A study of general practice consultations at Mosta Health Centre, Malta

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ABSTRACT

Background

Primary care is the first contact for patients with health-related problems. In Malta, primary health is provided by both private and state sectors. The state services are free-of-charge and provide a 24 hrs walk-in GP service at health centres as well as community care, immunisation and local clinics (bereġ) for free prescriptions and blood pressure monitoring.

Objective

The aim of this study was to obtain basic demographic data and reasons for encounter (RfEs) of patients attending Mosta Health Centre from 8am to 5pm between 16th July and 7th October 2012. The RfE data were collected with the International Classification of Primary Care Version 2 (ICPC-2) and compared with data from local and international studies.

Method

Patients attending the clinic during the first author's allocated time at the GP clinic were anonymously recorded and data collected was organised according to gender, age, locality and RfE. The RfEs were classified according to ICPC-2 criteria.

Results

A total of 271 patients were reviewed, where 132 were male and 139 females. The age of patients ranged between 2 months and 86 years. The majority of patients were from Mosta and St. Paul's Bay. The commonest RfE according to ICPC-2 was musculoskeletal complaints.

Conclusion

Data collected showed that in general practice the reasons for consultations is vast with the most common RfEs being musculoskeletal problems, administrative work, health check-ups, respiratory problems and blood pressure monitoring. Improvement of the primary care services with an increase in resources would decrease the burden on secondary care.

KEY WORDS:

Family medicine, general practice, ICPC, Malta, reasons for encounter.

INTRODUCTION

Primary health care as stated by the Alma-Ata Declaration "is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible where people live and work, and constitutes the first element of a continuing health care process" (Declaration of Alma-Ata, 1978). Primary health care in Malta is provided by both the private and the state sectors. These two general practice systems function independently of each other. The state services, which are offered free-of-charge at the point of use to all Maltese citizens, refugees or tourists (with latter only for emergencies), cover general practice through a number of health centres found spread throughout Malta (Floriana, Mosta, Birkirkara, Gzira, Paola, Bormla, Rabat, Qormi and Rabat-Gozo). The state also provides community care and local clinics (bereġ), which open for 1 to 3 hours once to five times a week on weekdays only and are spread around 40 different localities around the island (Sammut, 2000). Certain health centres also provide various specialised health services including Immunisation, Speech Therapy, Antenatal and Postnatal clinics, Well Baby and Paediatric Clinics, Diabetes clinics, Orthopaedic clinics and Wound clinics (Health, the Elderly and Community Care, 2012).

The Mosta Health Centre runs a very busy service on a daily basis catering for the northern part of the island. The health centre offers a walk-in GP clinic service where patients present to the doctor with their health problems. Mosta's Health Centre is the primary care hub for a number of localities before 5pm namely: Mosta, Sta. Venera, Naxxar, Għargħur, Mġarr, Għajn Tuffieħa, St Paul's Bay, Mellieħa, Burmarrad, Buġibba, Qawra, Baħar iċ-Ċagħaq, Madliena, Mriehel (part), Fleur-de-lys, Salina, Xemxija, Manikata, Bidnija, Żebbieġħ, Magħtab, Ta' Qali, Ta' Paris, Għadira and Ċirkewwa (Health, the Elderly and Community Care 2012). During the summer a larger amount of people visit Mosta Health Centre due to

the increase in people moving to their summer residence.

The aim of this study was to explore the content of family practice in a Maltese government health centre. Patients attending the clinic during the first author's allocated time at the GP clinic from 16th July to 7th October 2012 were reviewed to obtain basic demographic data and reasons for attending Mosta Health Centre.

METHOD

Every patient reviewed at the GP clinic by the first author between 8am and 5pm was noted. Each patient visit was anonymously recorded and the data collected was organised according to gender, age, locality and reason for attending the health centre. The reason for attending the health centre was classified using the International Classification of Primary Care Version 2 (ICPC-2) criteria (Wonca International Classification Committee, 1998).

The ICPC-2 criteria reflect the distribution and content of the aspects of primary care. ICPC has a biaxial structure, with 17 chapters on one axis and 7 components on the other. Chapters are based on body systems, with an additional chapter for psychological problems and one for social problems (Wonca International Classification Committee, 1998). Each chapter is divided into seven components, identified by a range of two digit numeric codes. Component 1 codes symptoms and complaints, while component 7 codes diseases. Therefore when it comes to reason for encounter (RfE), it can either be a symptom (Component 1) or disease (Component 7) (Soler et al, 2011). In this study, all 17 chapters where considered against Component 1 and Component 7.

