td>.439(**)</td>
<td>.479(**)</td>
</tr>
<tr>
<td>Q4: Hindered in doing their job by their mental and/or physical health</td>
<td>Correlation Coefficient</td>
<td>-.349(**)</td>
<td>-.340(**)</td>
</tr>
</tbody>
</table>

** p<0.001; N=226
Figure 4.8: Professional values most likely to lead to patient satisfaction

Table 4.9: Correlation between doctor’s duties and responsibilities and patient satisfaction

<table>
<thead>
<tr>
<th>Q1: Willing to take responsibility for getting his/her share of the work done</th>
<th>Correlation Coefficient</th>
<th>Q2: I am satisfied with the service my doctor gives me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Willing to take responsibility for getting his/her share of the work done</td>
<td>Correlation Coefficient</td>
<td>.450(**)</td>
</tr>
<tr>
<td>Q2: Willing to take responsibility for follow-up of patients where necessary</td>
<td>Correlation Coefficient</td>
<td>.532(**)</td>
</tr>
<tr>
<td>Q3: Committed to continuing his/her studies</td>
<td>Correlation Coefficient</td>
<td>.414(**)</td>
</tr>
<tr>
<td>Q4: Willing to learn from mistakes and recognizes his/her limitations</td>
<td>Correlation Coefficient</td>
<td>.461(**)</td>
</tr>
<tr>
<td>Q5: Poorly organised</td>
<td>Correlation Coefficient</td>
<td>-.448(**)</td>
</tr>
<tr>
<td>Q6: Easily accessible and able to be contacted where necessary</td>
<td>Correlation Coefficient</td>
<td>.431(**)</td>
</tr>
</tbody>
</table>

** p<0.001; N=226

Most of the doctor’s duties and responsibilities are considered equally important in achieving patient satisfaction. While taking the responsibility to follow-up patients
results in the highest rates of patient satisfaction, being poorly organized results in dissatisfaction. Being accessible and easily contacted is one of the lesser important duties of a family doctor nowadays as it is not so strongly correlated with patient satisfaction.

Figure 4.9: Duties and responsibilities most likely to lead to patient satisfaction

The most important factors related to communication skills that were associated with patient satisfaction were being able to make the patient feel calm and being willing to listen attentively. Keeping records and writing legibly were considered less important, even though records are necessary for continuity of care.
Results

Table 4.10: Correlation between doctor’s communication skills and patient satisfaction

<table>
<thead>
<tr>
<th>Q1: Able to make the patient feel calm</th>
<th>Correlation Coefficient</th>
<th>Q2: I am satisfied with the service my doctor gives me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>.586(**)</td>
<td>.569(**)</td>
</tr>
<tr>
<td>Q2: Willing to listen to patients and staff</td>
<td>.547(**)</td>
<td>.592(**)</td>
</tr>
<tr>
<td>Q3: Able to keep medical records consistently for the patients he sees</td>
<td>.456(**)</td>
<td>.499(**)</td>
</tr>
<tr>
<td>Q4: Able to write legibly</td>
<td>.490(**)</td>
<td>.485(**)</td>
</tr>
</tbody>
</table>

** p<0.001; N=226

Figure 4.10: Communication skills most likely to lead to patient satisfaction

Patients visit the doctor when they are sick and what they really want from the doctor is to get better. Patients expect the doctor to be up to date with recent developments and capable of making the right diagnosis. In fact, these two factors are highly correlated with patient satisfaction, as is explaining what is wrong with the patient before giving treatment. Other factors related to clinical care that affect patient satisfaction are outlined in the following table.
### Results

**Table 4.11: Correlation between clinical care and patient satisfaction**

<table>
<thead>
<tr>
<th>Q1: Up to date with recent developments</th>
<th>Correlation Coefficient</th>
<th>Q2: I am satisfied with the service my doctor gives me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: How much go you agree that your doctor is a good family doctor</td>
<td>.594(***)</td>
<td>.645(***).</td>
</tr>
<tr>
<td>Q2: Capable of making the right diagnosis</td>
<td>.613(***).</td>
<td>.577(***).</td>
</tr>
<tr>
<td>Q3: Unable to make appropriate decisions</td>
<td>-.430(***.</td>
<td>-.398(***.</td>
</tr>
<tr>
<td>Q4: A safe prescriber even when drugs carry a certain risk</td>
<td>.469(***.</td>
<td>.412(***.</td>
</tr>
<tr>
<td>Q5: Ready to refer patients to a specialist when necessary</td>
<td>.520(***.</td>
<td>.487(***.</td>
</tr>
<tr>
<td>Q6: Willing to care for the terminally ill patient</td>
<td>.508(***.</td>
<td>.473(***.</td>
</tr>
<tr>
<td>Q7: Able to face problems that arise in his work as a family doctor</td>
<td>.587(***.</td>
<td>.576(***.</td>
</tr>
<tr>
<td>Q8: Ready to explain what is wrong before giving treatment</td>
<td>.644(***.</td>
<td>.645(***.</td>
</tr>
</tbody>
</table>

**Figure 4.11: Factors associated with clinical care that lead to patient satisfaction**

**Legend:**
- Q1: Up to date with recent developments
- Q2: Capable of making the right diagnosis
- Q3: Unable to make appropriate decisions
- Q4: A safe prescriber even when drugs carry a certain risk
- Q5: Ready to refer patients to a specialist when necessary
- Q6: Willing to care for the terminally ill patient
- Q7: Able to face problems that arise in his work as a family doctor
- Q8: Ready to explain what is wrong before giving treatment

---

**Notes:**

**p<0.001; N=226**
When the correlations between the characteristics of the family doctor and patient satisfaction are analyzed, it can be seen that the factors most likely to lead to patient satisfaction are listed as factors associated with clinical care: (1) being ready to explain what is wrong before giving treatment, (2) being up to date with recent developments in the profession and (3) the ability to make the right diagnosis. These are followed by (4) being enthusiastic, (5) having a nice attitude with patients and (6) being honesty and trustworthy. These last three factors are all very important in the building of a healthy doctor-patient relationship.

4.3.3 Correlation between scale means and patient satisfaction

The scale mean for each of the five dimensions of the questionnaire gives a mean score for each dimension. The individual items are scored on a Likert scale of 1-5 with 1 being “strongly agree” and 5 being “strongly disagree”. Therefore a scale mean of 1.5 would mean that the dimension has a positive rating, between “strongly agree” and “agree”. On the other hand a scale mean of 4 means that the dimension has a negative rating (“disagree”). By using scale means, one can get a clear picture of the most important dimensions which affect patient satisfaction. Using the Pearson Correlation Test (Pearson’s r), the scale means were correlated to each other and also to patient satisfaction (c.f. Table 4.12). It can be seen that communication skills and clinical care are the most important dimensions affecting patient satisfaction as they are highly correlated with patient satisfaction.
Table 4.12: Correlations between scale means and patient satisfaction

<table>
<thead>
<tr>
<th>Personality Traits (A)</th>
<th>Pearson Correlation</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Values (B)</td>
<td>Pearson Correlation</td>
<td>.495**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duties and Responsibilities (C)</td>
<td>Pearson Correlation</td>
<td>.499**</td>
<td>.514**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Skills (D)</td>
<td>Pearson Correlation</td>
<td>.545**</td>
<td>.607**</td>
<td>.683**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Care (E)</td>
<td>Pearson Correlation</td>
<td>.559**</td>
<td>.510**</td>
<td>.620**</td>
<td>.707**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Patient Satisfaction (F)</td>
<td>Pearson Correlation</td>
<td>.545**</td>
<td>.407**</td>
<td>.573**</td>
<td>.675**</td>
<td>.731**</td>
<td>1</td>
</tr>
</tbody>
</table>

** p<0.001; N=226

4.4 Comparison of patient satisfaction between public and private sectors

When Asciak et al. compared public and private sectors of primary health care in 2002, results showed that patient satisfaction was higher in the private sector (96.1%) than in the public sector (83.1%). The results presented in this study confirm Asciak et al.'s findings where, six years later, patient satisfaction is still higher in the private sector.

Figure 4.12: Patient satisfaction in the public sector
Results

Figure 4.13: Patient satisfaction in the private sector

These figures illustrate the marked difference in patient satisfaction between public and private sectors of primary health care. While in the public sector, only 75.7% are satisfied with the service that the doctor provides, in the private sector, 98.2% of patients are satisfied with the service. 78.2% of patients believe that the doctor at the health centre is a good family doctor while in the private sector, 99.1% of patients believe that their doctor is a good family doctor. The difference in patient satisfaction between the public and the private sector of primary health care is highly significant (p<0.001). These results also indicate that the difference in patient satisfaction between both sectors is more marked than it was six years ago.

When comparing the factors most likely to lead to patient satisfaction (discussed in Section 4.3) between public and private sectors, it is evident that the doctors in the private sector are more likely to exhibit characteristics that lead to patient satisfaction than their public sector counterparts (c.f. Figure 4.14). As a result, patients in the private sector are significantly more satisfied than those in the public sector. There is
a highly statistical significant difference between public and private sectors in all the individual factors affecting patient satisfaction; in fact \( p < 0.001 \) for all the 29 items in the questionnaire except “Looks professional in the way he/she dresses” where \( p < 0.05 \).

