FACTOR INFLUENCING AFTER HOURS ATTENDANCES IN THE MOSQUE ROAD POLyclINIC AND EMERGENCY DEPARTMENT, SARAWAK GENERAL HOSPITAL, KUCHING.

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FACTOR INFLUENCING AFTER HOURS ATTENDANCES IN THE MOSQUE ROAD POLYCLINIC AND EMERGENCY DEPARTMENT, SARAWAK GENERAL HOSPITAL, KUCHING

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A thesis submitted in partial fulfillment of the requirement for Master in Public Health

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DECLARATION

No portion of the work referred to in this thesis has been submitted in support of an application for another degree of qualification of this or any other university or institution of higher learning.

Signature:

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Date: 8 August 2011
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Abstract

Attendance for non urgent cases during the after office hours is high in the emergency department and this had lead to the introduction of extended hours service in the polyclinic. Currently there are no study done in Kuching to determine the reasons for these attendances in the emergency department and polyclinic. The objective of the this study is to determine the reasons for seeking care during after-hours in the Mosques Road Polyclinic and the Emergency Department, Sarawak General Hospital, Kuching. This study was conducted through a cross sectional study and the data were obtained through a self administered questionnaire. The respondents were obtained by convenient random sampling. The self administered questionnaire was developed based on the literature review. The questionnaire was used to obtain data on social demographic, presenting complaints, knowledge on services in the emergency department and polyclinic, health seeking attitude and also the preferred health services. A convenient random sampling was done and a total of 216 respondents were obtained, comprising of 108 each from the polyclinic and the emergency department. The questionnaire was given to those who attended the polyclinic and emergency department after 5.00 pm. The data was analyzed using the SPSS version 17. The social demography shows that the mean age was 32.08 years (SD: ±10.845). The educational background was mainly secondary school (59.62%) and most of the respondents work in the private sectors (37.50%). From this study the main reason for seeking care during after-hours were the working commitment during daytime (67.6%) and also the need for accompaniment to the health facilities (50.0%). Condition getting worse only contribute 27.8% of the reason seeking care for after hours. Less traffic, shorter waiting time, parking and conditions of the illnesses showed significance differences for the reasons of attending after-hours between the two facilities. The knowledge on the services provided by these two departments showed the mean score were 5.07 and only 98 (45.8%) scored more than 5.07. From this study it also
showed that 54.2% of the respondents score less than 5.07 which mean that the knowledge on the services was poor among those who attended the facilities during the study. In this study, those who attended the emergency department preferred the emergency department due to the availability of the doctors for 24 hours (89.4%) and the various investigations in the department (78.9%). Working during the day was the main factor for people attending the emergency department and polyclinic during the after-hours. The poor knowledge of the respondent's on services in the emergency department and polyclinic may contribute to the non urgent attendances in the emergency department. It is noted that patient still considered emergency department as their first choice of health facilities.
Abstrak

Kehadiran pesakit selepas waktu pejabat adalah tinggi di Jabatan Kecemasan dan ini menyebabkan perlaksanaan poliklinik selepas waktu pejabat. Sehingga sekarang belum ada kajian untuk menentukan faktor yang menyebabkan kehadiran pesakit selepas waktu pejabat di Kuching. Objektif kajian ini adalah untuk menentukan penyebab utama pesakit datang selepas waktu pejabat (iaitu selepas pukul 5.00 petang) di Poliklinik Jalan Masjid dan Jabatan Kecemasan, Hospital Umum Sarawak, Kuching. Kajian ini telah dilaksanakan dengan menggunakan kaedah keratan rentas di mana responden dikehendaki mengisi borang soal selidik. Pihak responden di pilih dengan menggunakan kaedah persampelan rawak mudah. Borang soal selidik dibentuk setelah merujuk kepada jurnal yang berkaitan dengan tajuk kajian ini. Borang soal selidik tersebut digunakan untuk data sosial demografi, penyakit, pengetahuan mengenai perkhidmatan poliklinik dan Jabatan Kecemasan, sikap tentang rawatan dan pilihan utama fasiliti kesihatan untuk mendapatkan rawatan. Borang soal selidik tersebut telah diedarkan kepada mereka yang mendaftar selepas pukul 5.00 petang. Data telah dikaji dengan SPSS versi 17. Sosial demografi pesakit menunjukkan umur min 32.08 tahun (SD=±10.845). Tahap pendidikan yang hadir pada masa tersebut adalah dari sekolah menengah (59.62%) dan kebanyakkan yang hadir bekerja dengan pihak swasta. Sebab utama kehadiran pada waktu lepas pejabat adalah kerana bertugas pada masa pejabat (67.6%) dan tiada orang menenami ke tempat rawatan (50.0%). Bimbang penyakit semakin tenat hanya menyumbangkan 27.8%. Kurang kesesakan lalulintas, masa menunggu yang singkat, tempat letak kereta dan penyakit yang tenat adalah perbezaan yang signifikan diantara dua tempat tersebut. Penilaian pengetahuan perkhidmatan menempati min markah adalah 5.07 dan hanya 98(45.8%) sahaja mendapat markah lebih dari 5.07 mata. 54.2% memperolehi markah kurang dari 5.07% dan ini menunjukan pengetahuan mengenai perkhidmatan tidak memuaskan.101(46.8%) memilih jabatan kecemasan sebagai pilihan utama untuk rawatan.
Kehadiran doktor untuk 24 jam (89.4%) dan pelbagai jenis peralatan untuk menyiasat pesakit (78.9%) adalah sebab pesakit memilih jabatan kecemasan. Bekerja di waktu pejabat adalah penyebab utama pesakit hadir selepas waktu pejabat di jabatan kecemasan dan poliklinik. Kurang pengetahuan mengenai perkhidmatan adalah antara penyebab kehadiran pesakit selepas waktu pejabat. Responden juga telah memilih jabatan kecemasan sebagai pilihan utama untuk mendapatkan rawatan.
Chapter 1

