Original Research Article

Health Services Utilization and Self-Reported Acute Illnesses among Urban Families Inthanlyin Township, Yangon Region, Myanmar

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ABSTRACT

Background: Health services utilization is multidimensional. The decision to engage with a particular medical channel is influenced by socio-economic status, cultural contexts, and differentials in perception of vulnerability within communities, and quality of service provided by health centre. Aim of this study was to determine health services utilization and self-reported acute illnesses among urban families in Thanlyin Township, Yangon Region.
Methods: A cross sectional study was conducted in 2013. The necessary data were collected by face-to-face interviews with 468 households' heads.
Results: Prevalence of self-reported acute illnesses within past three months among members of urban families was 8.4%. Among ill persons, 27.2% were under 15 years of age. The commonest self-reported acute illness was respiratory symptoms (53.8%), and about three-quarter (76.6%) of ill persons received treatment at health services. Most of urban people (59.8%) preferred private clinic for seeking healthcare. Monthly family income, age of household's head, and age and sex of ill person were significant determinants of utilization of health services.
Conclusion: To improve healthcare utilization practices among urban families, it is important to raise their awareness. Further research should also be conducted to identify barriers to health service utilization within the community for all kinds of illnesses. Acute respiratory tract infection should be given priority in disease prevention and control.

Key words: Health services utilization, Self-reported illnesses, Urban Families, Yangon.

INTRODUCTION

Every nation is striving to improve health status of its people. In doing so, health equity is an important and ultimate goal for every society. It is often measured as inequalities in health outcomes (or) status, health services utilization, out-of-pocket expenditures, etc. between (or) among different population groups. Although proper utilization of health services improves the health status of the population, the presence of health facilities alone is not enough to guarantee for utilization. [1,2] Health services utilization is in fact multidimensional. A number of factors are related to the utilization of health services. These include factors related to population (such as socio-economic status, health status, risk behaviors and perceptions of the population, etc.), and factors related to health services (such as availability and

quality of services offered by health centre, etc.). [3,4] Besides, information on health service utilization is crucial for management of health services. Many developing countries are facing double-burden of communicable and non-communicable diseases nowadays. [5-8] At the same time, health service utilization is still low in these countries. [9,10]

Health status of a society reflects its social wellbeing. The information on health status of population can be attained from various sources such as self-reporting, clinic and hospital records and death registers, etc. [11] Therefore, the present study aimed to determine the self-reported acute illnesses and utilization of health services among urban families in Thanlyin Township, Yangon Region, Myanmar during 2013.

MATERIALS AND METHODS

Cross-sectional study design and multi-staged systematic random sampling procedure were applied in this study. Four wards out of ten were selected randomly at the first stage. Then households were selected using systematic random sampling procedure. Face-to-face interview with the heads of households selected was done to collect the necessary data.

Sample size requirement was calculated using Epi-info version 7.0. Estimated prevalence of self-reported acute illness and utilization of health services were set at 30% and 60%, respectively. [12,13] The minimum required sample size was 369 at 95% confidence level with 5% absolute precision. Equal allocation of sample size was made among 4 wards included in the study. A total of 468 respondents were participated in this study. The occurrence of acute illness in the households within past 3 months and healthcare utilization for these illnesses were based on self-report of the respondents. Types of acute illnesses were categorized into four main groups such as

respiratory symptoms (cough and cold with or without fever), symptoms of general weakness (dizziness, fainting attack, or blurred vision), gastro-intestinal symptoms including diarrhea and dysentery, and accidental injury with (or) without joint/muscle pain (or) swelling. Information on healthcare utilization was grouped into two strata; place of seeking healthcare and health services utilization. Place of seeking healthcare was regrouped into Government hospital (or) health centre, Private hospital (or) clinic and Drug shop (i.e., pharmacy). If an ill person received healthcare at either government and/or private health services, he or she was regarded as a user of health service.

Statistical analysis: Data entry and analysis were done using STATA 11.0 statistical package. Chi-squared test was applied in assessing the possible relationship between sociodemographic and economic variables, and healthcare utilization.

RESULTS

Altogether 468 households' heads living in urban area of Thanlyin Township were included in this study. Sociodemographic and economic characteristics of respondents and their families are shown in Table 1.

A total of 468 households and 2189 households' members were included in estimating prevalence of acute illness within past three months. The occurrence of self-reported illnesses among households and their members was 145 and 184, respectively. Therefore, the prevalence of acute illnesses among households was 31% while that among households' members was 8.4% (Table 2).

