

# Services Utilization among Some Selected University Students in Ghana

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## Abstract

This study is a survey into services utilization among students. The question of interest was to find out the type of services students might have utilized whilst growing up. Questionnaires were thus sent out to be filled by respondents who were recruited for the study based on their convenient accessibility. The Chi Square ( $\chi^2$ ) test was used to analyze the data with the aid of the IBM SPSS Statistics (Version 21) software. Findings suggested that services utilization were generally low. The influence of demographic variables on services utilization is then stated. The limitations and implications of the study as well as directions for future research are also discussed.

**Keywords:** Services Utilization, demographic variables.

## 1. Introduction

Considering the fact that healthcare services should be universally accessible, affordable, physically accessible and acceptable [1], there is substantial evidence to confirm that many people in developing countries under utilize healthcare services [2]. In Ghana for instance, significant differences exist in the utilization of different types of healthcare services by different groups of people [3]. The use of healthcare services has been labelled as a multifaceted behavioural phenomenon which is associated with the availability of services, the quality and cost of services, the social structure [4], one's health beliefs and the personal characteristics of the individual [5] who has to utilize the healthcare services.

### 1.1 Theoretical Framework

Andersen and Newman's model of health service utilization suggests three factors that influence services utilization [6]. These factors include societal variables, factors linked to the healthcare system and some individual factors. Societal factors affecting the use of healthcare services include technology and norms. Factors linked to the health system which are associated with services utilization comprise health related services while individual determinants to healthcare use include need factors, enabling factors and predisposing factors [7].

### 1.2 Review of Related Literature

A study indicated that about 92% of patients who visited Accra Psychiatric Hospital with a diagnosis of psychosis had sought other forms of treatment (for example visiting Christian or Traditional healers) before visiting the psychiatric hospital for assistance. In another instance, 64% of the patients visiting the psychiatric hospital had consulted a herbalist before, while 26% had sought help from a healing church, and two of them had consulted a fetish priest before visiting the psychiatric hospital [8].

Recent research into services utilization suggested a change in the pattern of help-seeking over the last fifty years in Ghana. It is now more common for patients to seek help from Christian healers than Traditional healers. A study conducted by Appiah-Poku *et al* [9]; into the use of traditional healing practitioners and Christian healers by patients attending public and private psychiatric clinics/hospitals suggested that a smaller percentage of patients had utilized other forms of treatment before visiting the formal healthcare centres/hospital. The study also revealed that a greater number of those who had consulted other forms of treatment before visiting the hospital/centre reported having consulted a pastor other than a traditional healer.

Patients with chronic conditions like asthma, schizophrenia etc. have the tendency of utilizing healthcare services more frequently than their counterparts who do not have these conditions [10].

Previous studies have also revealed that one's age is associated with one's use of healthcare services. It has been reported that, individuals who are between 60 to 69 years are more likely than individuals who are between 50 to 59 years to utilize healthcare. In addition, people who are over 70 years are more likely to utilize healthcare services as compared with people who are between 50 to 59 years old [9]. Another study, however, found out that older age was associated with less use of healthcare services especially that of psychological care and other health professionals.

Using multiple logistic regression models, a study analyzed the relationship between healthcare utilization and socio-economic status of the elderly in Belgium. The findings of the study indicated that healthcare utilization increased with age and was more prevalent among the female respondents used in the study than the male respondents [11].

A study into the sociodemographic variables influencing the utilization of healthcare services suggested that the probability that a person will utilize healthcare services was dependent on one being female, one's level of education and being separated from one's partner [12].

A quantitative approach was adopted to examine the link between gender and access to healthcare services using respondents from Burkina Faso. The result was suggestive of the fact that women may experience either the delay in the onset of the utilization of healthcare services or get excluded from the utilization of healthcare services [13].

One's level of education attained and wealth indices have been identified as determinant factors in the use and possession of insecticide treated mosquito nets.

Penh [14] studied the utilization of child health services for children who had diarrhoea and fever. The outcome of the study indicated that mothers who were 35 years old and above were less likely to seek healthcare for their children. It was also evident from the study that children from affluent households were more likely to source healthcare services from the private sector than from the public health sector especially when distance to a healthcare facility was not perceived as a problem.