**Figure 4.14: Comparison of public and private sectors: factors most likely to lead to patient satisfaction**

**Figure 4.15: Comparison of public and private sectors: patient satisfaction in different areas of Malta**
Figure 4.15 shows that patient satisfaction is higher in all private clinics when compared to the government health centres, with over 95% of patients being satisfied with the service provided in private clinics. This figure also shows that the busier health centres, such as Mosta and Paola, have lower rates of patient satisfaction than the other two health centres.

4.4.1 Comparison of scale means between public and private sectors

The scale means for each of the dimensions were compared between public and private sectors by using T-Test. In this way, the difference between the means for each dimension in public and private sectors could be clearly seen and the significance of this difference noted. The largest difference between the means in public and private sectors is for communication skills. For all the five dimensions, the difference between public and private sectors is highly statistically significant (p<0.001).

Table 4.14: Comparison of scale means between public and private sectors

<table>
<thead>
<tr>
<th></th>
<th>Private or Public Sector</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personality Traits</strong></td>
<td>Private sector</td>
<td>2.1460</td>
<td>0.32960</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Public Sector</td>
<td>2.5168</td>
<td>0.43997</td>
<td></td>
</tr>
<tr>
<td><strong>Professional Values</strong></td>
<td>Private sector</td>
<td>2.0748</td>
<td>0.42088</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Public Sector</td>
<td>2.3487</td>
<td>0.61256</td>
<td></td>
</tr>
<tr>
<td><strong>Duties and Responsibilities</strong></td>
<td>Private sector</td>
<td>2.0872</td>
<td>0.37988</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Public Sector</td>
<td>2.4790</td>
<td>0.54096</td>
<td></td>
</tr>
<tr>
<td><strong>Communication Skills</strong></td>
<td>Private sector</td>
<td>1.5888</td>
<td>0.52894</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Public Sector</td>
<td>2.3214</td>
<td>0.69741</td>
<td></td>
</tr>
<tr>
<td><strong>Clinical care</strong></td>
<td>Private sector</td>
<td>1.8598</td>
<td>0.38113</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Public Sector</td>
<td>2.2258</td>
<td>0.50900</td>
<td></td>
</tr>
<tr>
<td><strong>Patient Satisfaction</strong></td>
<td>Private sector</td>
<td>1.1963</td>
<td>0.41069</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Public Sector</td>
<td>2.0504</td>
<td>0.89584</td>
<td></td>
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</tbody>
</table>
4.5 Doctors’ perceptions of patient satisfaction and doctor satisfaction

This section analyses the doctors’ interviews and discusses the doctors’ perceptions of patient satisfaction. It also investigates the level of job satisfaction experienced by the doctors working in the clinics that were studied. Semi-structured interviews were carried out on full-time doctors working in each of the government health centres and on all the doctors working in the private clinics where the questionnaires were distributed.

In the first part of the interview, personal information about the doctors was obtained, such as age and what areas they practice in. The doctors were then asked whether they work privately or with the government, how many hours a week they work in the clinic and how much time, on average, they spend with each patient.

All doctors but one were male and their ages ranged from 27 to 61 years. All four doctors interviewed in the private clinics work only privately while the four doctors that were interviewed at the health centres work mostly with the government but also have some private practice. Most of the doctors work approximately forty hours in the clinics where they were interviewed.

It was very clear from the doctors’ attitudes that the doctors at the health centres were rather hurried and wanted to finish the interview as fast as possible. The general feeling expressed by these doctors was one of tension, stress and not enough time to give. In fact, this was confirmed when each of the health centre doctors admitted that
they spend less than ten minutes with each patient, half of them spending less than five minutes.

On the other hand, the private family doctors had a more relaxed attitude and had more time to express themselves. In fact, all these doctors spend more than ten minutes with each patient on average, with some spending fifteen minutes or more. The different attitudes between public and private family doctors could already be felt at this early stage.

Further qualitative data were analyzed using content analysis. The themes coincided with the dimensions of the questionnaire. Within each theme, several elements emerged. The doctors were asked about personality traits, professional values, duties and responsibilities, communication skills and clinical care. Each interviewee gave their opinion about factors affecting patient satisfaction.

All doctors agreed that the family doctor should be enthusiastic and have a nice, friendly attitude with his/her patients. Appearance is important, especially for patients who are visiting for the first time and “to give the impression of someone that is serious and professional”. 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.
Table 4.15: Elements associated with personality traits

<table>
<thead>
<tr>
<th>Theme:</th>
<th>Personality Traits</th>
</tr>
</thead>
</table>
| Elements: | • Enthusiasm  
|          | • Nice attitude  
|          | • Friendly  
|          | • Smart appearance |

Table 4.16: Elements associated with professional values

<table>
<thead>
<tr>
<th>Theme:</th>
<th>Professional Values</th>
</tr>
</thead>
</table>
| Elements: | • Honesty  
|          | • Trustworthiness  
|          | • Ability to keep confidentiality |

Communication skills were also considered to be “the most important”, “vital” and “essential to deliver the message to the patient”. Communication is important “to get the patient to do what the doctor wants him to do”. Allowing the patient to speak without interruption will help the patient to communicate all that he/she wants to say and this may include some hidden agendas which, if not explored, may lead to patient dissatisfaction. All doctors agreed 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, is kept by all the private family doctors and they have also been introduced at the health centres since a few years ago.

Table 4.17: Elements associated with duties and responsibilities

<table>
<thead>
<tr>
<th>Theme:</th>
<th>Duties and responsibilities</th>
</tr>
</thead>
</table>
| Elements: | • Being accessible, available  
|          | • Keeping up to date  
|          | • Being organized |
Clinical care was also mentioned as being the “most important for the patient”. Patients visit the doctor with a complaint and what they want is to get rid of their symptoms. The accuracy of diagnosis and whether the patient makes a good clinical recovery can affect whether the patient will return to the family doctor or not. Patients want a doctor who is up to date, responsible, knows his limits and refers when necessary. The way a person is questioned and examined should be given a lot of importance as it can change the way a patient feels about the doctor.

Other factors considered important by the doctors to achieve patient satisfaction were empathy, persuasion, “getting to know what the patient is really expecting out of you”, patience and being able to be contacted when necessary. The family doctor should be ethical, non-judgmental and knowledgeable and be able to give the patient enough time and attention.
When asked if the doctors thought their patients were satisfied, the doctors in private practice said that they think most of them were satisfied, especially those who return on a regular basis. Two of the doctors at the health centres said the patients are not satisfied as there is no continuity of care and patients cannot visit the same doctor at the health centre. The only reason why they choose this service is because it is free at the point of use. The other two doctors said that the patients are quite satisfied with the service despite having to wait for long hours. It avoids them having to go to hospital at times and they don’t have to pay for the service.

Figure 4.15 shows that 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. On the other hand, in the public sector, only some of the doctors have good perceptions of the level of their patients’ satisfaction. The larger and busier the health centres have lower rates of patient satisfaction than the smaller ones. This was well perceived by the doctors in the public sector as there is less likelihood of continuity of care in these health centres. In fact, doctors at Paola and Mosta Health Centre claim that people wait for long hours and never see the same doctor. This sometimes causes patient dissatisfaction, especially if the doctor doesn’t give the patient enough time after waiting for so long.

At Qormi Health Centre, the doctor correctly perceived that his patients are “quite satisfied” despite having to wait to see the doctor. At this health centre, the workload is moderate and since it is relatively small, patients sometimes manage to visit the
same doctor. This results in better continuity of care and higher levels of patient satisfaction. The shortage of staff can sometimes cause very long waiting times and occasional episodes of aggression from annoyed patients. At Gżira Health Centre, although the doctor’s perception was that his patients are not satisfied, almost 90% of the patients claim that they are satisfied at this particular health centre.

When asked whether the doctors are satisfied with their work as a family doctor at the clinics where they were interviewed, all the private family doctors said that they were satisfied, some saying they were “very satisfied”. The continuity of care and strong doctor-patient relationships were important factors for the doctors’ satisfaction. On the other hand, the doctors working in the public sector said they are not satisfied, in fact “not at all”. The reasons given were stress, lack of staff, no continuity of care and poor doctor-patient relationships.

4.6 Conclusion

This chapter outlined the results obtained from the various stages of this research. Factors associated with clinical care and communication skills were most reliable to measure patient satisfaction and were most highly correlated with patient satisfaction. The three factors most likely to lead to patient satisfaction were explaining what is wrong before giving treatment, the ability to make the right diagnosis and keeping up to date with recent developments. There is a highly significant difference in patient satisfaction between public and private sectors of primary health care. Doctors in the private sector are quite aware that their patients are satisfied and most of the doctors
in the public sector are aware that their patients are not so satisfied. In the following chapter, these results will be compared to the various studies that were discussed in the *Literature Review*. In this way, patient satisfaction in the Maltese primary health care system can be discussed in relation to previous studies in this field.
5. Discussion

5.1 Introduction

The main aims of this study were to identify the characteristics of a family doctor most likely to lead to patient satisfaction and to compare family doctors' characteristics and patient satisfaction between public and private sectors of primary health care. In the first part of this chapter, the findings of the research questions are presented and interpreted and in the second part, the implications are explored. Limitations of the study were discussed in the Methodology chapter in Section 3.10.