Introduction

1.1 Background

After hours or after office hour attendances in the emergency department is a common problem due to non urgent cases in the emergency department. The non urgent cases have caused overcrowding in the emergency department which also occurred during the afterhours. Despite the needs for urgency cases to be attended first, patients still wait for treatment in the emergency department.

Overcrowding has been a problem in most emergency departments. It was noted that the percentage of the attendance are mostly primary care patients. According to a study done in USA (Derlet, Richards, & Kravitz, 2001), out of 836 directors of emergency department surveyed, 575 (69%) responded, and 525 (91%) reported overcrowding as a problem. This is also noted to be occurring in other countries and hence overcrowding is an issue in the emergency department, which is also occurring in the Sarawak General Hospital.

Sarawak General Hospital is a tertiary hospital located within Kuching, and also the largest hospital in Sarawak. It is also the referral center for the state since it provides many specialties including tertiary care. This Emergency Department plays an important role as it is the main entrance for emergency cases and cases referred from other divisions. It also serves as entrance point for referral cases from nearby district hospitals. This department provides 24 hours services and cater for all emergency cases. This department is led by any Emergency Medicine Specialist and supported by Medical Officers, Nurses, Assistant Medical Officers and other supporting medical staff. In the department, it has categorized the patient into three categories: the red zone, yellow zone and the green zone. The green zone
will be the cases that are non urgent cases. Samples will be collected for this study from this category. According to data as shown in Figure 1.1 from the emergency department, there were 94,116 attendances to the department in the year 2008 and of which 73,291 cases were considered as non urgent. This figure however includes those who attended the emergency department during office hours.

![Attendances at the Emergency Department of the Sarawak General Hospital for the year 2005-2009](image)

Figure 1.1 Attendances at Emergency Department from 2005 to 2010

In order to reduce the overcrowding at the emergency department, the Mosque Road or Jalan Masjid polyclinic in the city has provided extended hours services to the public. Extended hours meant that the clinics are providing services from 5.00 pm to 9.30 p.m. The purpose of this extended hours services is to provide care for after-hour’s patient and also reduce the attendances in the emergency department. According to the data from the Information and Documentation Unit in the State Health Department, the attendances for the
after-hours at the polyclinics were 53,674 for the year 2009 and 30,421 from January 2010 to July 2010.

Currently there are 3 primary care clinics or polyclinics available in the Kuching Division. The Polyclinic located at the Jalan Masjid is the only clinic that opens after hours and during weekend following the instruction from the Health Ministry. The polyclinic started its after hours or extended hours services since the month of March 2008.

1.2 Statement of problem

Overcrowding at the emergency department is a problem of Sarawak General Hospital and the extended hours of the polyclinic were implemented to reduce the overcrowding. However it is not known why patient seek care after hours both in the ED and also in the polyclinics attendances have increased over the past few years. The health seeking behavior among the population with regard to the after-hours care is also not known.

1.3 Objectives

General Objective:

To determine factors influencing attendances after-hours in the Emergency Department, Sarawak General Hospital and Polyclinic Mosque Road, Kuching, Sarawak

Specific Objectives:

i. To determine patient’s knowledge with regards to emergency services in the hospital
ii. To determine the patient’s knowledge on outpatient polyclinic service
iii. To compare the demographic characteristics of patients attending both services
iv. To compare the factors associated with seeking treatment at the services.
1.4 Research questions

The research questions will be on the following:

i. What are the reasons for patients attending the after-hours clinic?

ii. Is there any difference in patients attending the emergency department and the polyclinics during the after-hours?

iii. Are there any differences in reason of the patients attending the emergency department and polyclinics?

iv. Is there any difference in terms of presenting complaints to the patient attending the emergency department and polyclinic?