Studies on services utilization and barriers to care have mostly been done in the Western countries. Findings from these studies have little information on services utilization among Ghanaian students. In this study, predisposing variables investigated were age, gender and religious affiliation.

### **1.3 Statement of the Problem**

Growing up comes with its own challenges. From literature, many people experience significant stressful situations which affect their physical/mental wellbeing during their transition from childhood into adulthood. Though there were several options available for these people and their caretakers to utilize to help them cope satisfactorily with these challenges many of these young people did not receive such services. The literature reviewed suggested that the current level of knowledge about the nature of healthcare services is limited. There was therefore the need to study the services utilization of university students to determine which groups of students had utilized which services and for what period of time.

### **1.4 Objectives of the Study**

This study aimed to investigate the pattern of services utilization among university students in Ghana.

### **1.5 Research Questions**

- What kind of health services did university students utilize whilst growing up?
- Can demographic variables influence the utilization of these services?

### **1.6 Statement of Hypotheses**

Hypothesis 1: Reports on services utilization will be low.

Hypothesis 2: Female respondents will report more frequent utilization of healthcare services than their male counterparts.

Hypothesis 3: There will be age differences in service utilization.

Hypothesis 4: Christian respondents will report more frequent utilization of mental health services than their counterparts of other religion.

## **2. Materials and methods**

### **2.1 Research Design**

This study is an exploration into services which students might have utilized whilst growing up. Questionnaires were thus sent out to be filled by respondents.

### **2.2 Study Area**

Presently, there are six public and several private universities in the Republic of Ghana. This study was conducted in three selected universities in the Republic of Ghana. These included two universities and one University College. Two of which were situated within the southern sector of Ghana and one within the northern sector.

These were:

- The Catholic University College of Ghana, Fiapre
- The University of Cape Coast and
- The University of Ghana, Legon,

The student population of the Catholic University College of Ghana, Fiapre, the University of Cape Coast and the University of Ghana, Legon, were approximately 5,000, 17,000 and 40,000 respectively.

### 2.3 Sample/Population

The population for this study was students who had been enrolled into various universities in the Republic of Ghana. The study utilized a non-probability, convenience sampling method to select three universities as well as to recruit participants from the universities' student body. Participants were selected based on their convenient accessibility.

The country (Ghana) was divided into two clusters; southern and northern clusters. The northern

sector included universities in the Northern Region, the Brong Ahafo Region and the Ashanti Region. The southern sector constituted universities in the Central Region, the Greater Accra Region, the Western Region and the Volta Region. The study sample was selected from both the northern and the southern sectors of Ghana. These were the University of Cape Coast, the University of Ghana, Legon, and the Catholic University College of Ghana. One hundred and ninety three (193) out of the two hundred and twenty (220) questionnaires distributed were returned, giving this survey a return rate was 87.7%. However, 188 questionnaires were complete and usable. A summary of the demographic characteristics of the participants is presented in the table below (Table 1).

**Table 1: Summary of the Demographic Characteristics of the Study's Participants**

Variables	Levels	N	%	Range	Mean	Std. Dev	SE Mean
Gender	Males	109	58				
	Females	79	42				
Total		188	100				
Age	25 yrs or below	136	72.3				
	Above 25 yrs	52	27.7				
Total		188	100	18-36 yrs	27 yrs	0.44857	0.03271
Religion	Christian	166	88.3				
	Muslim & Others	22	11.7				
Total		188	100				
Marital Status	Married	17	9.0				
	Never been married	158	83.1				
	Cohabiting	13	6.9				
Total		188	100				
Education	First Degree	186	98.9				
	Second Degree	2	1.1				
Total		188	100				

Source: Survey

Table 1 summarizes the demographic characteristics of the 188 participants of whom 42% were females. One hundred and thirty six (136) 72.3% of the sample were below 25 years old whilst 52 (27.7%) were either 25 years old or above. More than half of the sample (158) representing 83.1% were single, 17 (9%) were married and 13 (6.9%) were cohabiting. As many as 166 (88.3%) were Christians whilst 22 (11.7%) were either Muslims or affiliated to other religions.