5.2 Factors associated with patient satisfaction

The first part of this research was intended to establish which characteristics of a family doctor are associated with patient satisfaction. The tool (Lough, 2006) used to measure the characteristics of the family doctor included thirty items, which were correlated to the two items on patient satisfaction namely, satisfaction with the doctor at the clinic and satisfaction with the service provided. The thirty characteristics were also grouped into five dimensions, scale means and these were correlated with a mean score for patient satisfaction.
**Q1: Which factors are associated with patient satisfaction in primary health care?**

Clinical care was found to have the highest correlation with patient satisfaction ($r=0.731$ at $p<0.001$)\(^1\). When the individual items were correlated with patient satisfaction (satisfaction with doctor / satisfaction with service), the items which had the highest correlations were:

1. Ready to explain what is wrong before giving treatment ($\rho=0.644$, $\rho=0.645$, $p<0.001$)
2. Up to date with recent developments ($\rho=0.594$, $\rho=0.645$, $p<0.001$)
3. Capable of making the right diagnosis ($\rho=0.613$, $\rho=0.577$, $p<0.001$)

The items with the highest correlations were all items associated with clinical care. This reflects the importance of clinical care for the achievement of patient satisfaction. The ability to make the right diagnosis and giving a detailed explanation of the symptoms before giving treatment are aspects of clinical care that have all been described in the literature as being important factors affecting patient satisfaction (Grol et al., 1999; Van den Brink-Muinen et al., 2000; Zaghloul, 2001; Zebiene et al., 2004; Tahepold et al., 2006). A good doctor is often determined by the ability to make the right diagnosis as, once this has been established, the appropriate management can be undertaken, resulting in a good clinical outcome. Patients want relief from their symptoms, and whether they get better or not, determines how satisfied they will be with the service provided. An explanation of what is wrong is very often expected by the patient and when it is given appropriately, a high level of

\(^1\) $r$ = Pearson’s correlation coefficient; $\rho$ = Spearman’s Rho
Discussion

Patient satisfaction is achieved. In order to provide the best, evidence-based clinical care, one must keep up to date with recent developments in the profession and patients often expect this from their doctor. The ability to face problems that arise on a daily basis and be unaffected by them is an important characteristic which a doctor must have to stay strong and remain calm in order to be able to deal with the patients' problems.

Communication skills were the next most highly correlated with patient satisfaction ($r=0.675$, $p<0.001$). Good communication is crucial during a consultation as compliance and the execution of instructions in the correct manner depends entirely on this. Parasuruman et al. (1988), Lam (1997), Bultman and Svarstad (2000), Anderson et al. (2007) and Hansen et al. (2008) all stress that good communication is very important for a successful consultation. In this study, this was reflected in the patient questionnaires. 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 (Williams & Calnan, 1991; Lam, 1997; Grol et al., 1999; Zaghloul, 2001; Zebiene et al., 2004; Miettola et al., 2005). In fact, the communication skills, which were most highly correlated with patient satisfaction, were:

1. The ability to make the patient feel calm ($r=0.586$ / $p=0.569$, $p<0.001$)
2. Willing to listen to patients and staff ($r=0.547$ / $p=0.592$, $p<0.001$)

Continuity of care is another important factor for the achievement of high levels of patient satisfaction (Azzopardi & Dixon, 1999; Anderson et al., 2007; The World Health Report, 2008). Record-keeping and getting to know the patient more and more
with each visit result in a stronger doctor-patient relationship. Records are important for remembering certain important details about the patient and to be able to follow up certain conditions in a more efficient manner. From the results obtained, one can see that almost 80% of Maltese patients (n=226) consider consistent record-keeping an important component of a good family doctor service and they influence whether patients are satisfied with the service provided (p=0.499, p<0.001).

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. In fact, personality traits were highly correlated with patient satisfaction (p=0.545, p<0.001). 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 (p=0.596 / p=0.597, p<0.001). Enthusiasm from the doctor’s side is also crucial for patients to be satisfied with the doctor (p=0.556, p<0.001) and with the service provided (p=0.595, p<0.001). Having a nice attitude with patients and interacting in a friendly and enthusiastic manner was mentioned by Hansen et al. (2008) as necessary for the achievement of patient satisfaction. Anderson et al. (2007) also stress that the doctor’s personality and demeanour are important for patient satisfaction. 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. They want to be respected and treated well
(Zaghloul, 2001) for them to be satisfied with the doctor and with the service provided.

According to Robertson et al. (2008), the most important factors for achieving patient satisfaction are confidence and trust in the family doctor. Once the patient has built confidence and trust in the family doctor, achieving patient satisfaction from a consultation is much easier. In order to maintain a healthy doctor-patient relationship, the doctor should always be honest and keep the entire patient’s information confidential. When all the items related to professional values were grouped together, the scale mean reflected that these values were not the most important dimension for achieving patient satisfaction ($r=0.407$, $p<0.001$). However, when the individual items were correlated to patient satisfaction, it was found that honesty and trustworthiness are highly correlated to satisfaction with the doctor ($p=0.552$, $p<0.001$) and to satisfaction with the service ($p=0.592$, $p<0.001$). The ability to keep confidentiality was almost as important ($p=0.530 / p=0.581$, $p<0.001$).

With regard to duties and responsibilities, most of the items mentioned in the questionnaire were considered important for patient satisfaction, with the result that the mean correlation for this scale was quite high ($r=0.573$, $p<0.001$). Some key responsibilities were willingness to follow up patients and being accessible and able to be contacted when necessary. Zaghloul (2001), Gadallah et al. (2003) and Anderson et al. (2007) all describe how accessibility and the ability to be contacted in the study also believe that being able to contact their doctor is important for them to
be satisfied with the service he or she provides ($p=0.447, p<0.001$). However, less than 70% of patients ($n=226$) agree that their doctor can be easily contacted when necessary.

In summary, patient satisfaction is affected mainly by the quality of the doctor-patient relationship and by the efficacy of clinical care. Patients want a nice, friendly, enthusiastic doctor who will give them time to say all they want to say. The doctor should be capable of making the right diagnosis and explaining what is wrong before giving treatment, while keeping calm and making the patient feel calm.

5.3 Public vs. private sectors of primary health care

The aim of the second part of the study was to determine if there is a difference in patient satisfaction between public and private sectors of primary health care and to identify the reason for this difference.

Q2: Is there a difference in patient satisfaction between the public and private sectors of primary health care?

A good primary health care system is based on a strong doctor-patient relationship and this is important for continuity of care and patient satisfaction (Azzopardi & Dixon, 1999). The difference in patient satisfaction between public and private sectors of primary health care in Malta is based on the fact that, whereas in the private sector, the patient usually sees the same doctor at every visit, in the public sector, the patient may see a different doctor every time he/she visits the health centre. Despite the absence of a patient registration system in Malta, results show that patients in the
private sector are quite loyal to their family doctor, with most patients having never
visited another doctor in the last year and most of the remaining patients having
visited another doctor only one to five times in the last year.

Table 4.14 (Page 88) shows the difference between the scale means for each of the
five dimensions of the questionnaire. It can be clearly seen that there is a highly
significant difference between the two sectors for all the dimensions. However, the
largest difference between the five scale means is for communication skills
(p<0.001). This signifies that the doctors in the public sector have very poor
communication skills compared with those in the private sector.

The main reasons for this large discrepancy in communication between public and
private sectors is due to the poor working conditions of doctors at the health centres.
Besides the fact that doctors are underpaid and have little or no job satisfaction
(Azzopardi & Dixon, 1999), they also experience high levels of stress, disrespect and
abuse from patients (Sammut, 2007). The increasing shortage of doctors in the public
sector and worsening of working conditions over the years has meant that doctors
have less contact time with patients and are constantly under pressure. They are
therefore unable to listen attentively to patients or make them feel calm. Keeping
records, if possible, is avoided due to the high workload and lack of time, and writing
legibly is unrealistic with such a huge turnover of paperwork. Mantyselka et al.
(2007) describes how a similar situation in Finland has resulted in many patients
opting to use services in the private sector. In Malta, it has caused a drastic decrease
in patient satisfaction, from almost 95% in 1996 (Azzopardi & Dixon, 1999) to 83.1% in 2002 (Asciak et al., 2003) to 75.7% in 2008, as results from this study have shown.

The difference between public and private sectors for the other scale means is also statistically significant (p<0.001). With limited time on their hands, one can understand how doctors working in the public sector may sometimes have suboptimal clinical care and try to avoid carrying out certain duties; this invariably results in patient dissatisfaction.

When the individual questionnaire items were compared between public and private sectors, the largest differences (p<0.001) were seen for the following factors affecting patient satisfaction:

1. Being polite to patients and staff
2. Having a nice attitude with patients
3. Being unable to make appropriate decisions
4. Staying calm under pressure

These differences can easily be explained by the reasons mentioned earlier.

Mandel et al. (2003) and Howie et al. (2000) found that the size of the clinic is inversely proportional to the level of patient satisfaction achieved. They state that the smaller the clinic, the higher the level of patient satisfaction. This observation has been linked to the fact that patients attending smaller clinics are more likely to be seen by the same doctor, resulting in better continuity of care and a better doctor-patient relationship. This situation is also evident in the Maltese health centres. The
Discussion

smaller health centres have higher levels of patient satisfaction while the larger, busier ones have relatively lower levels (c.f. Figure 4.15, page 88). Besides the difference in continuity of care, there is also a difference in the waiting time to see the doctor, with larger, busier clinics having much longer waiting times and less contact time with the patient which, in turn, results in lower levels of patient satisfaction.