1.5 Operational definitions

After-hours

In this study, the after-hours will be defined as time starting after 5.00 pm. After-hours also meant after office hours. This mean that the patient included are those who registered after 5.00 pm in the emergency department and the polyclinics.

Non urgent

Non urgent patients are those who are able to walk in and do not require immediate treatment and there is no immediate threat to the patient’s life or limb. They can safely wait to be seen by the health care workers. These patients are categorized into the green zone in the Emergency Department, Sarawak General Hospital.
1.6 Literature Review

1.6.1 Introduction

The presentation of patients in the emergency department with non urgent or non life threatening conditions has been problematic to the hospitals in Sarawak especially in Sarawak General Hospital. It contributed to nearly 80% of the attendances in the Emergency Department (ED). A study done by (Selasawati et al., 2004) mentioned that there were 55% inappropriate cases at a university hospital emergency department. This has lead to an extra burden to the staff in that department and also resulted in long waiting time for patients since priority was given to the urgent cases. The non urgent cases in this study were defined as those who are having upper respiratory infections, gastroenteritis, urinary tract infections or skin infection.

1.6.2 Overcrowding

Overcrowding of the emergency department is the most common reason for the setting up of these after-hours or extended hours service in the clinic. Episodic, but frequent overcrowding is a significant problem in academic, county, and private hospital EDs in urban and rural settings. Its causes are complex and multifactorial. In USA, of 836 directors surveyed, 575 (69%) responded, and 525 (91%) reported overcrowding as a problem. Common definitions of overcrowding (more than 70%) included: patients in hallways, all ED beds occupied, full waiting rooms more than 6 hours per day, and acutely ill patients who wait more than 60 minutes to see a physician. Overcrowding situations were similar in academic EDs (94%) and private hospital EDs (91%) according to Derlet et al.,( 2001). Hence this situation occurred in most of the hospital, whether in academic institution or public hospitals. For several decades, French hospitals have faced overcrowding in ED. This phenomenon is mostly due to misuse
of EDs on the part of patients who use EDs for non urgent problems (Gentile et al., 2010). Another contributing factor for overcrowding in the emergency department is the closure of the primary care clinics on Sunday and public holidays. Hence the public has difficulty in seeking primary care during those times, thus contributing to attendances in the emergency departments.

1.6.3 After-hours service

After hours service is mainly services provided after the normal working hours that are after 5 in the evening. As mentioned earlier, emergency department has become overcrowded with patients and this is among the reasons for opening an after-hour service in some countries. Apart from providing after hours services in the primary health care setting, there are also centers in the ED which open an after-hours service within the hospital itself.

In Malaysia, the government has introduced after-hours or extended hours service by the clinics from 5 pm to 9.30 pm. This is among the steps that were implemented to reduce the overcrowding problem. However in Sarawak, there was no study found to look at whether there are differences in attendance of the clinic and emergency department after the implementation of the after-hours service in the polyclinics. For Western countries, there were research done to assess the after-hours clinic services and availability in the countries involved. They found that in Western countries, ED was the organizational model most frequently used to provide care for patients that came to seek treatment for primary health care (Huibers et al., 2009). The unavailability in continuity of care has contributed to the overcrowding and inappropriate utilization of care by the public. Meanwhile in Ontario, the clinics were opened after hours to reduce the number of low-acuity patients seeking care in the ED and to improve continuity of care (Wong, 2009). Another study done in Canada,
surveyed on the after-hour family medicine clinics. From the study, it was concluded that provision of a desirable primary care service is more preferable to most patients than ED if more were available for the community (Wong et al., 2009). A study in Kelantan, Malaysia, showed that 42% patients of patients involved in the study could not go to the outpatient department during office hours due to various reasons, and thus they made ED as their main care provider (Selasawati et al., 2007).

In the United Kingdom, attendances at the accident department reached a peak during the early evening and the availability of after-hours clinic a priority (Dixon & Morris, 1971). Thus after hours clinic is important in providing services to these patients. In Holland, the reorganization of out of hours or after-hours primary care has led to a shift in patient contacts from emergency care to primary care (van Uden et al., 2006).