As shown in Table 1, the percentage of respondents pursuing undergraduate courses at the first degree level constituted 98.9% (186) of the total sample whereas the percentage of those reading a second degree was 1.1% (2).

### 2.4 Measures

Respondents' use of healthcare services was determined by the Services Utilization Questionnaire (SUQ). The SUQ was also used to measure openness to receiving help. This questionnaire has different versions for parents and youth. The version for youth is what was used in this study. The questions were centred on the

different kinds of services and support a youth might have received while growing up. In addition, a demographic information sheet was included to assess basic demographic information about the subjects. These demographic variables included, gender, age, course being pursued at a tertiary institution, marital status, and religion.

The study instrument (questionnaire) was pre-tested in two tertiary institutions in Ghana with the aim of testing the questionnaire for content clarity. Eighty questionnaires were distributed out of which sixty three (63) were returned. After the pre-testing, problems such as ambiguity associated with some of the questions were modified. The wording and order of some of the questions were thus, changed.

### 2.5 Study Area

This study was conducted in three selected tertiary institutions in the Republic of Ghana. These institutions included two universities and one University College. Two of the institutions are located within the southern sector of Ghana while the other one is situated within the northern sector.

## 2.6 Data Collection/Procedure

After a respondent's consent had been obtained, confidentiality was then assured and some explanations given. Then a set of questionnaires and a pen or a packet of tissue was given to him or her. The questionnaires were randomly presented to the participants.

## 2.7 Data Analysis

The IBM SPSS Statistics (Version 21) was used to analyze the data. After which appropriate statistical tests were used to test each hypothesis. Prior to the analysis, the questionnaires were checked to ensure that they were complete. The Chi Square ( $\chi^2$ ) goodness of fit test and Chi Square ( $\chi^2$ ) test of independence were used to analyse the data.

## 2.8 Ethical Consideration

Approval to conduct this study was sought from the institutions and individuals who were directly or indirectly involved in the study. Permission was obtained from the author of the instrument used in this study before it was pilot-tested and used for the study. Above all, the study received formal institutional review board approval prior to data collection. Participants were recruited voluntarily and given both written and verbal explanations on how to fill the questionnaire and the intended use of information gained. Privacy and confidentiality were assured. Participants were informed that the data collected would be summarized in aggregate form only and that no

individual responses would be reported. All participants were given the option of withdrawing from the study at any time and to decline from answering any questions they did not wish to complete. No respondent was maltreated in any way. All literature sources that were consulted and used for the study have been cited.

## 3. Results

**Hypothesis 1:** Reports on service utilization will be low.

The aim of hypothesis 1 was to examine the frequency of services utilization among the participants. This hypothesis was tested using the Chi Square goodness of fit test with the aid of the SPSS software. The outcome of the SPSS indicated that services utilization in general was low. Participants reported low patronage for special education for learning ( $N = 188$ ,  $\chi^2_{(1)} = 17.894$ ,  $p = 0.000$ ), special education for behaviour/emotional support ( $N = 188$ ,  $\chi^2_{(1)} = 66.723$ ,  $p = 0.000$ ), mental health/counselling services, ( $N = 188$ ,  $\chi^2_{(1)} = 87.149$ ,  $p = 0.000$ ), day treatment for mental health/behaviour problems, ( $N = 188$ ,  $\chi^2_{(1)} = 143.064$ ,  $p = 0.000$ ), residential treatment for mental health/behaviour problems, ( $N = 188$ ,  $\chi^2_{(1)} = 143.064$ ,  $p = 0.000$ ), and hospitalization for mental health/behaviour problems ( $N = 188$ ,  $\chi^2_{(1)} = 143.064$ ,  $p = 0.000$ ).

Table 2 depicts the SPSS output for the Chi Square goodness of fit test computed on this data.