The lack of health promotion and disease prevention has also contributed to deterioration in service quality in the public sector (Azzopardi & Dixon, 1999). Doctors in the private sector are continuously working hard to provide a better service to patients, including advice about health promotion and disease prevention. Most private family doctors have updated their patient record systems to computerized ones and use several sophisticated tools for diagnostic and treatment purposes. The attitude of private family doctors is usually very friendly and they give patients the attention they require and as much time as they need to express themselves. They explain what is wrong before giving treatment and make an effort to keep up to date with new developments in order to be able to provide the most appropriate management. All these positive factors are more likely to achieve high levels of patient satisfaction in the private sector.

5.4 Doctors' perceptions of patient satisfaction and doctor satisfaction

The third part of this research involved interviewing the doctors working in the clinics where the patient satisfaction questionnaires were distributed. The doctors
were asked about their perception of patient satisfaction and about their own personal job satisfaction.

Q3: **Is the level of patient satisfaction achieved from a consultation perceived differently by patients and doctors?**

The objective of the semi-structured interviews was to identify critical factors in the doctors' practices that they felt were important for achieving patient satisfaction. The results from the semi-structured interviews were then compared to results from the questionnaires and the perceptions of patients and doctors were analyzed.

All doctors working in public and private sectors had very similar views about the most important factors affecting patient satisfaction. The doctors' perceptions of the critical factors that are important for patient satisfaction were very similar to the results obtained from the patient questionnaires. In fact, the most important factors mentioned for achieving patient satisfaction were communication skills and clinical care.

All the doctors perceive that good communication is of utmost importance to pass on the message to the patient. Both patients and doctors are aware that the patient should be given time to speak without interruption in order to explain in detail the presenting complaint, and include any issues which may not be mentioned if the patient is interrupted at an early stage. The doctors felt that they should be calm in order to be able to help the patient feel calm.
Clinical care was considered to be extremely important by doctors as they claim that it is what the patients come for. Doctors' and patients' perceptions about clinical care were very similar. Both considered the fact that patients want to be cured when they go to the doctor and that patient satisfaction depends on whether they are relieved from their symptoms or not. The ability to make the right diagnosis and explain what is wrong were both mentioned as factors which are likely to lead to patient satisfaction.

Other similarities between doctors' and patients' perceptions included issues related to the doctors' attitude and professional values. Both patients and doctors believe that the doctor should be friendly, portray a nice attitude and show enthusiasm towards the patients' complaints. The doctor should be honest, trustworthy and be able to keep confidentiality in order to be trusted by the patient and to have a good, long-lasting relationship with the patient.

Once the critical factors for the achievement of patient satisfaction had been established, the differences between public and private sectors were explored. The general impression that the doctors portrayed could be easily understood from the way that they answered their questions and from other non-verbal cues which they displayed. The difference between public and private sectors could be experienced just from the attitude and enthusiasm of the doctors to the interviewer and to the interview in general.
The general impression that the doctors in the public sector gave was that they didn’t have time for the interviewer and that they were under high levels of stress and it was impossible to keep calm. Each one of these doctors admitted that they spend less than ten minutes with each patient on average and two out of the four doctors interviewed spend less than five minutes with each patient, reducing the quality of communication to a minimum. The doctors have good perceptions about the way their patients in the public sector feel about their communication skills. They understand and admit that they often do not have enough time to give to the patient and that, very often, the patient is not satisfied with their communication skills.

On the other hand, the doctors in the private sector were much more relaxed. The length of the interviews was also much longer as many of the points were discussed in detail. These doctors all had a very friendly, inviting attitude and showed enthusiasm in the interviewer and in the interview. It was very clear that their communication skills with patients were much better that those of the doctors in the public sector. In fact, all of these doctors spend more than ten minutes with the patient, on average, and sometimes the consultation lasts fifteen minutes or more. The doctors stressed the importance of giving the patients all the time and attention that they need. Patients want their doctor to be calm and empathic and they want be calmed down when they visit the doctor. Good communication in the private sector is one of the main reasons for high patient satisfaction in this sector. The doctors understand that when their patients are given time and there is good communication in the consultation, this leads to high levels of patient satisfaction.
The doctors in both sectors stressed the importance of a good *doctor-patient relationship* and *continuity of care* for achieving patient satisfaction. In the public sector, the quality of the doctor-patient relationship is very poor as patients very often visit a different doctor each time and there is no continuity of care. The public sector doctors are aware that these factors are important for patient satisfaction and that patients are not satisfied when there is no continuity of care. On the other hand, doctors in the private sector claim that continuity of care is crucial for a family doctor and it is what builds strong doctor-patient relationships and achieves patient satisfaction. In fact, patients who have one family doctor and visit that family doctor on a regular basis have much higher levels of patient satisfaction.

The doctors in both sectors are aware that their patients go to them to get better. Therefore, good *clinical care* is very important for patient satisfaction. As many patients visiting the doctor just want to be listened to and reassured, the quality of clinical care may vary between public and private sectors due to the fact that public sector doctors do not have much time to listen to patients. Since they are hurried, they give the impression that they are unable to take appropriate decisions which may result in a poor clinical outcome. Public sector doctors are aware that patients are not satisfied with the clinical care they sometimes provide and that patients occasionally visit doctors in the private sector for a second opinion when they are not satisfied with the clinical care provided in the public sector.
The doctor's personality traits strongly affect patient satisfaction. The attitude, enthusiasm and friendliness of the doctor are crucial for the building of a healthy doctor-patient relationship and for achieving patient satisfaction. Patients want to be treated with respect (Zaghloul, 2001) and want the doctor to be polite and kind. Since doctors in the public sector are under a lot of pressure, their attitude towards patients is not always ideal and they sometimes are arrogant and impatient and they are aware that this causes dissatisfaction.

From the points mentioned, one can clearly see that doctors in both public and private sectors are very aware of the factors that cause patient satisfaction or dissatisfaction. Sometimes, because of high levels of stress in the public sector, certain factors leading to patient dissatisfaction are hard to avoid, but doctors are aware of this. In fact, when doctors in the public sector were asked if they thought their patients were satisfied, they commented about the lack of continuity of care and doctor-patient relationship. They said that patients wait for very long periods to see the doctor, especially in the busier health centres, and are not given enough time with the doctor. They feel that despite all this, a good number of patients feel that they are relatively satisfied with the service.

Merkel (1984) and McKinstry et al. (2006) found that doctors are not very good at predicting the level of patient satisfaction from a consultation. Hall et al. (1999) found that the main cause of the discrepancy between physicians' and patients' perception of the consultation was the lack of communication. This may explain the
large discrepancy between the doctor’s and patients’ perception of patient satisfaction at Gzira Health Centre (c.f. Figure 4.15). At this health centre, when the doctor was asked if he thought his patients were satisfied, he replied “not at all”. Despite this perception, almost 90% of patients at this health centre are satisfied with the service.

At Paola Health Centre, the doctor believed that most patients are relatively satisfied as the service is free of charge and it avoids patients needing to go to hospital. Despite this perception, it was found that only 70% of patients at this health centre are satisfied with the service. According to Mercer and Howie (2006), there sometimes is congruence between the doctors’ and patients’ perceptions of the quality of care delivered. In fact, the doctor’s perception of patient satisfaction at Mosta Health Centre (63%, n=30) was quite realistic as the doctor believed that most of his patients are not satisfied. Similarly, at Qormi Health Centre, the doctor said that they are quite satisfied. In fact 80% (n=30) of patients at this health centre claim they are satisfied with the service.

The congruence between doctors’ and patients’ perception of patient satisfaction in the private sector is probably the result of very good communication in this sector (Hall et al., 1999). In this sector, doctors believe that their patients are satisfied with the service they provide and that is why many of them return on a regular basis. In fact, the level of patient satisfaction in the private sector was over 95% in each of the clinics.
5.5 Implications of the findings

The findings of this study highlight the characteristics of a family doctor that are most likely to lead to patient satisfaction. The results suggest that the most important factors affecting patient satisfaction are factors associated with communication skills and clinical care. From this study, it can be seen that the quality of care in the public sector needs to be improved radically. The following is a list of barriers to improvement of the service in the public sector:

Adequacy of resources

Health care resources are limited and since our new state-of-the-art hospital has been built, much of our limited resources have been allocated towards its maintenance with the result that the primary health care sector has continued to deteriorate (Abela et al., 2003; Times of Malta, 2009). More attention needs to be focused on improving the primary care sector in order to prevent the need for secondary care. The public needs to be educated about health promotion and disease prevention in order to make better use of our limited health resources.