The data obtained over the 3 months were further analysed according to requests for official X-ray report interpretation available on the patient archiving and communication system (PACS), blood pressure monitoring, renewal of national insurance (NI) certificates and those requiring a certificate of medical fitness to undergo sports.

As no sensitive personal data was gathered during this study, no ethical approval was needed, while authorisation was obtained from the Primary Health Care Department to use the anonymous data for this study.

RESULTS

A total of 271 patients were reviewed by the first author at Mosta Health Centre during the selected period. There were 132 males and 139 females. The ages ranged between 2 months and 86 years, with an average age of 46 years (Table 1).

Tables 2, 3 and 4 show the different localities and the

Table 1: Number of patients in different age ranges

AGE RANGES	NUMBER OF PATIENTS
0 – 10	18
11-20	27
21-30	39
31-40	36
41-50	25
51-60	32
61-70	42
71-80	41
81-90	11

Table 2: Number of patients from Mosta Health Centre's catchment area visiting before 5pm

LOCALITY	NUMBER OF PATIENTS
Mosta	82
St Paul's Bay	80
Naxxar	37
Mellieħa	12
Mġarr	5
Għargħur	3
Żebbiegħ	1
Salina	1
St Venera	1

Table 3: Number of patients from Rabat Health Centre's catchment area visiting Mosta Health Centre before 5pm

LOCALITY	NUMBER OF PATIENTS
Lija	7
Balzan	6
Attard	5
Rabat	4
Baħrija	1
Dingli	1

Table 4: Number of patients from B'Kara Health Centre's catchment area visiting Mosta Health Centre before 5pm

LOCALITY	NUMBER OF PATIENTS
Birkirkara	15
Iklin	5

number of patients that visited the health centre. There were 5 other patients from other localities not within the Mosta Health Centre catchment area that also visited the GP before 5pm.

The reason for attending the health centre was classified using the ICPC-2 classification, with Table 5 showing the number of patients presenting to the GP clinic for different reasons. One must note that in one consultation there may have been more than one reason for attending the GP clinic, so when it came to ICPC-2 classification one consultation may have been put done into a different number of chapters.

Further analysis of the data obtained from the 76 patients assigned to the "L - Musculoskeletal" chapter of the ICPC-2, showed that there were 30 patients who attended for the official X-ray report after these patients had X-rays taken at the Health Centre X-ray department.

Of the 31 patients within the "K – Circulatory" chapter of ICPC-2, 28 patients visited the GP clinic to have their blood pressure checked. This may have been the sole reason for attending the clinic or else an additional request during the consultation.

Within the ICPC-2 "Z – Social" chapter, 9 patients out of 15 came to have a renewal of their national security insurance certificate due to chronic illness, thus being coded here rather then in the chapter of the health problem concerned. The "A – General" chapter included 4 patients who presented to be issued with a certificate of fitness for sports activity, and 5 patients requesting a health check-up, with the majority in this chapter needing referral tickets to other health departments including physiotherapy.

From the 271 patients reviewed, there were 29 patients that were referred to other health departments with 6 referrals being to Accident and Emergency department at Mater Dei Hospital due to acute pathology. The remainder of the consultations required advice and medications according to the reason for attending the clinic. Some consultations were follow-up consultations especially where blood pressure assessment was being done. Other patients needed their consultation to be continued by the nurses and were transferred to the treatment room. Such patients included those candidates who required nebulisers or wound care / dressings.

