Factors Associated with Health Care Seeking Behaviour: A cross-sectional study at an emergency department in a teaching hospital

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Abstract

BACKGROUND

Emergent conditions are time-sensitive and delays in receiving emergency care can cause mortality and morbidity. Different healthcare-seeking behaviours (HSB) are influenced by several factors which impact choices in seeking healthcare. This study aimed to determine the factors associated with HSB among patients admitted to the Emergency Department of Korle Bu Teaching Hospital (KBTH).

METHODOLOGY

This was a cross-sectional study among patients admitted at the Accident and Emergency Centre of KBTH from May to June 2020 using the quantitative approach in data collection. Simple random sampling was used to select 400 participants who met the inclusion criteria after which the questionnaires were administered. Participants were assessed on their HSB based on Andersen's Behavioural Model of Health. Pearson's chi-square test was used to assess the association between categorical independent variables and the HSB of patients while Welch's t-test was used to compare means of triage vital signs at admission between patients who sought formal and informal care. All factors significant from Pearson's chi-square test were introduced into the binary logistic regression model. P-values less than 0.05 were considered statistically significant in this study.

RESULTS

Of the 400 respondents interviewed, the mean age was 51 years with 56.5% being women. The majority of respondents (61.50%) sought formal health care as their initial action when sick whiles the remaining sought informal care. The adjusted odds for seeking formal health care were higher among patients who self-rated their illness as severe, those who travelled more than 30 minutes to the nearest health facility and those who were classified as red according to South African Triage Scale (SATS).

CONCLUSION

Self-rating of the severity of illness, distance to health facility and patient classification as red by SATS were significant factors associated with healthcare-seeking behaviour. Knowledge about the factors associated with healthcare-seeking behaviour is vital for health education and health promotion campaigns towards appropriate health care seeking behaviour.

***Keywords**: Health Care Seeking Behaviour, Emergency Care, Formal Healthcare, Andersen's Behavioural Model of Health, Self-Treatment*

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Introduction

Globally, half of the world's population is unable to get the health services they need (1). Out-of-pocket expenditure on health pushes about 100 million people into extreme poverty (2). In 2010, at least, 10% of household expenditure was spent on covering health costs by 11.7% of the world's population (3). In sub-Saharan Africa, financial costs greatly influence healthcare-seeking behaviour (HSB), especially among the poor (4) and access to essential health services is limited (5). This usually causes people to have inappropriate HSB. The utilization of health care is a complex behavioural phenomenon. Despite advances made towards Universal Health Coverage (UHC) and Primary Health Care (PHC), many people still have inappropriate HSB. To achieve the goals of primary health care and universal health coverage, it is vital to understand the factors associated with the HSB of people to tailor health care services to individuals and communities.

In Ghana, just like in other African countries, patients often present in emergent situations after seeking health care from alternate places and practitioners. Healthcare, and more specifically, emergency care is sought usually after home-based and cultural remedies have failed and these patients often present as advanced cases of emergent nature (6). For example, 60% of patients with breast cancer in Ghana present as advanced cases usually between 8 months and 5 years after initial symptoms (7). Many patients with hypertension seek emergency care late or when they have developed complications like stroke, myocardial infarction, heart failure and kidney failure (8). Acute coronary syndrome is a life-threatening illness needing urgent emergency care; however, previous studies show a 15-minute to 10-day delay in seeking professional care leading to an increase in mortality (9).

Emergent conditions are time-sensitive and delays in receiving emergency care can cause mortality and morbidity (10). Determining the factors that influence the healthcare-seeking behaviour patterns of patients admitted to the emergency department will help us to understand the choices these patients make in seeking care. When these factors that shape behavioural practices are understood, they can then be tailored towards health promotion programmes and interventions towards good healthcare-seeking behaviour practices.

There have been several predictors of healthcare utilization among people when they are sick and these usually provide frameworks for predicting healthcare use by individuals. One of the commonest models is the Behavioural Model of Health by Ronald M. Andersen which takes into consideration both individual and contextual determinants of health to predict healthcare utilization (11–13). The model seeks to look at determinants of health-seeking behaviour based on predisposing factors, enabling factors and needs factors. The model proposes that the use of health services by people is a function of their tendency to use the health services, factors which enable or impede the use of the service and their need for care (14). See figure 1.

Guided by Andersen's model, this study sought to determine the factors associated with HSB among people admitted to an emergency department in a health facility.