Shortage of doctors

The public sector of primary health care has been chronically understaffed for many years (Abela et al., 2003). Over the last few years, the number of doctors working at the health centres has been rapidly decreasing with the consequence of leaving a greater workload on the remaining doctors. With an increasing number of patients
attending the health centres and an increasing number of doctors leaving the health centres, the situation is becoming unsustainable (Times of Malta, 2009)

Public-private split

The public sector and the private sector function almost completely independently of one another in Malta (Azzopardi & Dixon, 1999). Private family doctors have limited access to certain investigations e.g. blood investigations and services provided in the public sector, including the ability to prescribe certain anti-hypertensive medicines without prior consultant approval. This results in excessive work for doctors in the public sector which can easily be avoided if doctors in the private sector are allowed access. Consultants in the public sector who issue approvals for anti-hypertensive medication are overloaded with work as all private family doctors need their approval prior to prescribing certain common anti-hypertensive drugs on the Schedule V system. This also results in very long waiting lists for patients. Fortunately, access to radiological investigations at the health centres by private family doctors has recently been introduced and this has taken a very large workload off doctors in the public sector who were previously the only doctors allowed to request such investigations.

Lack of staff motivation

Employees in the public sector of primary health care seem to be very resistant to change and improvements introduced into the system. In fact, when patient records were introduced, there was considerable protest from the staff working there as this was considered as extra, unnecessary work for them. The staff at reception was the
most affected as they had to find the paper file for every patient that attended the health centre and had to create a new file for every new patient that did not already have one. Doctors in the public sector experience a high workload and relatively low wages, forcing most of them to work also privately (Azzopardi & Dixon, 1999). This sometimes may result in less of an effort towards work in the public sector as it is considered much less rewarding. In addition, many doctors working in the private sector are not motivated to further their studies or even keep up to date with recent developments. According to a study by the Director of Primary Health care, doctors working at the health centres are ready to give up working in the private practice and work solely in the public sector if the system is changed to provide them with job satisfaction and adequate remuneration (Azzopardi & Dixon, 1999).

Abuse of the primary health care system

Since the service provided at the health centres is free at the point of use, there is significant abuse of the system by patients. There is no control over blood or radiological investigations that are requested at the health centres, with the result that patients may request the same investigations over and over again unnecessarily, causing excessive work for doctors at the health centres and unnecessary government expenditure (Azzopardi & Dixon, 1999). Some patients return to the health centre on a regular basis to make use of the services there, even if they do not really need them. This results in poorer access to certain services for patients who really need them.
5.6 Conclusion

In this chapter, the results from this research have been interpreted and discussed in detail. The implications of the findings have been described and, in the next chapter, these implications will be used to make recommendations for better practice and for policy-makers.
6. Conclusion

6.1 Introduction

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

6.2 Summary of the study

Patient satisfaction has long been recognized as an important way to evaluate the quality of health care (Baker, 1990, McKinley et al., 1997, Zemencuk et al., 1999, Mandel et al., 2003, Zhang et al., 2007). The level of patient satisfaction depends mainly on factors related to the doctor-patient relationship, namely good communication skills, empathy and continuity of care. By identifying factors which affect patient satisfaction using the appropriate tools, one can make changes to the health care system in order to improve the quality of service delivered.

Patient satisfaction in primary health care in Malta was found to be quite high in the public sector when it was measured in 1996, with almost 95% of patients being satisfied with the service (Azzopardi & Dixon, 1999). In 2003, Asciak et al. found that this level of patient satisfaction had decreased to 83.1% in the public sector while in the private sector, it remained relatively high at 96.1%. The factors which led to the
lower levels of patient satisfaction in the public sector had been identified as being mainly a poor doctor-patient relationship and lack of continuity of care (Azzopardi & Dixon, 1999). As the shortage of doctors in the public sector keeps increasing due to the high levels of stress and job dissatisfaction experienced by these doctors (Sammut, 2007), the situation keeps getting progressively worse and this is causing an increasing number of dissatisfied patients in the public sector of primary health care.

6.3 Findings of the study

The aims of this study were to identify the factors that are most likely to lead to patient satisfaction and to compare patient satisfaction between public and private sectors of primary health care in Malta. Four health centres in representative areas of Malta were compared to four private clinics in the same geographical areas. A 32-item patient satisfaction questionnaire was distributed in each clinic. The response rate was 99% in the public sector and 89% in the private sector. Following this, doctors from each clinic were interviewed about their perceptions of patient satisfaction in their clinics.

The findings indicate that the factors most likely to lead to patient satisfaction are those associated with clinical care \((r=0.731, p<0.001)\). Patient satisfaction depends on whether the doctor is:

1. Ready to explain what is wrong before giving treatment \((\rho=0.644, p<0.001)\)
2. Capable of making the right diagnosis \((\rho=0.613, p<0.001)\)
3. Up to date with recent developments in the profession \((\rho=0.594, p<0.001)\)
Conclusion

Communication skills were found to be almost as important in affecting patient satisfaction ($r=0.675$, $p<0.001$). The large difference in patient satisfaction between public and private sectors or primary health care is mainly due to the difference in the doctors’ communication skills:

1. The ability to make the patient feel calm
2. Willingness to listen to patients and staff

The poor doctor-patient communication in the public sector can be explained by the doctors’ high workload, high stress levels and lack of time for the patient. Doctors in the public sector are aware of the factors that affect patient satisfaction and most have good perceptions of the low levels of patient satisfaction. On the other hand, doctors 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 patient satisfaction 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:

- **Patient registration**: By introducing a system of patient registration, one can increase patient and doctor satisfaction by having better continuity of care and
Conclusion

stronger doctor-patient relationships. From the semi-structured interviews with family doctors in public and private sectors of primary health care, it evolved that patient registration is the ideal way to eliminate the split between public and private sectors and to provide optimal care to patients in primary care. By introducing a small fee for patients and 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.

- **Better working conditions for doctors:** By increasing the remuneration for doctors working in the public sector and ensuring job satisfaction, the service delivered by doctors would undoubtedly improve (Azzopardi & Dixon, 1999). Appointments should be spaced out every ten minutes and patients should only be allowed a limited number of non-urgent appointments per year.

- **Control over abuse of resources:** This was another recommendation which evolved from the semi-structured interviews. By monitoring the investigations which have been requested and the medications which have been prescribed, as well as possibly introducing a small fee for requesting blood or radiological investigations, there could be more control over abuse of resources. This should reduce the workload on doctors dramatically. In addition, certain shifts which are very quiet should be discontinued and doctors should be allocated to shifts or clinics which are busier and require more staff.
Conclusion

• **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. This issue would also be solved by patient registration, according to the family doctors working in the private sector.

• **Computerization of patient records:** By changing the system of patient records from a paper-based to a computerized one, both patients and doctors could benefit from a better system of patient care. In this way, investigations and reports from secondary care could be accessed and the system of patient appointments and continuous care could function more efficiently. In addition, repeat prescriptions could be printed, further decreasing the workload for doctors. In fact, the health centre in Gozo has already adopted this system of computerized patient records and this has greatly reduced the workload on doctors working in this health centre (Spiteri, 2009).

• **Increase motivation for doctors:** By introducing patient registration and a computerized system of patient records, doctors could be motivated to ensure the best care for their patients. By monitoring blood pressure readings and blood results periodically, the doctors with the "healthiest" patients could possibly benefit from a bonus cheque at the end of each month (Balzan et al., 2008).
• **Monitoring of patient satisfaction:** The satisfaction of patients attending primary care clinics should be monitored on a regular basis by questionnaires which should include sections where patients can leave comments about the service. In this way, decision makers can selectively concentrate on trying to improve those areas showing high dissatisfaction and, in this way, would not only save resources but would also achieve better outcomes of patient satisfaction. (Otani et al., 2003)

### 6.5 Recommendations for further research

This study was limited by the fact that only four areas of Malta were chosen to take part. Future research should aim to explore patient satisfaction in the smaller district clinics and also in the island of Gozo. In this way, the findings would allow more generalisability and applicability. Research on patient satisfaction should take place on a regular basis to monitor the quality of health care (Grogan et al., 2000). Findings should be used to implement changes and further studies can then be used to assess the difference in levels of patient satisfaction after these changes have been implemented.

### 6.6 Conclusion and final recommendations

It was shown that patient satisfaction depends very much on good communication and good clinical care. By improving the communication between doctors and patients in the public sector, the quality of care could be improved and this would, in turn, lead to higher levels of patient satisfaction. On the other hand, introducing patient
registration in primary health care would ensure better continuity and quality of care. The factors affecting patient satisfaction in the private sector should not only be maintained but also facilitated through improvement in the public-private contact in health care, namely better access by all family doctors to their patients’ hospital records, better access to investigative procedures, and better feedback on patient referrals. These recommendations would ensure a seamless and holistic approach not only between doctors in primary health care, but also between primary and secondary/tertiary care.
Appendices

Appendix 1:

Patient information leaflet (English version)

Patient Satisfaction
In Primary Health Care
Information Leaflet

Dear Patient,

As you may already know, we are constantly trying hard to improve our services and the quality of care we provide to our patients. I am a family doctor and at present, I am working full-time in the private sector. I have also worked in the Health Centres for 3 years. At the moment, I am carrying out a study to assess the level of patient satisfaction at the Health Centres and at private clinics.

I hope to identify the factors that lead to patient satisfaction so that as doctors, we will be able to provide a better service and have more satisfied patients. In order to take part in the study, you must be a Maltese citizen between 30-70 years of age and you must have attended this clinic at least twice before. The doctor/student will choose some patients at random from the waiting area. If you are chosen and you agree to participate, you will be asked to sign a consent form and to fill in a questionnaire which will take around 5 minutes to complete.