Table 3 shows age and sex distribution of ill persons. The illness was most frequently encountered among persons with less than 15 years of age (27.2%) and females (57.1%). Respiratory symptoms (i.e., cough and cold with or

without fever) were the commonest type of illness among households' members.

About three fourth of ill persons (76.6%; 95% CI: 69.8%, 82.5%) utilized health services for their illnesses. The commonest place of seeking healthcare by ill persons was private clinic (59.8%) whereas government hospital and health centre were the least (16.8%). See Table 4.

Table 1: Sociodemographic and economic characteristics of urban families (n = 468)

Characteristics	Frequency	Percent
Type of family		
Nuclear	274	58.6
Joint/extended	89	19.0
Three generation	105	22.4
Size of family		
<5	242	51.7
≥ 5	226	48.3
Monthly family income		
<20,0000 kyats	198	42.3
≥20,0000 kyats	270	57.7
Age of household's head in completed years		
20-40 years	104	22.2
41-60 years	203	43.4
>60 years	161	34.4
Sex of household's head		
Male	380	81.2
Female	88	18.2
Education of household's head		
Low (Primary level of education)	118	25.2
Medium (Secondary level)	277	59.2
High (University and graduate)	73	15.6
Occupation of household's head		
Government employee	112	23.9
Businessmen/merchant	91	19.5
Manual workers	141	30.1
Dependents	85	18.2
Others	39	8.3

Table 2: The prevalence of acute illnesses among households and their members

Self-reported acute illness	Frequency (%)	95% Confidence Interval
Households (n = 468)	145 (31.0%)	26.8%, 35.4%
Households' members (n = 2189)	184 (8.4%)	7.3%, 9.6%

Table 3: Age and sex of ill persons and types of self-reported illnesses within past three months among urban families (n = 184)

	Frequency	Percent
Age of ill persons in completed years		
<15 years	50	27.2
15-30 years	19	10.3
31-45 years	41	22.3
46-60 years	35	19.0
>60 years	39	21.2
Sex of ill persons		
Male	79	42.9
Female	105	57.1
Type of self-reported acute illnesses		
Respiratory symptoms	99	53.8
Symptoms of general weakness	39	21.2
Gastro-intestinal symptoms	24	13.0
Accidental injury	22	12.0

Table 5 shows the determinants of health service utilization among urban families in response to illness within past three months. There were no significant relationships between socioeconomic and demographic variables of households, and the utilization of health services except age of household's head (p = 0.004) and monthly family income (p = 0.05). Age (p = 0.03) and sex (p = 0.05) of ill persons also had significant association with health services utilization.

Table 4: Health service utilization and place of seeking for healthcare among persons with self-reported acute illness (n=184)

	Frequency	Percent
Health service utilization		
Present	141	76.6
Absent	43	23.4
Place of seeking for healthcare		
Public hospital/health centre	31	16.8
Private clinic	110	59.8
Drug shops (Pharmacies)	43	23.4

Table 5: Determinants of health service utilization among urban families in response to illness within past three months (n = 184)

Characteristics	Health service utilization	
	Present	Absent
	Frequency (%)	Frequency (%)
Type of family		
Nuclear (n = 98)	73(74.49)	25(25.51)
Joint/extended (n = 36)	29(80.56)	7(19.44)
Three generation (n = 50)	39(78.00)	11(22.00)
Chi^2=0.612 p-value=0.74		
Size of family		
<5 (n = 87)	64(73.56)	23(26.44)
≥ 5 (n = 97)	77(79.38)	20(20.62)
Chi^2=0.867 p-value = 0.35		
Monthly family income		
<20,0000 kyats (n = 83)	58(69.88)	25(30.12)
≥20,0000 kyats (n = 101)	83(82.18)	18(17.82)
Chi^2=3.848 p-value = 0.05		
Age of household head in completed years		
20-40 years (n = 34)	19(55.88)	15(44.12)
41-60 years (n = 86)	72(83.72)	14(16.28)
>60 years (n = 64)	50(78.13)	14(21.87)
Chi^2=10.67 p-value = 0.004		
Sex of household head		
Male (n = 143)	108(75.52)	35(24.48)
Female (n = 41)	33(80.49)	8(19.51)
Chi^2=0.438 p-value = 0.51		
Education of household head		
Low (n = 54)	45(83.33)	9(16.67)
Median (n = 105)	75(71.43)	30(28.57)
High (n = 25)	21(84.00)	4(16.00)
Chi^2=3.7 p-value = 0.16		
Occupation of household head		
Government employee (n = 51)	43(84.31)	8(15.69)
Businessmen/merchant (n = 30)	25(83.33)	5(16.67)
Manual workers (n = 61)	44(72.13)	17(27.87)
Dependents (n = 34)	24(70.59)	10(29.41)
Others (n = 8)	5(62.50)	3(37.50)
Chi^2=4.708 p-value = 0.32		
Age of ill person in completed years		
<15 years (n = 50)	36(72.00)	14(28.00)
15-30 years (n = 19)	12(63.16)	7(36.84)
31-45 years (n = 41)	28(68.29)	13(31.71)
46-60 years (n = 35)	33(94.29)	2(5.71)
>60 years (n = 39)	32(82.05)	7(17.95)
Chi^2=10.85 p-value = 0.03		
Sex of ill person		
Male (n = 79)	66(83.54)	13(16.46)
Female (n = 85)	75(71.43)	30(28.57)
Chi^2=3.695 p-value = 0.05		