Materials and Methods

Study site

The study was conducted at the Accident and Emergency Department of the Korle Bu Teaching Hospital (KBTH). The KBTH is the largest and leading referral centre in Ghana with a bed capacity of 2000. The hospital has 21 clinical and diagnostic departments. The Emergency Department serves as the receiving point for trauma, medical and surgical emergencies.

The Department comprises the triage area and three main wards namely red, orange and yellow which are colour-coded based on the acuity of illness. Patients who present to the Emergency Department are first seen and triaged using the South African Triage Scale (SATS) (15). Patients' complaints and medical history are taken by medical officers. They are then examined, managed and then assigned to the various specialities based on their diagnosis.

Study design and participants

This was a cross-sectional study using a quantitative approach to data collection. The study population comprised patients who presented to the Emergency Department of KBTH with surgical and medical emergencies and were admitted. These patients have presented with various medical and surgical conditions. This included both referred and self-referred patients.

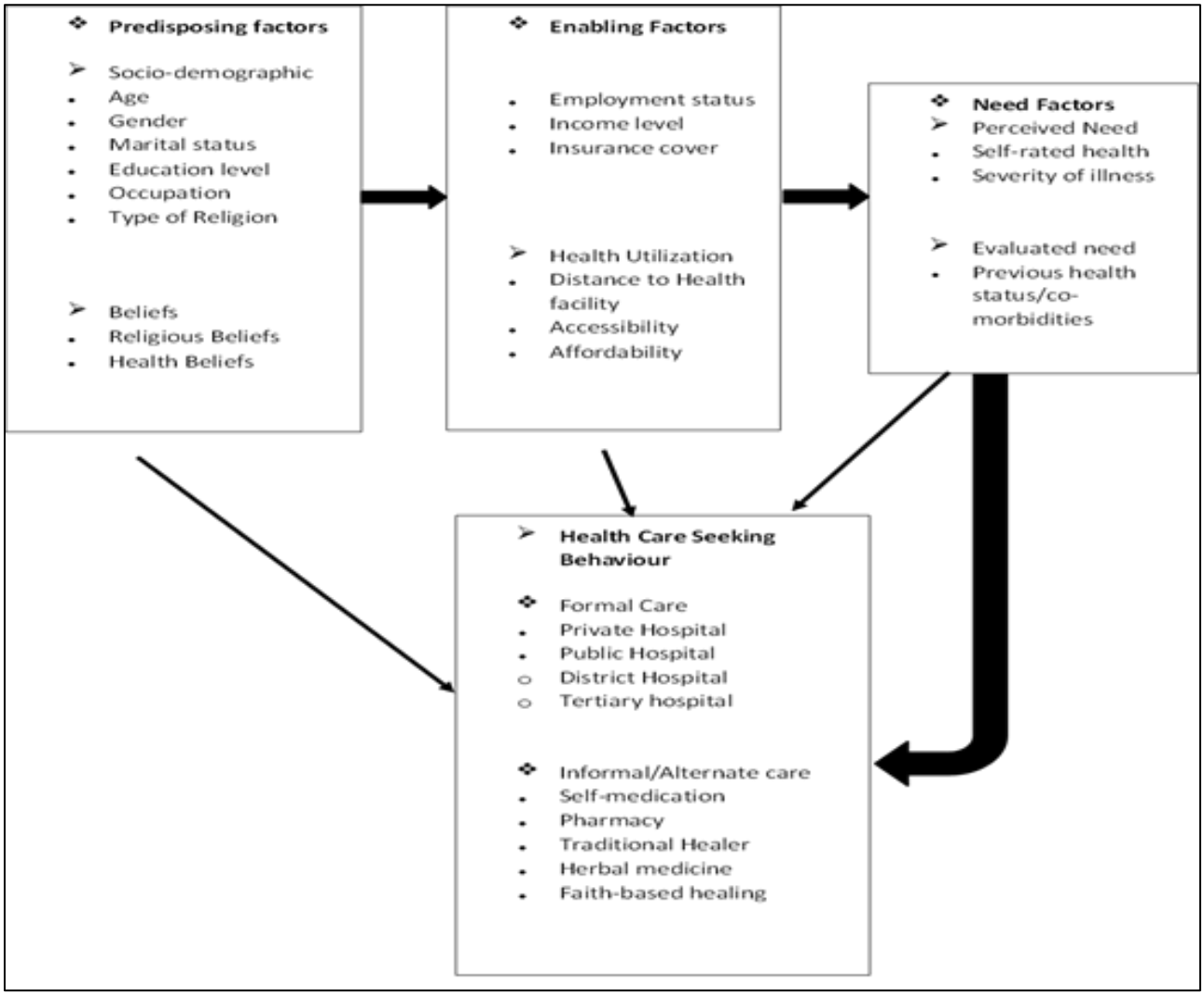

Figure 1:
Conceptual framework adapted from Andersen's Behavioural Model of Health (Andersen, 1995***)***