**Table 2: Summary Table of the Frequencies and the Chi Square ( $\chi^2$ ) goodness of fit test (services utilization)**

S/N	Variables	Yes	No	df	$\chi^2$	P (level of Significance)
1.	Have you received any special education for learning?	65	123	1	17.894	$P = 0.000$
2.	Have you received any special education for behaviour/emotional support?	38	150	1	66.723	$P = 0.000$
3.	Have you received mental health/counselling services?	30	158	1	87.149	$P = 0.000$
4.	Have you received day treatment for mental health/behaviour problems?	12	176	1	143.064	$P = 0.000$
5.	Have you received residential treatment for mental health/behaviour problems?	12	12	1	143.064	$P = 0.000$
6.	Have you been hospitalised for mental health/behaviour problems?	9	179	1	153.723	$P = 0.000$

This finding is in consonance with that of WHO [2], which suggested that in the less developed countries people tend to underutilize services provided by formal healthcare systems. It is also in consonance with that of Appiah-Poku *et al* [9], which suggested that services utilization in general was low.

**Hypothesis 2:** Female respondents will report more frequent utilization of healthcare services than their male counterparts. Hypothesis 2 sought to examine the

relationship between gender and services utilization. The data for this hypothesis was analysed with the Chi Square test of independence ( $\chi^2$ ) using the IBM SPSS Statistics (Version 21) software. The results indicated that there were no significant gender differences in reports on services utilization for special education for learning, ( $N = 188$ ,  $\chi^2_{(1)} = 1.060$ ,  $p = \text{NS}$ ), special education for behaviour/emotional support, ( $N = 188$ ,  $\chi^2_{(1)} = 0.524$ ,  $p = \text{NS}$ ), mental health/counselling services, ( $N = 188$ ,  $\chi^2_{(1)} =$

0.316,  $p = \text{NS}$ ), day treatment for mental health/behaviour problems, ( $N = 188$ ,  $\chi^2_{(1)} = 3.196$ ,  $p = \text{NS}$ ), residential treatment for mental health/behaviour problems, ( $N = 188$ ,

$\chi^2_{(1)} = 1.400$ ,  $p = \text{NS}$ ) and hospitalisation for mental health/behaviour problems, ( $N = 188$ ,  $\chi^2_{(1)} = 2.357$ ,  $p = \text{NS}$ ). This is depicted in the Table 3 below.

**Table 3: Summary Table of the Frequencies and the Chi Square Test ( $\chi^2$ ) of Independence (for gender)**

S/N	Variables	Gender	Yes	No	df	$\chi^2$	$p$ (level of Significance)
1.	Have you received any special education for learning?	Males Females	41 24	68 55	1	1.060	NS
2.	Have you received any special education for behaviour/emotional support?	Males Females	24 14	85 65	1	0.524	NS
3.	Have you received mental health/counselling services?	Males Females	16 14	93 65	1	0.316	NS
4.	Have you received day treatment for mental health/behaviour problems?	Males Females	4 8	105 71	1	3.196	NS
5.	Have you received residential treatment for mental health/behaviour problems?	Males Females	5 12	104 176	1	1.400	NS
6.	Have you been hospitalised for mental health/behaviour problems?	Males Females	3 6	106 73	1	2.357	NS

The findings of Ruth & Anthony [12] and Hoeck *et al* [11], which suggested that services utilization was more prevalent among females than males is inconsistent with the findings of this study. This discrepancy might have arisen from the fact that this study's participants were to report their services utilization for a longer time frame (from their childhood to the present) than that of Ruth & Anthony [12] and Hoeck *et al* [11].

**Hypothesis 3:** There will be age differences in service utilization.

Hypothesis 3 was to find out the age differentials in services utilization. This hypothesis was also tested using the Chi Square Test of Independence ( $\chi^2$ ) with the IBM SPSS Statistics (Version 21) software. The results indicated that there were no age differences in services utilization for special education for learning, ( $N = 188$ ,  $\chi^2_{(1)}$

$= 1.043$ ,  $p = \text{NS}$ ), special education for behaviour / emotional support, ( $N = 188$ ,  $\chi^2_{(1)} = 0.366$ ,  $p = \text{NS}$ ), mental health/counselling services, ( $N = 188$ ,  $\chi^2_{(1)} = 0.334$ ,  $p = \text{NS}$ ) day treatment for mental health/behaviour problems, ( $N = 188$ ,  $\chi^2_{(1)} = 0.466$ ,  $p = \text{NS}$ ). The Chi Square Test of Independence ( $\chi^2$ ) could not be used to analyse the data for residential treatment for mental health/behaviour problems and hospitalisation for mental health/behaviour problems in terms of age because the expected frequencies were below 5. (Table 4)

Again, this finding is not in harmony with that of Hoeck *et al* [11], which suggested that healthcare services utilization increased with age. This was probably due to the fact that respondents for this study were between the age ranges of 18-36 years which was relatively shorter than that of the respondents used in the study of Hoeck *et al* [11].

