

Assessing of the factors influencing the bypassing of primary healthcare facilities by patients in the Wa Municipality of Ghana

Bismark Yayra Adzah

MSc. Candidate-Institute for the Advanced Study of Sustainability
United Nations University
Shibuya, Tokyo- Japan
adzah@student.unu.edu

Abraham Dayouri

Former Teaching Assistant- Department of Planning
University for Development Studies
Tamale, Ghana

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Abstract- Despite efforts by Government to ensure that there is a hierarchical order in healthcare delivery, some patients do not seek healthcare from their nearest Primary healthcare facility. Existing studies on bypassing of healthcare facilities in Ghana focused specifically on patients seeking maternal healthcare and accident cases ignoring bypassing behaviour of other patients seeking other healthcare services and the factors influencing their bypassing behaviour. This study therefore sought to assess the rate of bypassing of primary healthcare (PHC) facilities and the factors influencing the bypassing of primary healthcare (PHC) facilities by patients in the Wa municipality seeking all healthcare services. A mixed method approach was used with a concurrent design. Systematic sampling technique was used to select 264 patients exiting the higher level facilities with the interval 3. A simple random sampling techniques was also used to select five heads of the primary healthcare (PHC) facilities. Quantitative data was analyzed using both descriptive statistics and cross tabulation whilst qualitative data was analyzed in themes. Results from the study shows that 164 respondents representing 62.12% of patients who sought healthcare at the higher level facilities had bypassed their nearest PHC providers. At a significant level of 5%, socio-economic variables such age, religion, ethnicity, employment status and income level were found to be significantly associated with bypassing of PHC facilities. From the health system point of view, lack of drugs, poor attitude of staff, lack of diagnostic facility and equipment, overcrowding and poor access road to the PHC facilities are major health system factors influencing the bypassing of PHC facilities. Socio-cultural factors such as social relations, social status and religion greatly influence the bypassing of PHC facilities. Bypassing of PHC facilities indicates the

inefficiencies in the health system policies and also suggests the lack of trust in the lower level facilities. The Ministry of Health and other health sector agencies should organize training on patient-staff relationship for the health workers in the municipality. The National Health Insurance Scheme should also be given to private insurance firms to manage on contract basis.

Key words—Universal health coverage, primary healthcare, bypassing.

I. INTRODUCTION

Universal health coverage has been adopted as a target of the Sustainable Development Goal three (3) (United Nations, 2015). This target (3.8) states: “Achieve universal health care, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all” (United Nations, 2015). National and regional government see primary health care (PHC) as a key to attaining universal health coverage (Ayeke, 2014). Primary health care was described in the 1978 Declaration of Alma-Ata as “*essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in their community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination*” (WHO, 1978:1-2). It is the underpinning of the medical services delivery framework in numerous nations and is acknowledged as the best model for providing essential medical services to their populaces (Ehiri *et al.*, 2005; Lewis, 2004). PHC delivery moves a country towards a more

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productive and an excellent medical care structure (Kanyora & Njogu 2013).

As a result of decentralization and health sector restructurings in Ghana, health care administration are coordinated as one goes down the order of the health structure from the national to the sub-district level (GHS, 2017). The national health system provides three tiers of health care; primary, secondary and tertiary (GHS 2017). The three should enjoy patronage from clients and a good referral system is the main link between them (Irvine *et al.*, 1991). In order to facilitate access to healthcare services, many low-income and middle income countries have assigned PHC facilities as the main point of care for uncomplicated health problems and refer complicated ones to higher level healthcare facilities (Kahabuka *et al.*, 2011; GHS, 2005).

In Ghana, the health center or community or CHPS compound has generally been the primary point of contact in the conventional health delivery system (GHS, 2017). However, depending on the severity of ailment and the proximity to any of these health facilities, any facility may become the patient's first point of contact (GHS, 2017).

Notwithstanding the availability of PHC facilities proximate to patients, the ultimate decision on which health facility to seek healthcare service lies with the patient (Abeno, 2014). When individuals fall sick, they choose to combat their illness either by going to a health facility, usually within their proximity, or further away from them depending on the type of illness and the socio-economic status of the person or by choosing self-medication (Abeno, 2014). When patients choose to receive healthcare from providers found farther away than the closest PHC providers to their residence, it results in bypassing (Liu, 2008).