Participants were included if they had medical and surgical emergencies (non-trauma defined by the absence of trauma or an indicative 'no' response on the trauma component of their SATS score) (15), were 18 years and above, and fully conscious and alert as defined by a Glasgow Coma Score of 15/15 (16). Trauma cases were excluded because they often present immediately to health facilities due to their injuries from trauma.

The sample of 400 was determined assuming a 50% proportion of an unknown population, with an error margin of 5% and a confidence interval of 95% using the formula developed by Cochran (1977) and a 5% non-response rate. The total number of participants was divided over six weeks (42 days). Ten participants were selected every day via simple random sampling resulting in a total of 400 participants being recruited over the study period. Every day, at 6 hourly specific time intervals during the day, that is at 8 am, 2 pm and 8 pm, the sampling frame was obtained from the admission book at the point of entry into the Emergency Department where they were triaged. Triage is the area where patients are initially seen, vitals and other parameters are taken and assigned a category based on the severity of their illness. The admission book contained all the names of patients and the type of emergency admitted to the Emergency Department. The study was conducted from May 2020 to June 2020.

Participants who met the inclusion criteria were selected via shuffling in a bottle jar at the specified intervals. If they did not meet the inclusion criteria, another participant was randomly selected. The process continued till the quota for the day was reached. If the quota for the day was not met, they were added to the following day till the total number of participants was obtained for the study.

Data collection tool

A questionnaire was used in line with Andersen's model (12) and comprised questions on demographic characteristics, enabling factors (e.g., employment status, occupation, income level, health insurance status and how patients use health facilities), need factors (e.g., self-rated health, co-morbidities and severity of illness), and HSB (e.g., formal, informal).

Ethical considerations

Ethical approval was obtained from the Scientific Technical Committee (STC) and Institutional Review Board (IRB) of the Korle Bu Teaching Hospital (Approval number: KBTHSTC/IRB/00021/2020) before the start of the collection of data. Verbal and written consent was sought from participants who met the inclusion criteria. To ensure privacy during the administration of the questionnaire, three bedside screens were placed all around each participant's bed by the research assistant before the start of the interview. Refusal to answer questions did not affect respondents' care at the hospital.

Data analysis

Data were first entered into Microsoft excel, cleaned and exported to STATA IC version 16 for analysis (Stata Corp, College Station, TX, USA). Frequency and percentages were used to describe categorical variables whilst the mean and standard deviation were used to summarize continuous variables. Pearson's chi-square test was used to assess the association between categorical independent variables and the HSB of patients. The Welch's t-test was used to compare the mean of the triage vital signs at admission between patients who sought formal and informal care.

All factors significant from Pearson's chi-square test were introduced into the binary logistic regression model. The binary logistic regression model was then used to assess the crude and adjusted odds of initiation of formal health care. 95% confidence interval of the

respective odds ratios was also presented. P-values less than 0.05 were considered statistically significant in this study.

Results

Demographic and clinical characteristics

A total of 400 individuals were enrolled on the study. The mean age of the respondents was 51.0 ± 17.8 years. Most of the respondents were females (56.50%, n=226) and 71.8% (n=284) were married (Table 1). About 36% (n=144) were self-employed and the majority (63.5%, n=254) earned below 1000 Ghana cedis (≈120 USD) per month. About two-thirds of patients were insured (72.8%, n=291). Private health facilities were the nearest to the homes of 41.3% (n=164) of the patients. Over half (56.7%, n=225) of the respondents travelled at most 10 minutes to the nearest health facility from their home (Table 1).

Over half of the respondents (52.5%) had hypertension and 19.5% had diabetes. Less than half of the respondents (41.0%) self-rated their health condition as good. The majority (88.5%, n=353) were referred from another health facility to KBTH (Table 1). A little over a quarter (27.75%, n=111) presented with a single symptom. For the majority of participants (73.93%), symptoms of illness onset started less than a week while 78.95% took an action less than a week after symptom onset as shown in Table 2.