**Table 4: Summary Table of the Frequencies and the Chi Square Test ( $\chi^2$ ) of Independence (for age)**

S/N	Question/Variables	Age	Yes	No	Df	$\chi^2$	$p$ (level of Significance)
1.	Have you received any special education for learning?	Below 25 yrs 25 yrs & above	21 6	115 46	1	1.043	NS
2.	Have you received any special education for behaviour/emotional support?	Below 25 yrs 25 yrs & above	26 12	110 40	1	0.366	NS
3.	Have you received mental health/counselling services?	Below 25 yrs 25 yrs & above	23 7	113 45	1	0.334	NS
4.	Have you received day treatment for mental health/behaviour problems?	Below 25 yrs 25 yrs & above	21 6	115 46	1	0.466	NS



**Hypothesis 4:** Christian respondents will report more frequent utilization of mental health services than their counterparts of other religion.

Hypothesis 4 sought to find out the role religion played in services utilization. The data was subjected to the Chi Square Test of Independence ( $\chi^2$ ) with the aid of the IBM SPSS Statistics (Version 21) software. The results suggested that there were no association between religion and services utilization for special education for learning, ( $N = 188, \chi^2_{(1)} = 1.546, p = \text{NS}$ ).

The Chi Square Test of Independence ( $\chi^2$ ) could not be used to analyze the data for services utilization of special education for behaviour/emotional support, mental health/counselling services, day treatment for mental health/behaviour problems, residential treatment for mental health/behaviour problems and hospitalization for mental health/behaviour problems in terms of age because the expected frequencies were below 5. This is shown in Table 5.

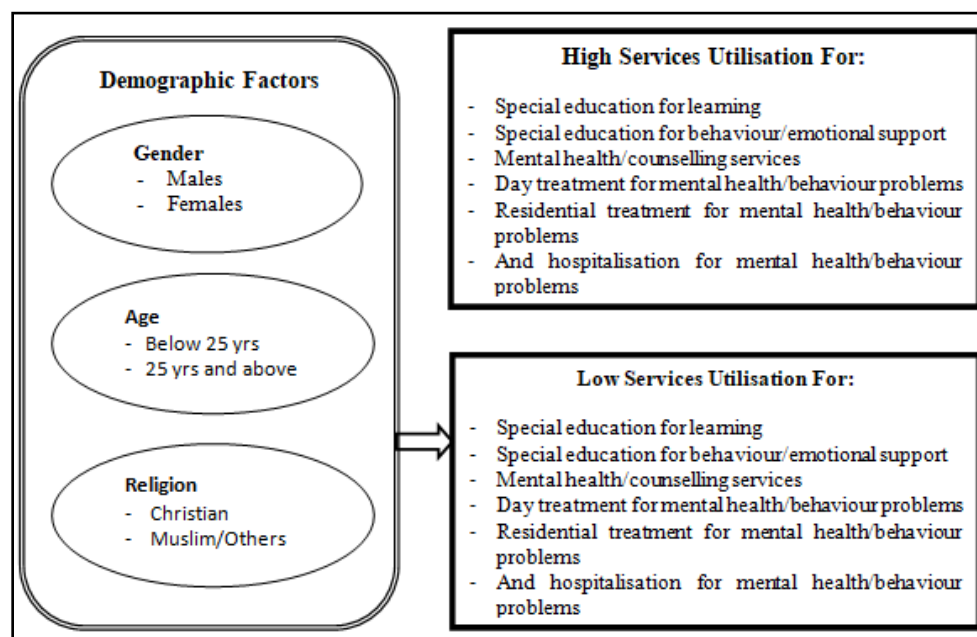
**Table 5: Summary Table of the Frequencies and the Chi Square Test ( $\chi^2$ ) of Independence (for age)**