Bypassing has great effects on the health system and the patients. From the health system perspective, bypassing has adverse effects for higher level facilities. Bypassing lower level facilities for healthcare can disturb nature of care as higher level facilities become congested (Murray & Pearson, 2006). Congestion puts pressure on the secondary and tertiary hospitals' human and logistic resources to the extreme, prejudicing the adeptness of these facilities to adequately provide care of adequate standard and improved health outcomes (Miller *et al.*, 2002). According to the clients' viewpoint bypassing can have negative and positive outcomes. It might increase commuting cost and time to reach a health facility. However, it could likewise mean getting access to facilities with proper functionality which could convert into better healthcare (Abeno, 2014).

Studies of healthcare facility bypassing behaviour are not new in healthcare research (Liu, 2008; Murray & Pearson, 2006; Miller *et al.*, 2002; Yaffee *et al.*, 2012; Paul *et al.*, 2002; Leonard, 2002; Ona *et al.*, 2016; Abeno, 2014; Gauthier & Wane, 2008; Akin and Hutchinson, 1999). In Ghana, the only study on bypassing behavior by Yaffee *et al.*, (2012) was limited to accident and emergency cases ignoring patients who are bypassing their nearest PHC facilities for other health services such as maternal health care service, child health and other illness. The study also ignored the socio-economic and socio-cultural factors influencing bypassing health facilities. This makes it hard for the generalization of the research finding to all patients receiving treatment from the higher level facilities and does not present the issue holistically. This study, therefore, fills this gap in literature by providing up to

date empirical evidence on the rate of PHC facility bypassing for all healthcare services and the socio-economic and socio-cultural factors influencing it.

This study is significant in that it provides scientific knowledge on the prevalence and factors influencing bypassing of primary healthcare facilities. This will enable evaluation of the referral policy, and ensure proper utilization of health care facilities especially PHC facilities as well as to ensure equitable and accessible health for all hence contributing to the achievement of Sustainable Development Goal 3.

II. EXTENT AND DETERMINANTS OF PHC FACILITY BYPASSING: TOWARDS A CONCEPTUAL FRAMEWORK.

PHC is viewed as the *"first-contact care, delivered by generalists, dependent (increasingly) on teamwork, which is accessible (both geographically and culturally), comprehensive (interested in old as well as new problems), coordinated, population-based (there is responsibility for 'the list' as well as the individual patient), and activated by patient choice"* (Donabedian, 1988:44).

PHC seeking is what happens when someone who is sick (or who thinks he or she is sick or who needs to abstain from getting sick) counsels a medical professional in a community seeking for counsel, medical checks, treatment or referral to specialist care. It includes not merely the acute care that sick persons might receive before they enter hospital with a serious illness (such as a stroke or diabetic emergency), but also the care they receive after discharge – rehabilitation, ongoing education and support, and continuing surveillance of their chronic condition (Greenhalgh, 2007).

Although the main idea of PHC is to make healthcare accessible to patients at the community level, patients still seek healthcare at facilities farther away at a higher cost (Abeno, 2014). Earlier researchers have defined bypassing in many ways depending on their research objective and the geographical scope of their study. *"Bypassing refers to a person or a patient's action to seek care at a healthcare facility that is not the nearest one of its type to the person's home"* (Fleming *et al.*, 2013:1). Liu *et al.*, (2007), defined bypassing as a situation where patients receive medical services from a hospital located farther away than the hospital nearest to their home.

There is empirical evidence of prevalence of bypassing of primary healthcare providers across the world. Sabde *et al.*, (2018) assessed bypassing of healthcare facilities for childbearing in India and found that thirty eighth percent (38%) of the mothers bypassed their closest community healthcare facility for their delivery. Ona *et al.*, (2016) also conducted a research on determinants of bypassing behaviour for critical access hospitals in Rural Kentucky. According to the information from the survey, the bypassing rate of the local Critical Access Hospitals is 84.7 percent. Yaffee *et al.*, (2012) assessed bypassing proximal health care facilities for acute care patients in a Ghanaian Accident and Emergency Centre. Their study found that only 36.6% of patients who bypassed care were seeking care for an injury-related complaint. Kanyora & Njogu (2013) assessed factors contributing to patients bypassing the 2nd and 3rd levels of primary health care facilities in Kirinyaga districts in Kenya. Their results showed that 96.1% of respondents did not visit

their nearest local facility for medical services but went direct to the district hospital.

From the above studies, the rate of bypassing ranges from 36% to 96% (Sabde *et al.*, 2018; Ona *et al.*, 2016; Yaffee *et al.*, 2012; Kanyora & Njogu 2013; Akin & Hutchinson, 1999). In developing countries the rate of bypassing is as high as 96% (Kanyora & Njogu, 2013) whilst in developed countries the rate of bypassing is as low as 38% (Sabde *et al.*, 2018).