The mean systolic and diastolic blood pressure were 136.7 mmHg and 89.2 mmHg respectively while the mean heart rate was 94.5 beats per minute with a mean temperature of 36.2 ^{o}C. Triage Early Warning Scores (TEWS) based on the South African Triage Scale (SATS) showed 18.5% were admitted to the red ward (Table 2).

Table 1:

Demographics and Clinical Characteristics of Participants: Socio-Demographic Factors

Variable	Frequency (N=400)	Percentage %
Age group in years (mean ± SD)	51.0 ± 17.8	
18-29	60	15
30-39	50	12.5
40-49	76	19
50-59	84	21
60-69	62	15.5
>69	68	17
Sex		
Female	226	56.5
Male	174	43.5
Marital status		
Single	79	19.75
Married	287	71.75
Divorced/widowed	34	8.5
Highest level of education		
No formal education	43	10.78
Basic/JHS	152	38.1
SHS	134	33.58
Tertiary	70	17.54
Religion		
Christian	362	90.5
Muslim	35	8.75
Traditionalist	3	0.75

Health care seeking behaviour of study participants

About 61.5% (n=246) and 38.5% (n=154) sought formal healthcare and informal healthcare, respectively (Fig 2). Among those who sought informal health care, 23.3% engaged in self-treatment. Initiation of formal HSB was low among married patients (57.5%, n=165/287) and higher among respondents aged 18-29 years (71.67%, n=43/60), females (64.60%, n=146/226) and those who had tertiary education (67.14%, n=47/70); those employed (71.9%, n=77/107); patients who travelled more than 30 minutes to the nearest health facility (83.9%, n=26/31); those who earned a monthly income of Ghc 1000 cedis and above (65.07%, n=95/146) and those who were insured (62.89%, n=183/291) (Table 3).

Table (continued) 1:

Variable	Frequency (N=400)	Percentage %
Employment status		
Employed	107	26.75
Retired	61	15.25
Self-employed	144	36
Unemployed	88	22
Income Level		
<Ghc1000.00	254	63.5
Ghc 1000.00 +	146	36.5
Health insurance status		
Insured	291	72.75
Not insured	109	27.25
Type of nearest facility		
Public clinic/health centre/ CHPs	15	3.78
Polyclinic	104	26.2
Public/CHAG hospital	114	28.72
Private facility	164	41.31
Time to nearest facilities from home		
<10minutes	225	56.68
11-30minutes	141	35.52
>30minutes	31	7.81
History of hypertension		
No	190	47.5
Yes	210	52.5
History of diabetes		
No	322	80.5
Yes	78	19.5
Number of chronic conditions		
None	131	32.75
1 condition	218	54.5
2-3 conditions	51	12.75
Self-rating of severity of illness		
Mild	299	74.75
Moderate	65	16.25
Severe	36	9
Referral status		
Referred from another facility	353	88.25
Self-referral	47	11.75

The self-rating of severity of illness was also significantly associated with the health-seeking behaviour of patients (χ^2=10.32, p=0.006). Those who rated their severity of illness as severe (86.1%, n=31/36) were more likely to seek formal care.

There was a significant association between the number of symptoms (χ^2=6.22, p=0.045) and duration of taking action after the onset of symptoms and the HSB of patients (χ^2=7.32, p=0.026).

Table 2:
Clinical Symptoms and vital signs of participants

Number and Duration of Symptoms Reported among Study Participants			
Variable	**Frequency**		**Percentage %**
Number of Symptoms			
1 symptom	111		27.75
2 symptoms	162		40.5
3-5 symptoms	127		31.75
Duration since symptoms onset			
Less than a week	295		73.93
A week to <1 month	71		17.79
>1 month	33		8.327
Duration before taking action after onset of symptoms			
Less than a week	315		78.95
A week to <1 month	59		14.79
>1 month	25		6.27
Triage vital signs of study participants			
Variable	**Mean ± SD**	**Frequency**	**Percentage (%)**
Systolic blood pressure (mmHg)	136.7 ± 35.0		
Diastolic blood pressure (mmHg)	89.2 ± 22.0		
Heart rate (beats per minute)	94.5 ± 22.8		
Respiratory rate	22.5 ± 5.5		
Temperature (°C)	36.2 ± 0.7		
SPO2	94.1 ± 7.9		
RBS	10.7 ± 5.6		
Blood pressure level			
Normal		99	24.75
Elevated		105	26.25
Stage 1 hypertension		71	17.75
Stage 2 hypertension		125	31.25
Mobility of patients			
Mobile		118	29.5
Supported		282	70.5
Triage colour			
Orange		161	40.25
Red		74	18.5
Yellow		165	41.25

SD: standard deviation

Patients who were classified as red initiated formal health care higher than those classified as orange or yellow and this was significant (χ^2=6.31, p=0.043) (Table 4).