DISCUSSION

In this study, the prevalence of illnesses within past 3 months was 31% among households and 8.4% among households' members. These figures were slightly higher than those found in previous studies done in Laos (3.5% among family members), [13] Cambodia (27% among households [6] and 7.8% among members) [14] and Ethiopia (6.5% among members). [15] However, the prevalence of self-reported illnesses detected in the present study was less than those of similar studies conducted in China (11% of members), [16] Cambodia (15% among members), [6] Vietnam (48%), [17] India (> 40%) [17] and Bangladesh (94% among households and 45% among members). [18] These differences may be due to variation in period for which the prevalence was determined. Some studies estimated the prevalence for one month [13,14 ,19] whereas some based on two weeks [15] or one year. [6] Besides, type of illnesses studied may be responsible for theses discrepancies. This study looked for acute illnesses while others studied all kinds of illnesses [10,12,14-19] or serious illnesses [6] or acute respiratory tract infection alone. [13] Differences in study

area whether urban or rural, (or) differences in health status among study populations, (or) differences in distribution of study population with regard to socioeconomic status, age and sex may also be responsible.

The commonest illness identified in the present study was respiratory symptoms (i.e., acute respiratory tract infection). This finding was consistent with those of similar studies carried out in China, [16] Bangladesh, [18] Vietnam [12] and Nigeria. [10]

This study revealed that about 75% of ill persons consulted health services for their illnesses; 59.8% at private clinic and 16.8% at public health facilities. This means that study population preferred private clinic to seek healthcare. This finding was supported by those of other studies carried out in India, [17,20-23] Bangladesh, [24] Vietnam, [12] and Cambodia. [14] A similar study conducted in Laos reported that urban population preferred private clinic whereas rural dwellers relied mainly on public health facilities. [13] The present study was conducted in urban area where there are many private clinics. Geographical accessibility, affordability and easiness in communication would make urban people to use private health facilities much more than public ones. However, the reverse was true in some studies. [19,24] These opposite findings may be due to the differences in study site whether urban or rural, (or), variations in socioeconomic status (or) age and sex distributions of study population among different studies.

The utilization of health services by ill persons detected in this study was 76.6%. This finding was almost comparable to those found in previous studies. Studies conducted in Laos, [13] Nigeria [2] and Cambodia [14] reported that the utilization of health services among study population was 71%, 76.8% and 92%, respectively. However, underutilization of health service was frequently reported in many studies carried out in developing countries [9,15,19,25] including China [16] and India. [26] Differences in level of awareness (or health knowledge), education and/or economic status among study population (or) differences in study area whether urban or rural might explain these variations.

In this study, age of household's head, family income, and age and sex of ill person were significantly related to the utilization of health services. This finding was consistent with those of previous studies done in different countries. Independent studies conducted in India, [20,26] Ghana, [27] and among indigenous population of North America, Australia and New Zealand [4] reported that socioeconomic status was significantly associated with the use of health services. Besides, age and sex of ill persons, and income were found to have significant relationship with health service utilization in a Nigerian study. [28]

CONCLUSION

Although the utilization of health services is not so poor, it is important to raise their awareness to improve healthcare utilization practices among urban families. Further research should be conducted to identify barriers to health service utilization, especially for public health facilities. Besides, pattern of health service utilization within the whole community (i.e., both urban and rural) for all kinds of illnesses including non-communicable diseases should also be studied. Acute respiratory tract infection should be given priority in disease prevention and control.

Ethical approval: The study was approved by the research and ethics committee of the University of Medicine 1, Yangon.

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