Table 5: Number of reasons for encounter classified in different chapters according to the ICPC-2 Classification

ICPC-2 CLASSIFICATION	NUMBER OF RfEs
A: General	48
B: Blood, Blood forming	11
D: Digestive	14
F: Eye	5
H: Ear	15
K: Circulatory	31
L: Musculoskeletal	76
N: Neurological	3
P: Psychological	4
R: Respiratory	34
S: Skin	24
T: Metabolic, Endocrine, Nutrition	0
U: Urinary	6
W: Pregnancy, Family Planning	1
X: Female genital	5
Y: Male genital	1
Z: Social	15

DISCUSSION

Using the ICPC-2 classification, the five most common reasons of encounter in this study were for Musculoskeletal, General, Respiratory, Circulatory and Skin problems. Musculoskeletal problems consisted of patients requiring X-rays, patients presenting to the GP clinic with injuries and patients complaining of joint pains. The General classification is the second most common RfE which is made up of patients that presented in need of referral tickets to other health departments and free medications as well as patients presenting for general health check-ups and check up for medical fitness for sports activity. The third most common RfE is respiratory problems, where acute upper respiratory tract infection (URTI) was the main component of this section. The circulatory category makes up the fourth most common RfE where blood pressure monitoring was the major RfE. The fifth commonest RfE is Skin, with insect and jelly fish bites/stings, rashes (both infective and non-infective), skin itching and skin lesions falling under this category.

These five most common RfEs were compared to other studies both performed locally as well as internationally (Table 6). The study performed by Soler et al. (2011) compared the most common RfEs in three private practice populations from the Netherlands, Malta and Serbia.

Table 6: A comparison of the five commonest reasons for encounter between this study's results and the other five different studies; the data was classified using the ICPC-2 Classification.

	MALTA- CUSCHIERI & SAMMUT, 2012	MALTA - SOLER ET AL. 2011	NETHERLAND – SOLER ET AL. 2011	SERBIA – SOLER ET AL. 2011	MALTA – SOLER 2000	MALTA – AGUIS MUSCAT & CARABOTT, 1989*	MALTA – GALEA, 1990
1	Musculoskeletal	Respiratory including fever	Respiratory including fever	Respiratory	Uncomplicated Hypertension (Circulatory)	Administrative (General)	ENT infections (Ear)
2	General	Gastrointestinal	Skin	Musculoskeletal	URTI (Respiratory)	URTI (Respiratory)	Pain – Orthopaedics (Musculoskeletal)
3	Respiratory	Ear	General	Headache	Administrative (General)	Blood pressure* (Circulatory)	Well person check (General)
4	Circulatory	Headache	Musculoskeletal	Gastrointestinal	No disease	Hypertension (Circulatory)	Blood pressure (Circulatory)
5	Skin	Skin	Gastrointestinal	Psychological	Hay fever (Respiratory)	Acute Tonsillitis (Respiratory)	Diabetes (Endocrine)

*In the study by Aguis Muscat & Carabott (1989), no classification was considered during the study when it came to RfEs. In the Aguis Muscat & Carabott study the third most common RfE was put down as preventive examinations. Here the authors were most likely referring to the routine blood pressure checks done as it was reported that "a specific search of 468 encounters in the Government dispensaries showed that only 28 (6%) patients did not request a blood pressure check". This assumption was made by Soler (2000) in his thesis. Therefore, taking this in consideration, in this discussion blood pressure checks were included in the ICPC-2 Circulatory category.

In all three practices the most common RfE was due to respiratory conditions, URTI being the main encounter. The thesis written by Soler (2000) also discussed the common RfEs at a private clinic in Malta, where the most common was uncomplicated hypertension which according to the ICPC-2 falls under the Circulatory category. In a study performed by Aguis Muscat & Carabott (1989), where the ICPC classification was not incorporated, it was found that the most common RfE was due to administrative work which can be easily be put down as part of the "General" category of the ICPC-2. Another study performed by Galea (1990), also took into consideration the RfEs without using any classification. In this study ENT infections were the most common RfE, which if the ICPC-2 classification is implemented, would fall under the "Ear category".

The results of the five most common RfEs from this study, although not strictly comparable to the other five studies, show a striking similarity in the RfEs of private practices both in Malta and internationally. Respiratory conditions (mostly URTIs) are present in almost all studies (Table 6). This shows very clearly that in general practice a large percentage of consultations are due to URTI symptoms. When taking in consideration all studies being compared, the next most common RfE falls under the ICPC-2 "General" category, which is mainly made up of administrative work. This was also pointed out in the study by Aguis Muscat & Carabott (1989) where the authors concluded that a "large part of Health Centre work is devoted to what is mainly routine clerical work".