In the United Kingdom, it has been shown that the GP cooperative is the main provider of out-of-hours care for the population studied. Within the group of all patients who contacted the ED, self-referrals constituted a large group, although they only represented a small percentage of all out-of-hours demand (Dale et al., 1995). In New South Wales, Australia, an after-hours general practice clinic was associated with a reduction in low-urgency presentations to the emergency department in Wagga Wagga district (Buckley, Curtis, & McGirr, 2010). Meanwhile, Dixon and Morris (1971) showed that at that time, attendances at the accident department reached a peak during the early evening, and included relatively more males, more adults, more patients with injuries than with symptoms, and more residents from the area immediately adjoining the hospital. Hence after-hours clinic or primary care clinic existence during the after-hours played an important role in reducing the overcrowding in the emergency department.
1.6.4 Reason for seeking care after hours

There was some literature study on the various reasons that has led to the seeking of care in the ED for after-hours service. A study done in Ontario, showed 57.4% stated they would have consulted their family physicians if their family physicians had been available at the time. Of those who would not have, 20.0% did not have family physicians. Participants were also asked to state their reasons for presenting to the ED instead of to their family physicians’ offices. They were allowed to make multiple selections. The most common reason was the perceived need for services unavailable through a family medicine clinic, such as specialist consultation (37.6%) and diagnostic imaging (31.2%). Some 17.0% thought they would get better care in the ED (Wong et al., 2009). As mentioned earlier, the usage of ED was also due to some of the patients being unable to attend clinic during office hours as they were working. Thus accessibility of care especially in terms of service hours is an important part of the patient health seeking attitude.

Another study done in London with regards to the reasons for seeking care after hours were given as follows, 81 (49.1%) patients said it was the greater flexibility that such clinics offered with 64 (38.8%) specifically stating that it was because they worked during the day. Forty one (24.8%) responded that it was easier for them to get to the hospital in the evening because someone could drive them to the hospital. The same number responded that it was easier to get someone to accompany them in the evening, and 22 (13.3%) stated that the reason was because they had family commitments during the day. 18 patients listed other reasons which included important practical issues such that parking restrictions in the environment of the hospital would not apply in the evening and at weekends (Feeney, Roberts, & Partridge, 2005). Meanwhile access was prominent in the minds of uninsured
patients seeking ED care for non-urgent medical diagnoses. Thus financial factors also influenced the patient’s attendances in the ED. Another reason for the attendances is that the patients perceive themselves as having an urgent problem (Koziol-McLain et al., 2000).

Access was prominent in the minds of uninsured patients seeking ED care for non-urgent medical diagnoses. Typically, patients did not perceive themselves as having an urgent problem, had been unsuccessful in gaining access to alternative non-ED health care settings, and found the emergency department to be a convenient and quality source of health care (Koziol-McLain et al., 2000).

1.6.5 Inappropriate Utilization of Emergency department

A study in Australia showed that there were significant differences among the medical staff perception and patient’s perception with regards to the reasons for utilization of the emergency departments. However there were still complaints with regards to the utilization of the emergency department as outpatient services. A study done by Selasawati et al., (2007) noted that 85% of the severity of the illness contributed for their reason coming to the emergency department. Hence patient’s perception regarding the severity of their illnesses is one of the main contributions for inappropriate utilization of the emergency department. A large majority of ED patients perceived the problems for which they seek care from an ED as urgent (Gill & Riley, 1996), even when they are assessed as non-urgent by a health professional. In Italy, Bianco, Pileggi and Angelillo (2003) found that of the 541 patients who agreed to participate, 19.6% of patients, according to the judgment of two observers, had non-urgent conditions. Gill and Riley (1996) found that eighty-two percent of patients rated their condition as urgent. Patient-rated urgency was not associated with having a regular source of care. The most common reason for seeking care in the ED was expediency.
More than half had attended the accident and emergency department because they did not want to bother their own general practitioner or thought that their problem was unsuitable for his attention. A higher proportion had attended for reasons of perceived speed or convenience according to Davies (1986). He also mentioned that perceptions of the role of the accident department needed to be changed if present behaviour is to be altered. Selasawati (2007) also found the same problem in terms of patient’s perception also contributed to the inappropriate use of emergency department.

An analysis of reported work suggested that the most important factors were the perceived appropriateness of the condition for ED, accessibility and GP availability (Murphy, 1998). Thus patient’s perception with regards to the services provided in that department had contributed to the patient attendances in the emergency department.

Coleman, Irons and Nicholl (2001) using objective criteria, estimated that 55% of those presented by as non-urgent population attending the emergency department were suitable for treatment in either the general practice, or a minor injury unit, or a walk in centre or by self care. However, in almost one quarter (24%) of low priority patients who self referred to emergency department was not the first contact with the health services for the presenting health problem. The reason for attending ED cited most frequently by the patients was a belief that radiography was necessary. The reason given least often was seeking advice from a nurse practitioner. Taking into account the objective suitability of the health problem to be treated elsewhere, and the reasons for attending ED given by the patients, it is estimated that, with similar health problems, as few as 7% of the non-urgent ED population may be expected to present to providers other than ED in the future. It was also found that one of the main reasons for using ED was the request for radiographic images. Meanwhile more than