Thank you for your attention.

Yours sincerely,

Dr. Andrew Agius
21, Tal-Borg Street
Paola
Tel: 21889203
Mob: 7985 4565
E-mail: andrew.andrew@hotmail.com

I hope that with this study, we will be able to know better what patients want from us. In this way we will be able to provide a better service which leads to higher level of patient satisfaction.
Appendix 2:

Patient information leaflet (Maltese version)

Ghaziz pazjentla,


Giezzli ta’ l-attenzjoni.
Dejem tieghed.

Dr. Andrew Agius
21, Tal-Borg Street
Paola
Tel: 21666903
Mob: 7985 4595
E-mail: agius.andrew@gmail.com
Patient Satisfaction in Primary Health Care

Appendix 3:

Health centre patient questionnaire (English version)

Please tick where appropriate

Male □ Female □ Age _______ years

Do you have a private family doctor? Yes □ No □

How many times have you seen your doctor in the last year? _________

How many times have you seen another doctor in the last year? _________

<table>
<thead>
<tr>
<th>Section 1: Personality traits</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you visit your doctor at the health centre do you feel that he/she:</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>1. Has a nice attitude with the patients</td>
</tr>
<tr>
<td>2. Is polite to patients and staff</td>
</tr>
<tr>
<td>3. Is enthusiastic about his/her job</td>
</tr>
<tr>
<td>4. Stays calm under pressure</td>
</tr>
<tr>
<td>5. Is arrogant</td>
</tr>
<tr>
<td>6. Doesn’t have enough time for you</td>
</tr>
<tr>
<td>7. Looks professional in the way he/she dresses</td>
</tr>
<tr>
<td>8. Able to demonstrate a sense of humour when appropriate</td>
</tr>
</tbody>
</table>
### Section 2: Professional Values

*How much do you agree that the doctor at the health centre is:*  

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<tr>
<td>Honest and trustworthy</td>
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<td>2.</td>
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<tr>
<td>Able to keep confidentiality</td>
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<td>3.</td>
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<tr>
<td>Able to maintain a healthy work/life balance</td>
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<td>4.</td>
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<tr>
<td>Hindered in doing their job by their mental and/or physical health</td>
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</tbody>
</table>

### Section 3: Duties and Responsibilities:

*How much do you agree that the doctor at the health centre is:*  

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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<tr>
<td>Willing to take responsibility for getting his/her share of the work done</td>
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<td>2.</td>
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<tr>
<td>Willing to take responsibility for follow-up of patients where necessary</td>
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<td>3.</td>
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<td>Committed to continuing his/her studies</td>
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<td>4.</td>
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<tr>
<td>Willing to learn from mistakes and recognizes his/her limitations</td>
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<td>5.</td>
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<tr>
<td>Poorly organized</td>
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<td>6.</td>
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<tr>
<td>Easily accessible and able to be contacted when necessary</td>
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</tbody>
</table>

### Section 4: Communication Skills

*How much do you agree that the doctor at the health centre is:*  

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tr>
<td>1.</td>
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<tr>
<td>Able to make the patient feel calm</td>
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<td>2.</td>
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<tr>
<td>Willing to listen to patients and staff</td>
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<td>3.</td>
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<tr>
<td>Able to keep medical records consistently for the patients he sees</td>
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<td>4.</td>
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<tr>
<td>Able to write legibly</td>
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</table>
### Section 5: Clinical Care

**How much do you agree that the doctor at the health centre is:**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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### Section 6: Overall

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<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tbody>
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<td>1.</td>
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<td>2.</td>
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</table>
Appendix 4:

Health centre patient questionnaire (Maltese version)

Jekk jogħġbok immarka fejn japplika

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<thead>
<tr>
<th></th>
<th>Raġel</th>
<th>Mara</th>
<th>Eta’</th>
<th>snin</th>
<th>Iva</th>
<th>Le</th>
</tr>
</thead>
</table>

Ghandek tabib tal-familja?

Kemm-il darba mort tara lit-tabib tieghek is-sena’ li ghaddiet?

Kemm-il darba mort tara tabib iehor is-sena’ li ghaddiet?

Section 1: Valuri Personali

<table>
<thead>
<tr>
<th>Meta tmur ghand it-tabib (jew tabiba) fiċ-Centru tas-Sahħa:</th>
<th>Naqbel hafna</th>
<th>Naqbel</th>
<th>La naqbel u lanser ra' magħix</th>
<th>Ma naqbiż</th>
<th>Ma naqbiż hafna</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ikun dhuli mal-pazjenti?</td>
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<td>2. Iġib ruħu sewwa mal-pazjenti u mal-bqija ta’ l-istaff?</td>
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<tr>
<td>3. Tarah li hu ddedikat fix-xoghol tieghu?</td>
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<td>4. Tarah li jibqa’ kalm meta jkun mghobbi b’hafna xoghol?</td>
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<tr>
<td>5. Qatt hassejt li hu arroganti?</td>
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<tr>
<td>6. Qatt hassejt li bhallikieku m’ghandux hin għalik?</td>
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<tr>
<td>7. Jaghtik l-impressjoni ta’ persuna profesjonali bil-mod kif ikun liebes?</td>
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<tr>
<td>8. Qatt innotajt jekk jafx jiċċajta meta jkun il-waqt?</td>
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</tbody>
</table>
### Section 2: Valuri Professjonali

**Kemm taqbel li t-tabib fiċ-Centru tas-Sahha hija/huwa:**

<table>
<thead>
<tr>
<th>Naqbel</th>
<th>Naqbel</th>
<th>Lu naqbel u langa ma maqbiix</th>
<th>Ma maqbiix</th>
<th>Ma maqbiix</th>
<th>Hafina</th>
</tr>
</thead>
</table>
1. Onest u li tista’ tafdah? | ☐ | ☐ | ☐ | ☐ | ☐ |
2. Kapaći żomm il-kunftidenzjalita’? | ☐ | ☐ | ☐ | ☐ | ☐ |
3. Kapaći żomm bilanċ bejn il-hajja tax-xoghol u l-hajja personali tieghu? | ☐ | ☐ | ☐ | ☐ | ☐ |
4. Ma’ jistax jaghmel xoghu kif suppost minhabba problemi mentali jew fiziki? | ☐ | ☐ | ☐ | ☐ | ☐ |

### Section 3: Dmirijiet u Responsabilitajiet

**Kemm taqbel li t-tabib fiċ-Centru tas-Sahha huwa/hija:**

<table>
<thead>
<tr>
<th>Naqbel</th>
<th>Naqbel</th>
<th>Lu naqbel u langa ma maqbiix</th>
<th>Ma maqbiix</th>
<th>Ma maqbiix</th>
<th>Hafina</th>
</tr>
</thead>
</table>
1. Lest biex jiehu r-responsabbilta’ biex jaghmel ix-xoghol tieghu? | ☐ | ☐ | ☐ | ☐ | ☐ |
2. Lest biex jiehu r-responsabbilta’ biex ikompli jsegwi l-progress tal-pazjenti meta jkun jinhass il-bżomm? | ☐ | ☐ | ☐ | ☐ | ☐ |
3. Lest biex ikompli l-istudji tieghu? | ☐ | ☐ | ☐ | ☐ | ☐ |
4. Lest biex jitghallem mill-izbalji u jkun jaf il-limitazzjonijiet tieghu? | ☐ | ☐ | ☐ | ☐ | ☐ |
5. Xi ftit jew wisq disorganizzat? | ☐ | ☐ | ☐ | ☐ | ☐ |
6. Faċli biex issibu u tikkuntattjah meta tigi bżonn? | ☐ | ☐ | ☐ | ☐ | ☐ |

### Section 4: Komunikazzjoni

**Kemm taqbel li t-tabib fiċ-Centru tas-Sahha:**

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<thead>
<tr>
<th>Naqbel</th>
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<th>Lu naqbel u langa ma maqbiix</th>
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<th>Hafina</th>
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</thead>
</table>
1. Kapaći jġieghel lill-pazjent ihossu kalm? | ☐ | ☐ | ☐ | ☐ | ☐ |
2. Lest jisma’ l-pazjenti u l-istaff? | ☐ | ☐ | ☐ | ☐ | ☐ |
3. Kapaći jiehu u żomm records tajbin u b’mod konsistenti dwar il-visti li jaghmel? | ☐ | ☐ | ☐ | ☐ | ☐ |
4. Kapaći jikteb b’mod li jingharaf? | ☐ | ☐ | ☐ | ☐ | ☐ |
### Section 5: Organizzazzjoni fil-klinika

**Kemm taqbel li t-tabib fiċ-Ċentru tas-Sahha:**

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<thead>
<tr>
<th>Question</th>
<th>Naqbel haflna</th>
<th>Naqbel</th>
<th>Naqbel u lingua ma ġejnix</th>
<th>Ma naqbix</th>
<th>Ma naqbix haflna</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Iżomm ruħu informat fuq żviluppi ricenti fil-qasam tal-professjoni tieghu?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Jaf jasal għal dijanjosi tajba?</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Mhux kapaci jieħu deċiżjonijiet kif suppost?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Ta’ min jaʃdah meta jigi biex jordna medicini ukoll jekk dawn ikunu ta’ ċertu periklu?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Jirreferi lill-pazjenti tieghu għand xi specjalista meta jhoss li hemm dan il-bżonn?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Lest li jieħu hsieb pazjent li qed imut b’xi marda terminali?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Kapaċi li jaffaċċja l-problemli li jinqalghu ix-xoghol tieghu bhala tabib tal-familja?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lest li jispjega lill-pazjent xi tkun il-problema qabel ma jaghtih il-medicini jew xi trattament iħor?</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Section 6: Fuq Kollox