Another common RfE in these studies is blood pressure monitoring, which shows that the Maltese population goes frequently to the GP to have a regular check up of their blood pressure, irrelevant of whether they have hypertension or not. In fact in the Aguis Muscat & Carabott (1989) study, the authors commented that "blood pressure checks consume a large part of the doctor's time". Musculoskeletal consultations in general practice are also a frequent encounter as could be seen in Table 6, not only in Malta but also in the Netherlands and in Serbia.

The Mosta Health Centre study also took into consideration the different localities from which patients attended the Mosta health centre. The majority of the patients visiting Mosta Health Centre between 8am and 5pm were from the Mosta centre's catchment area, making up 82% of the patients. But 18% of the patients were from other catchment areas, as can be seen in Table 3 and 4. This shows that there was a significant percentage of patients that visited Mosta Health Centre

from outside its catchment area which could be either because they are not aware of their catchment area health centre or else because patients are ignoring their catchment health centre.

Limitations of the study

This study performed at Mosta Health Centre over 3 months gives a snap shot of the different RfEs in a health centre. As the data collection was performed as a personal iniative of the first author, with only a small percentage of patients visiting the health centre being considered, this is a limitation of the study. Another limitation is that cases included were only those seen in the GP consulting room, thus excluding patients sent from reception directly to the treatment room for interventions such as nebulised therapy, wound care and haemoglucotests. Such limitations could have been overcome if all patients attending over two 3-month periods in winter and summer had been studied so that a more realistic picture was obtained.

However, when the results of this study were compared to larger studies performed both in Malta and internationally, there were very close similarities. So one may say that, even though only a very small amount of patients were considered in comparison to the large amount of patients that visit the health centre daily, the results were comparable to other studies performed. To have a better comparative study reflecting the RfEs at health centres, a bigger study over longer periods and involving more doctors serving in different health centres should be performed, with the results then being compared to local and international data.

CONCLUSION & RECOMMENDATIONS

In general practice the reasons for consultations are vast and this clearly demonstrates the different roles the family doctor tends to play in the management of patients' health-related problems, providing support and caring for the patients as well as having a role in the health education of the patient (Galea, 1990). In fact, according to the European Definition of General Practice / Family Medicine, there are six core competencies that every family doctor should master: "Primary care management; Person-centred care; Specific problem solving skills; Comprehensive approach; Community orientation and Holistic modelling" (WONCA Europe, 2011).

Primary care should be the front line for all patients that require health related consultations. This study shows clearly that a wide age range of patients present at the health centre from difficult localities. Moreover, patients present to the health centre with different reasons for encounter that can be well categorized using the ICPC-2 classification.

Investment in primary health care services and patients' education about the available services at primary care level, would lead to a decrease on the impact on the different departments at Mater Dei Hospital (Malta's public hospital), mostly on the Accident and Emergency Department where large amounts of patients call on the department daily without having gone to their local health centre first.

Proposals for improving state primary health care services would include the presence of well equipped services with availability of simple investigations that can be easily accessed, such as a 12-lead ECG and radiology in all health centres. The paper-based patient records used at present could be upgraded into a more efficient electronic medical record system, ideally linked to the electronic systems already in place for investigations and electronic case summaries. Trained professionals from different health departments available in health centres as part of a roster-based clinic would decrease the waiting list at the hospital outpatient clinics.

Aguis Muscat & Carabott (1989) made a proposal that is still applicable today, in that there should be a reduction in the amount of clerical work that the general practitioner needs to do within government health centres, leading to more time to see patients and to take more responsibility for patients' management. The authors also suggested that specific blood pressure clinics should be set up so that screening and blood pressure monitoring could be done. As Malta's Health Interview Survey in 2008 found that 78% of citizens had consulted a general practitioner the previous year (Ministry for Social Policy, 2008), doctors would also have more time to avail themselves of such opportunities to practice preventive medicine (McWhinney, 1997) and provide health behaviour counselling (Saliba, 2009) in their daily practice.

Moreover "patient education, preferable through mass media, could help towards achieving better utilisation of our human resources (including doctors and nurses) and material resources (including medication and clinic facilities) especially when provided for free of charge" (Aguis Muscat & Carabott, 1989). Additional knowledge of the catchment areas for each health centre would decrease any unnecessary backlog at health centres. All this would lead to a more efficient and effective primary care system.

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