The t-test was used to compare mean vital statistics between those who sought formal health care and those who sought informal healthcare. None of the mean vital statistics was significant between the two-healthcare seeking behaviours.

Logistic regression model of factors associated with seeking formal health care

The binary logistic regression model was used to assess the crude and adjusted odds of a patient seeking formal health care as initial action when sick (Table 5). All variables significant from Pearson's chi-square test were considered in the binary logistic regression model. From the adjusted logistic regression model, the odds of seeking formal health care were 27% lower for each increase in the number of symptoms presented by patients (AOR: 0.73, 95% CI: 0.57-0.94, p=0.016). Initiation of formal health care was 4-fold higher among patients who self-rated their illness as severe compared to those who self-rated their illness as mild (AOR: 4.05, 95% CI: 1.45-11.35, p=0.008) with 2-fold higher odds among patients who were classified as red at triage compared to those who were classified as orange at triage (AOR: 2.12, 95% CI: 1.10-4.07, p=0.025). The odds of seeking formal health care were almost 3-fold high among patients who travelled more than 30 minutes to the nearest health facility compared to those who travelled less than 10 minutes (AOR: 2.99, 95% CI: 1.00-8.89, p=0.049).

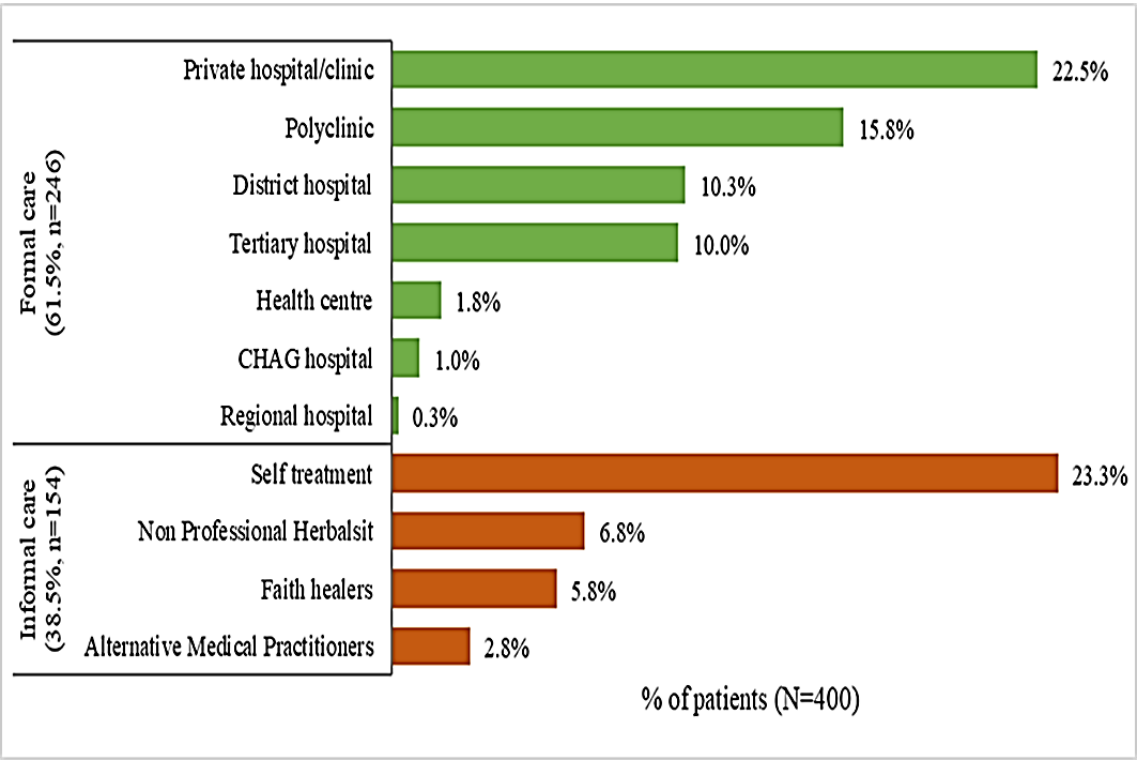

Figure 2:
Healthcare-seeking behaviour of participants

Table 3:
Association between predisposing factors, enabling factors and healthcare-seeking behaviour among participants