<table>
<thead>
<tr>
<th>Question</th>
<th>Naqbel haflna</th>
<th>Naqbel</th>
<th>Naqbel u lingua ma ġejnix</th>
<th>Ma naqbix</th>
<th>Ma naqbix haflna</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kemm taqbel li dan it-tabib huwa tabib tajjeb?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Jiena sodisfatt/a bis-servizz li nirċievi mingħand it-tabib taċ-Ċentru tas-Sahha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5:

Private clinic patient questionnaire (English version)

Please tick where appropriate

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Age</th>
<th>years</th>
</tr>
</thead>
</table>

Do you have a private family doctor? Yes [ ] No [ ]

How many times have you seen your doctor in the last year? [ ]

How many times have you seen another doctor in the last year? [ ]

<table>
<thead>
<tr>
<th>Section 1: Personality traits</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you visit your doctor, do you feel that he/she:</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>1. Has a nice attitude with the patients</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2. Is polite to patients and staff</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>3. Is enthusiastic about his/her job</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>4. Stays calm under pressure</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>5. Is arrogant</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>6. Doesn’t have enough time for you</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>7. Looks professional in the way he/she dresses</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>8. Able to demonstrate a sense of humour when appropriate</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
## Section 2: Professional Values

**How much do you agree that your doctor is:**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Honest and trustworthy</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Able to keep confidentiality</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Able to maintain a healthy work/life balance</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Hindered in doing their job by their mental and / or physical health</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

## Section 3: Duties and Responsibilities:

**How much do you agree that your doctor is:**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Willing to take responsibility for getting his/her share of the work done</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Willing to take responsibility for follow-up of patients where necessary</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Committed to continuing his/her studies</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Willing to learn from mistakes and recognizes his/her limitations</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Poorly organized</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. Easily accessible and able to be contacted when necessary</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

## Section 4: Communication Skills

**How much do you agree that your doctor is:**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Able to make the patient feel calm</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Willing to listen to patients and staff</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Able to keep medical records consistently for the patients he sees</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Able to write legibly</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
### Section 5: Clinical Care

**How much do you agree that your doctor is:**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Up to date with recent developments in the profession</td>
<td></td>
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<tr>
<td>2. Capable of making the right diagnosis</td>
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<tr>
<td>3. Unable to make appropriate decisions</td>
<td></td>
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</tr>
<tr>
<td>4. A safe prescriber even when drugs carry a certain risk</td>
<td></td>
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<tr>
<td>5. Ready to refer patients to a specialist when necessary</td>
<td></td>
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<tr>
<td>6. Willing to care for the terminally ill patient</td>
<td></td>
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<tr>
<td>7. Able to face the problems that arise in his work as a family doctor</td>
<td></td>
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</tr>
<tr>
<td>8. Ready to explain what is wrong before giving treatment</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Section 6: Overall

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much do you agree that your doctor is a good family doctor?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I am satisfied with the service my doctor gives me</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Appendix 6:

Private clinic patient questionnaire (Maltese version)

Jekk jogħġbok immarka fejn japplika

Ragel □ □ Mara □ □ Eta' □□□□□□ snin
Ghandek tabib tal-familja? □ □ Iva □ □ Le □ □
Kemm-il darba mort tara lit-tabib tiehek is-sena’ li ghaddiet? ______________
Kemm-il darba mort tara tabib iehor is-sena’ li ghaddiet? ______________

<table>
<thead>
<tr>
<th>Section 1: Valuri Personali</th>
<th>Naqbel hafna</th>
<th>Naqbel</th>
<th>La naqbel u fanqat ma napbix</th>
<th>Ma naqbul</th>
<th>Ma naqbul hafna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meta tmur ghand it-tabib (jew tabiba):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Ikun dhuli mal-pazjenti?</td>
<td>□ □ □ □ □ □ □</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Igib ruhu sewwa mal-pazjenti u mal-bqija ta’ l-istaff?</td>
<td>□ □ □ □ □ □ □</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Tarah li hu ddedikat fix-xoghol tieghu?</td>
<td>□ □ □ □ □ □ □</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Tarah li jibqa’ kalm meta jkun mghobbi b’hafna xoghol?</td>
<td>□ □ □ □ □ □ □</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Qatt hassejt li hu arroganti?</td>
<td>□ □ □ □ □ □ □</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Qatt hassejt li bhallikieku m’ghandux hin ghalik?</td>
<td>□ □ □ □ □ □ □</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Jaghtik l-impressjoni ta’ persuna professionali bil-mod kif ikun liebes?</td>
<td>□ □ □ □ □ □ □</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Qatt innotajt jekk jafx jiċċajta meta jkun il-waqt?</td>
<td>□ □ □ □ □ □ □</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Patient Satisfaction in Primary Health Care

### Section 2: Valuri Professionali
*Kemm taqbel li t-tabib tieghek hija/huwa:*

<table>
<thead>
<tr>
<th></th>
<th>Naqbel hafna</th>
<th>Naqbel</th>
<th>La taqbel u lingux ma naqbix</th>
<th>Ma naqbix</th>
<th>Ma naqbix hafna</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Onest u li tista’ tafdah?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Kapaći ħomm ħ-l-kunfidenzjalita’?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Kapaći ħomm bilanċ bejn il-hajja tax-xoghol u l-hajja personali tieghu?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Ma’ jistax jaghmel xoghlu kif suppost minhabba problemali jew fiziqi?</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Section 3: Dmirijiet u Responsabilitajiet
*Kemm taqbel li t-tabib tieghek huwa/hija:*

<table>
<thead>
<tr>
<th></th>
<th>Naqbel hafna</th>
<th>Naqbel</th>
<th>La taqbel u lingux ma naqbix</th>
<th>Ma naqbix</th>
<th>Ma naqbix hafna</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lest biex jiehu r-responsabbilta’ biex jaghmel ix-xoghol tieghu?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lest biex jiehu r-responsabbilta’ biex ikompli jsegwi l-progress tal-pazjenti meta jkun jinhass il-bżonn?</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Lest biex ikompli l-istudji tieghu?</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4. Lest biex jitghallem mill-izbaIji u jkun jaf il-limitazzjonijiet tieghu?</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>5. Xi ftit jew wisq disorganizzat?</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6. Facli biex issibu u tikkuntattjhah meta tigibżonnu?</td>
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</tr>
</tbody>
</table>

### Section 4: Komunikazzjoni
*Kemm taqbel li t-tabib:*

<table>
<thead>
<tr>
<th></th>
<th>Naqbel hafna</th>
<th>Naqbel</th>
<th>La taqbel u lingux ma naqbix</th>
<th>Ma naqbix</th>
<th>Ma naqbix hafna</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kapaći jġieghel lill-pazjent ihossu kalm?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lest jisma’ l-pazjenti u l-istaff'?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Kapaći jiehu u ħżomm records tajbin u b’mod konsistenti dwar il-visti li jaghmel?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Kapaći jikteb b’mod li jingharaf?</td>
<td></td>
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</tr>
</tbody>
</table>
### Section 5: Organizzazzjoni fil-klinika

**Kemm taqbel li t-tabib:**

<table>
<thead>
<tr>
<th>Naqbel hafna</th>
<th>Naqbel</th>
<th>La naqbel u lampos ma naqbel ma majbik</th>
<th>Ma majbik hafna</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Izomm ruhu infurmat fuq żviluppi riċenti fil-qasam tal-professjoni tiegħu?  
2. Jaf jasal ghal dijanjosi ta’ ċja?  
3. Mhux kapaċi jieħu deċiżjonijiet kif suppost?  
4. Ta’ min jafdaħ meta jigi biex jordna medċini ukoll jekk dawn ikunu ta’ ċertu periklu?  
5. Jirreferi lill-pazjenti tiegħu ghand xi specjalista meta jhoss li hemm dan il-bżonn?  
6. Lest li jieħu hsieb pazjent li qed imut b’xi marda terminali?  
7. Kapaċi li jaffaċċja l-problemi li ċinqalghu ix-xoghol tiegħu bhala tabib tal-familja?  
8. Lest li jispjega lill-pazjent xi tkun il-problema qabel ma jagħtih il-medicini jew xi trattament iehor?  

### Section 6: Fuq Kollox

<table>
<thead>
<tr>
<th>Naqbel hafna</th>
<th>Naqbel</th>
<th>La naqbel u lampos ma naqbel ma majbik</th>
<th>Ma majbik hafna</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Kemm taqbel li dan it-tabib huwa tabib tajjeb?  
2. Jiena sodisfatt/a bis-servizz li nircievi minghand it-tabib tal-familja  

---

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Appendix 7:

Research assistants consent form

Legal Document: Consent form for Research Assistants

Name of Research Assistant: ____________________________________________
Studies: ____________________________________________________________

1 I confirm that I have read and understood the information for the above study and have had the opportunity to ask questions.