S/N	Questions/Variables	Religion	Yes	No	Df	$\chi^2$	p (level of Significance)
1.	Have you received any special education for learning?	Christian	60	106	1	1.546	NS
		Muslim	5	17			

#### 4. Summary of Findings

The main findings of the study indicated that services utilization was generally low. There was no

gender, age nor religious affiliation differences in reports of services utilization (Figure 1).



**Figure 1: Summary of Findings of the Study**

#### 5. Implications of the Study

Findings from the study suggested that health practitioners must embark on a massive public education in order to publicise their services. They also owe it a duty to make their services attractive.

#### 6. Limitations

It would have been more appropriate to sample respondents from all the tertiary institutions in Ghana, however due to time constraint only three tertiary institutions were involved in the study. Again, the simple random sampling technique would have been more expedient than the convenient sampling technique which

the study utilized to recruit participants. In spite of these difficulties, the findings of this study are applicable and generalizable to tertiary universities in the Ghana.

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## References

- [1]. Doroh, V. R. Hatam, N., Jafari, A. Kafashi, S. and Kavosi, Z, "Determinants of Outpatient Services Utilization in Shiraz", *J Community Med Health Educ*, 2013; 3: 4.
- [2]. WHO (2014), World Health Statistics, WHO Press, World Health Organization, Geneva, Switzerland.
- [3]. Ghana Statistical Service (GSS), Ghana Living Standards Survey Round 6 (GLSS 6): Main Report, Ghana Statistical Service, Accra 2014.
- [4]. Dunlop, Coyte, & McIssac, 2000
- [5]. Gortmaker, S.L., J. Eckenrode, and S. Gore, Stress and the utilization of health services: A time series and cross-sectional analysis. *Journal of Health and Social Behaviour*, 1982; 23: 25-38.
- [6]. Andersen R, Newman JF: Societal and individual determinants of medical care utilization in the United States. *Milbank Memorial Fund* 1973; 81: 95-123.
- [7]. Leaf, P.J., M.L. Bruce, and G.L. Tischler, The differential effect of attitudes on the use of mental health services. *Social Psychiatry*, 1986; 21: 187-192.
- [8]. Lamprey JJ. Psychiatric morbidity in Accra polyclinics. *Ghana Med J*. 1978;170–176.
- [9]. Appiah-Poku J, Laugharne R, Mensah E, Osei Y, Burns T. Previous help sought by patients presenting to mental health services in Kumasi, Ghana. *Soc Psychiatry Psychiatr Epidemiol* 2004; 39:208–211.
- [10]. Loring KR, Sobel DS, Stewart AL, Brown BW Jr, Bandura A, Ritter P, Gonzalez VM, Laurent DD, Holman HR: Evidence suggesting that a chronic disease self-management program can improve health 25
- [11]. Hoeck, S., Francois, G., Der Heyden, J.V., Geerts, J. and Hal, G.V. Healthcare Utilization among the Belgian Elderly in Relation to their Socio-economic Status. *Health Policy* 2011; 99: 174-182. <http://dx.doi.org/10.1016/j.healthpol.2010.08.010>
- [12]. Ruth A. P. &Anthony F. J. Who uses mental health services in Australia? An analysis of data from the national survey of mental health and wellbeing. *Australian and New Zealand Journal of Psychiatry*, 2000; 34 (6): 997-1008.
- [13]. Nikiema, B., Haddad, S. and Potvin, L. Women Bargaining to Seek Healthcare: Norms, Domestic Practices, and Implications in Rural Burkina Faso. *World development* 2008; 36(4): 608-624.
- [14]. Penh P. "factors associated with utilization of health services for childhood diarrhoea and fever in Cambodia: further analysis of Cambodia demographic and health survey". A publication of national institute of statistics ministry of planning, and directorate general for ministry of health. Retrieved from 2013 <http://countryoffice.unfpa.org/cambodia/drivee>.