		Health Care Seeking Behaviour			
Variables	**N**	**Informal care n (%)**	**Formal care n (%)**	**Chi-square**	**P-value**
Total	400	154 (38.50)	246 (61.50)		
Predisposing Factors					
Age group years				5.27	0.383
18-29	60	17 (28.33)	43 (71.67)		
30-39	50	17 (34.00)	33 (66.00)		
40-49	76	35 (46.05)	41 (53.95)		
50-59	84	34 (40.48)	50 (59.52)		
60-69	62	23 (37.10)	39 (62.90)		
>69	68	28 (41.18)	40 (58.82)		
Sex				2.11	0.146
Female	226	80 (35.40)	146 (64.60)		
Male	174	74 (42.53)	100 (57.47)		
Marital status				6.92	0.031*
Single	79	22 (27.85)	57 (72.15)		
Married	287	122 (42.51)	165 (57.49)		
Divorced/widowed	34	10 (29.41)	24 (70.59)		
Educational level				1.32	0.724
No formal education	43	16 (37.21)	27 (62.79)		
Basic/JHS	152	61 (40.13)	91 (59.87)		
SHS	134	54 (40.30)	80 (59.70)		
Tertiary	70	23 (32.86)	47 (67.14)		
Religion				0.33	0.568
Christian	362	141 (38.95)	221 (61.05)		
Muslim/Traditionalist	38	13 (34.21)	25 (65.79)		
Enabling Factors					
Income level				1.24	0.266
<Ghc1000.00	254	103 (40.55)	151 (59.45)		
Ghc 1000.00 +	146	51 (34.93)	95 (65.07)		
Employment status				10.44	0.015*
Employed	107	30 (28.04)	77 (71.96)		
Retired	61	27 (44.26)	34 (55.74)		
Self-employed	144	67 (46.53)	77 (53.47)		
Unemployed	88	30 (34.09)	58 (65.91)		
Type of nearest facility				3.8	0.283
Public clinic/health centre/CHPs	15	3 (20.00)	12 (80.00)		
Polyclinic	104	40 (38.46)	64 (61.54)		
Public/CHAG hospital	114	50 (43.86)	64 (56.14)		
Private facility	164	60 (36.59)	104 (63.41)		
Time to nearest facilities from home				7.57	0.023*
<10minutes	225	94 (41.78)	131 (58.22)		
11-30minutes	141	54 (38.30)	87 (61.70)		
>30minutes	31	5 (16.13)	26 (83.87)		
Ever used nearest facility				1.82	0.177
No	75	34 (45.33)	41 (54.67)		
Yes	325	120 (36.92)	205 (63.08)		

P-value notation: *: p<0.05. **: p<0.01. ***: p<0.001

Discussion

The demographic characteristics of participants were comparable across previous studies (17,18). In our study, the mean age was 51 years with the majority being females. Females have a greater likelihood of seeking formal health care when ill and have greater knowledge about health-related issues and were more likely to be compliant with prescribed medications compared with males (19). While 61.50% sought formal health care from public or private hospitals, as their initial action when ill, 38.50% sought informal care from other avenues.

Table 4:
Association between health-related factors and healthcare-seeking behaviour among participants