2 I confirm that I have had sufficient time to consider whether or not I want to be included in the study.

3 I understand that I will be paid for assisting in the research project and cannot withdraw until completion of data collection.

4 I understand that the patients’ participation is voluntary and they are free to withdraw at any time, without giving any reason, without their medical care or legal rights being affected.

5 I understand that patients’ participation will take place only after their written consent.

6 I agree to contact the principal researcher if I have any queries at any time deemed necessary.

7 I understand that under no circumstances will the names of the participants be divulged, in full accordance with the data protection act.

8 I agree that record forms will not be accessible to anyone but myself and the principal researcher.

9 I understand that I am legally bound to complete the data collection to the best of my capabilities.

10 I understand that this is a legal document and I am bound to abide by the rules and regulations laid down by the primary researcher.

11 I agree to take part in the above research

Signature: ___________________________    Date: ________________
Appendix 8:

Doctors’ interview

How old are you? ____________  What area do you work? ____________

How many years have you been practicing as a GP?
1 – 10 years ____  10 – 20 years ____  20 – 30 years ____  >30 years ____

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

If both, do you work: mostly privately ____  mostly with the government ____

How many hours a week do you work in this clinic?
<30 ____  30 – 40 ____  40 – 50 ____  50 – 60 ____  >60 ____

How much time (in minutes) do you spend with each patient on average?
2 – 5 ____  6-9 ____  10-14 ____  15 or more ____

1. What personality traits do you believe a family doctor should have to ensure a good level of patient satisfaction? How important is the attitude and appearance of the family doctor for the patient?

2. What professional values should a family doctor portray to gain respect and satisfaction from his patients?

3. What are the duties and responsibilities of a family doctor? How important do you feel that being committed and accessible is for the patient?

4. How important is it for a family doctor to have good communication skills and how can this effect the relationship with the patient? Do you think that keeping records is important in primary health care?

5. When it comes to clinical care, what are the factors that are important in ensuring patient satisfaction?

6. Do you have any other issues that you would like to mention not covered in my questions that feel might improve patient satisfaction and quality in primary care?

7. Are you satisfied with your work as a family doctor?
Appendix 9:

Letter to Director of Primary Health Care requesting consent to carry out a survey at the health centres

Dr. D. Vella Baldacchino, Director
Primary Health Care
7, Harper Lane
Floriana VLT 14

12th June 2008

Re: Request for consent to carry out a survey in health centres

Dear Dr. Vella Baldacchino,

I am reading a course leading to a Masters of Sciences in Family Medicine at the University of Malta. I will be completing a dissertation entitled Patient Satisfaction in Primary Health Care under the supervision of Dr. Alexandra Buttigieg (sandra.buttigieg@um.edu.mt). I would like to consider factors affecting patient satisfaction in view of the family doctor.

I hope to administer a questionnaire (please see attached) to 30 patients in 4 health centres (Mosta, Qormi, Gzira and Paola) resulting in a total of 120 patients. These patients will be selected at random from patient lists and debriefed about the questionnaire at the Health Centre while they wait. The questionnaire will take approximately 10 minutes to administer and will consider aspects of:
- professional values
- communication skills
- organizational skills / clinical care
- personality issues

The questionnaires should then be posted in the self-addressed envelope provided. Questionnaires will be compared to parallel questionnaires administered to patients in the private sector.

I also hope to interview 4 doctors (1 from each Health Centre) and ask them questions (attached) relating to the same issues as those in the patient questionnaire. 1 doctor from each private clinic will also be interviewed.

I would like to request your consent to administer these questionnaires and interview the doctors between October and December 2008 at the above mentioned health centres. Should you approve, I will be happy to send you a copy of the dissertation on completion in 2009.

Thank you for your attention.

Yours sincerely,

Andrew Agius
Appendix 10:

Temporary Permit from the Director
d of Primary Health Care

24 June 2008

Dr Andrew Agius MD MMCFD
21 Borg Street Paola

Re: Your request to carry out a research entitled “Patient Satisfaction in Primary Health Care” within the PHD

Dear Dr Agius,

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.

Yours truly,

Dr M. Vella DPO,
Primary Health Department
Appendix 11:

Permanent Permit from the Director of Primary Health Care

DIVIZJON TAS-SAHHA PRIMARJA
7 Sqa Harper,
Pirjeta
FRN 1940

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

23 October 2008

Dr Andrew Agius MD MMCFD
21 Borg Street Paola

Re: Your request to carry out a research entitled "Patient Satisfaction in Primary Health Care" within the PHD

Dear Dr Agius,

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 questionnaire to fill, a consent form should be signed by the participating data subject and a privacy policy statement read to them;
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 Enlaicchino, Data Controller

Primary Health Department
Appendix 12:
University Research and Ethics Committee (UREC) letter of approval

University of Malta
MEDICAL SCHOOL
Mater Dei Hospital, Tal-Groqq MSD 2090

Ref No: 38/2008
1st August 2008

Dr Andrew Agius
Bramwell Court Flat 1
Triq l-Immakulata
Marsaskala MSK 1122

Dear Dr Agius

Please refer to your application submitted to the Research Ethics Committee in connection with your research entitled:

PATIENT SATISFACTION IN PRIMARY HEALTH CARE

The University Research Ethics Committee at its meeting of 11 July 2008 approved the above-mentioned Protocol.

Yours sincerely

[Signature]

Dr M Vassallo
Chairman
Research Ethics Committee
Appendix 13:

Permission from Dr. Murray Lough
to use questionnaire

Murray Lough

to me show details 20 October Reply

you're very welcome to use it andrew. i'd love to see your research when it's finished. best of luck with it.

murray

--- On Tue 20/10/08, Andrew Agius <agius.andrew@gmail.com> wrote:
From: Andrew Agius <agius.andrew@gmail.com>
Subject: Re: Fwd: Patient questionnaire

To: murraylough@yahoo.co.uk
Date: Tuesday, 20 October, 2008, 10:34 PM
- Hide quoted text -

Dear Dr. Lough,

The questionnaire on MSF is very interesting and so is the concept of GP appraisal. I took an interest in your questionnaire when I downloaded it from the internet as I am currently reading for a Masters in Family Medicine and I am carrying out a survey on patient satisfaction as part of my dissertation. I noticed that the various dimensions of the tool can be used to assess how a patient feels about his GP and therefore this can be used to measure patient satisfaction.

Since this tool would help me very much in my research, I would like to request your permission to use it for my survey as a tool to measure patient satisfaction. Do you think it would be a problem to use this questionnaire for my research?

I would be happy to send you a copy of the research once it is completed. The title is "Patient Satisfaction in Primary Health Care" (in Malta).

I thank you very much for all your help.

Kind regards,

Andrew
Appendix 14:

Private family doctors consent form

Consent Form

The aims and details of the project on 'Patient Satisfaction in Primary Health Care' have been explained to me by Dr. Andrew Agius or his delegate. I have also explained to my patients what this study entails.

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 and to make the necessary observations on my patients. 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:

Dr. Andrew Agius
Mob: 7985 4595
E-mail: agius.andrew@gmail.com

Surname: __________________________ Name: __________________________

I.D. number: ______________________ Telephone number: __________

Signature: ________________________
Appendix 15:  

Health centre doctors consent form

| Consent Form |

The aims and details of the project on 'Patient Satisfaction in Primary Health Care' have been explained to me by Dr. Andrew Agius or his delegate.

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 and to make the necessary observations. 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:

Dr. Andrew Agius  
Mob : 7985 4595  
E-mail: agius.andrew@gmail.com

Surname: ___________________________  
Name: ___________________________

I.D. number: ______________________  
Telephone number: _______________

Signature: _________________________
Appendix 16:

Patient consent form (English version)

The aims and details of the project on ‘Patient Satisfaction in Primary Health Care’ have been explained to me by Dr. Andrew Agius or his delegate.

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 make the necessary observations and questionnaire analysis. 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:

Dr. Andrew Agius
Mob: 7985 4595
E-mail: agius.andrew@gmail.com

Surname: ____________________  Name: ____________________
Address: ____________________  
Telephone Number: ____________  Mobile: ______________
Identity Card Number: ____________  Signature ______________


Appendix 17:

Patient consent form (Maltese version)

Formola ta’ Kunsens

L-iskopijiet u d-dettalji tal-proġett dwar ‘Patient Satisfaction in Primary Health Care’ spjegahomli Dr. Andrew Agius jew id-delegat/a tiegħu.


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

Dr. Andrew Agius
Mob: 7985 4595
E-mail: agius.andrew@gmail.com

Kunjom: __________________________ Isem: __________________________

Indirizz: __________________________

Numru tat-telefown: __________________________ Mobile: __________________________

Numru ta’ l-Identita’: __________________________ Firma __________________________
References


Patient Satisfaction in Primary Health Care


Patient Satisfaction in Primary Health Care


Balzan, M., Cassar, J., Caixero, I., John, T., Sciortino, P., Lynch, L. et al., 2008. MAM National Conference on Primary Care. [Conference, Mater Dei Hospital, 8 November 2008]


Patient Satisfaction in Primary Health Care


Spiteri, E., 2009. *Discussion on computerization of patient records in the public sector of primary health care [Meeting] (Personal communication, 23 June 2009)*