		Healthcare Seeking Behaviour			
		Informal care	**Formal care**	**Chi-square**	**P-value**
Variables	**N**	**n (%)**	**n (%)**		
Total	400	154 (38.50)	246 (61.50)		
History of hypertension				1	0.318
No	190	78 (41.05)	112 (58.95)		
Yes	210	76 (36.19)	134 (63.81)		
History of diabetes				0.59	0.441
No	322	121 (37.58)	201 (62.42)		
Yes	78	33 (42.31)	45 (57.69)		
Self-rating of severity of illness				10.32	0.006**
Mild	299	124 (41.47)	175 (58.53)		
Moderate	65	25 (38.46)	40 (61.54)		
Severe	36	5 (13.89)	31 (86.11)		
Referral status				0.12	0.727
Referral from another facility	353	137 (38.81)	216 (61.19)		
Self-referral	47	17 (36.17)	30 (63.83)		
No. of symptoms				6.22	0.045*
1 symptom	111	32 (28.83)	79 (71.17)		
2 symptoms	162	70 (43.21)	92 (56.79)		
3-5 symptoms	127	52 (40.94)	75 (59.06)		
Duration since symptoms onset				5.45	0.066
Less than a week	295	107 (36.27)	188 (63.73)		
A week to <1 month	71	36 (50.70)	35 (49.30)		
>1 month	33	11 (33.33)	22 (66.67)		
Duration before taking action after onset of symptoms				7.32	0.026*
Less than a week	315	114 (36.19)	201 (63.81)		
A week to <1 month	59	32 (54.24)	27 (45.76)		
>1 month	25	8 (32.00)	17 (68.00)		
Triage colour				6.31	0.043*
Orange	161	67 (41.61)	94 (58.39)		
Red	74	19 (25.68)	55 (74.32)		
Yellow	165	68 (41.21)	97 (58.79)		

P-value notation: *: p<0.05. **: p<0.01. ***: p<0.001

Table 5:
Logistic Regression Model of Factors Associated with Seeking Formal Health Care

	Unadjusted Logistic Regression		Adjusted Logistic Regression	
Variables	**COR [95% CI]**	**P-value**	**AOR [95% CI]**	**P-value**
Age of patients	0.99 [0.98-1.00]	0.238	0.99 [0.98-1.01]	0.306
Number of symptoms	0.78 [0.62-0.98]	0.031*	0.73 [0.57-0.94]	0.016*
Number of existing chronic conditions	0.88 [0.50-1.54]	0.643	1.36 [0.94-1.97]	0.100
Sex of patient				
Female	1.00 [reference]		1.00 [reference]	
Male	0.74 [0.49-1.11]	0.147	0.77 [0.48-1.21]	0.253
Marital status				
Single	1.00 [reference]		1.00 [reference]	
Married	0.52 [0.30-0.90]	0.019*	0.56 [0.28-1.13]	0.108
Divorced/widowed	0.93 [0.38-2.25]	0.866	0.84 [0.25-2.75]	0.770
Employment status				
Employed	1.00 [reference]		1.00 [reference]	
Retired	0.49 [0.25-0.95]	0.034*	0.61 [0.25-1.51]	0.286
Unemployed	0.75 [0.41-1.39]	0.363	0.97 [0.45-2.11]	0.947
Self-employed	0.45 [0.26-0.76]	0.003**	0.56 [0.30-1.05]	0.070
Distance to nearest health facility				
<10minutes	1.00 [reference]		1.00 [reference]	
11-30minutes	1.16 [0.75-1.78]	0.509	1.10 [0.69-1.76]	0.690
>30minutes	3.73 [1.38-10.07]	0.009**	2.99 [1.00-8.89]	0.049*
Ever visited nearest health facility				
No	1.00 [reference]		1.00 [reference]	
Yes	1.42 [0.85-2.35]	0.178	1.43 [0.81-2.53]	0.218
Self-rating of severity of illness				
Mild	1.00 [reference]		1.00 [reference]	
Moderate	1.13 [0.65-1.97]	0.655	0.88 [0.48-1.62]	0.680
Severe	4.39 [1.66-11.61]	0.003**	4.05 [1.45-11.35]	0.008**
Duration before taking action after onset of symptoms				
less than a week	1.00 [reference]		1.00 [reference]	
A week to <1 month	0.55 [0.33-0.93]	0.026*	0.83 [0.30-2.31]	0.715
>1 month	1.14 [0.53-2.44]	0.739	1.74 [0.25-11.97]	0.572
Duration since symptoms onset				
less than a week	1.00 [reference]		1.00 [reference]	
A week to <1 month	0.48 [0.27-0.84]	0.010*	0.44 [0.14-1.39]	0.161
>1 month	1.21 [0.50-2.88]	0.675	0.51 [0.06-4.24]	0.531
Mobility of patient				
Mobile	1.00 [reference]		1.00 [reference]	
Supported	1.61 [1.04-2.50]	0.032*	1.48 [0.90-2.45]	0.124
Triage colour				
Orange	1.00 [reference]		1.00 [reference]	
Red	2.06 [1.12-3.79]	0.020*	2.12 [1.10-4.07]	0.025*
Yellow	1.02 [0.65-1.58]	0.941	1.06 [0.65-1.75]	0.807

Informal health care providers sought were non-professional herbalists, faith healers, alternative medical practitioners, and the majority engaging in self-treatment, observations consistent with previous studies (20–22). Self-treatment is still a major pathway in seeking health informally. Reasons such as the easy availability of herbs and previous experience with treating similar illnesses (23), herbalists being more accessible, no-cost services and the ability to determine spiritual causes of illness have been cited (24). Similarly, self-medication with modern medicines was cited as the initial therapeutic option (25). We must look at the informal channels for seeking health care to ensure the safety of patrons.

In this study, persons who rated their health as severe had 3-fold higher odds of seeking formal health care compared to those who rated their health as mild. Understandably, people who rate their illness as severe are more likely to seek formal health care because they know their symptoms have worsened and will need to seek care for their illness (24,26,27).

Persons who lived more than 30 minutes from the nearest health facility had an almost 3-fold increase in seeking formal care when sick compared to those who lived less than ten minutes. However, travel time to health facilities was reported to be negatively associated with a visit to the health facility (28). In the 2017 Ghana Living Standards Survey, 41.1% of respondents averagely spent 30-60 minutes to and from the health facility while 39.4% spent less than 30 minutes. Additionally, more than 75% of persons who visit health facilities in almost all regions spent 60 minutes travelling to and from the health facility (29). It is therefore likely that most health facilities are at least 30 minutes away from households. Another possible explanation is that people who live far away tend to visit health facilities earlier since they know that their health condition may get worse if they do not.

The odds of seeking formal health care were 27% lower for each increase in the number of symptoms that the patient had at the start of their current illness. This meant that when a person's number of symptoms increases, that person is less likely to seek formal health care. This is unexpected because when a person starts developing more symptoms, that person is more likely to seek formal care. One reason for this could be when the number of symptoms increases, a person may be in a poor physical state to seek help from a health facility and may believe they have reached the end of their life and therefore will not put in any effort to get better.

Patients classified as red according to SATS had 2-fold high odds of seeking formal health care compared to those classified as orange. Patients classified as red need immediate care and attention and therefore such patients may be severely ill and may have to seek formal health care.

In this study, the odds of seeking formal health care were 51% lower for persons who retired compared to those employed. Those who were retired were less likely to seek formal health care compared to those who were employed. In a study looking at insurance status and health-seeking behaviour in Ghana, older people were more uninsured (4). By extension, those retired (mostly old people) may not be enrolled on the country's national health insurance scheme and therefore less likely to seek formal health care. In addition, retired people, again mostly old people tend to believe in the potency of herbal medications (22) and therefore are less likely to seek care in health facilities. Additionally, the odds of seeking formal health care were 55% lower for persons who were self-employed compared to those employed. Self-employed people may not be covered by health insurance compared to employed people who may have their health insurance premiums paid for by their

employers and thus, are less likely to seek formal health care.

Our study showed that respondents whose duration of symptoms was between a week to less than a month were less likely to seek formal health care compared to those whose symptoms were less than a week. This may be because they perceive the initial symptoms to be mild and are not aware of the seriousness of their symptoms and this has previously been reported (30).

In our study, persons who took a week to less than a month to take action after the onset of symptoms had 45% decreased odds of seeking formal health care compared to those who took less than a week after the onset of symptoms to take action. This could be explained that those who took a long time to seek health care are less likely to go to a health facility because they might have found other informal channels such as self-medication to take care of their illness. This finding was similar to another study where delay in seeking treatment was associated with a decrease in the likelihood of seeking formal health care (21).

Study Limitations

Though this study has provided evidence to support the literature on the health-seeking behaviour of patients, we acknowledge some limitations. First, there may exist recall bias for some patients who could not remember exactly when their symptoms started but this was minimized by asking participants to recall symptoms at the onset of their current illness. Secondly, the reliance on self-reporting of health status and self-rating of severity of illness could differ vastly from the actual state of the patient. Patients may also be prone to provide socially desirable responses since they were on admission at the time of data collection, but this was minimized when the participants were given the assurance that their care was not going to be affected by participating in this study.

Conclusion

Self-rating of the severity of illness, distance to a health facility, number of symptoms and patient classification as red by SATS were significant factors associated with health care seeking behaviour in this study. Healthcare professionals must understand the choices these patients make since knowledge about factors associated with HSB is vital for health education and health promotion campaigns so that appropriate HSB will be practised by all.

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