Factors influencing bypassing of PHC facilities

a) Socio-economic factors that influence bypassing of PHC facilities

Socio-economic factors such as sex, age, income level, employment status and access to means of transport are strong determinants of a patients' bypassing behaviour (Ona *et al.*, 2016; Akin & Hutchinson, 1999; Bronstein & Morrissey, 1991). Goodman *et al.*, 2008, Basu, 2005 and Radcliff *et al.* (2003) found lower rates of bypass among the elderly and higher rates of bypass among working males. Contrary to Goodman *et al.*, 2008 and Yaffee *et al.*, 2012, in their study, patients who bypassed proximate facilities were found to be older and the vast majority (65.8%) had visited the facility previously. The lower the patient's income, the lower the probability of bypassing and if the patient is employed, the lower his likelihood of bypassing (Ona *et al.*, 2016). Poor individuals tend to bypass higher quality facilities because they cannot afford them whereas richer individuals bypass lower quality facilities and go for better care (Gauthier & Wane, 2008). It was found that bypassing is considerably more common among higher pay groups in Chad (Gauthier & Wane, 2008).

b) Health system factors that influence bypassing of PHC facilities.

Literature suggests that patient bypass primary healthcare facilities due to certain health system factors. Reasons given for bypassing primary healthcare facilities in favor of visiting higher level health centers and hospitals have included hospital location, unavailability of hospital services, lack of diagnostic facilities, shortage of drugs, lack of skilled staff, lack of trust in staff, long waiting times, poor attitude of hospital staff and overall poor services (Kahabuka *et al.*, 2011; Kanyora & Njogu, 2013).

c) Socio-cultural factors that influence bypassing of PHC facilities

One's culture is a system of shared beliefs, values, customs, behaviours, and artifacts that members of a society use in coping with one another and with their world, and that are transmitted from generation to generation through learning (Leininger, 1978). Bailey, 1987 in assessing socio-cultural factors and health care-seeking behaviour among black Americans identified that race and inferiority was a major factor influencing health seeking behaviour among blacks.

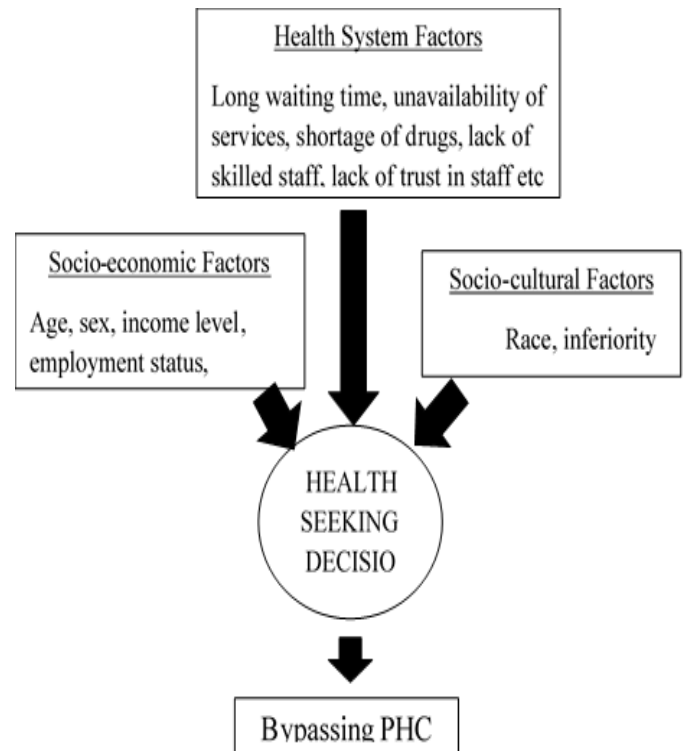


Figure 1.0 A conceptual framework

Results from the review of existing literature shows that patient's decision about where to receive health care services is influenced by the health system factors, socio-economic factors and socio-cultural factors. These studies however are limited to the patient's opinion only ignoring the views of the PHC providers who manage the day to day affairs of the PHC facilities.

III. STUDY CONTEXT AND METHODOLOGY

The study was conducted in the Wa Municipality of the Upper West Region of Ghana. It lies within latitudes 1°40'N to 2°45'N and longitudes 9°32' to 10°20'W (GSS, 2010). Wa Municipal Assembly has its capital as Wa which also serves as the regional capital of Upper West Region (WMMTDP, 2014). The Municipality has a total of 33 health facilities comprising of 22 public health facilities (1 hospital, 10 health centers, 11 CHPS compound) and 11 private health facilities (GHS, 2017).

The study employed the mixed method approach applying both quantitative and qualitative research methods. It began with quantitative method which focused on establishing the rate of bypassing PHC and the socio-economic factors influencing bypassing of PHC facilities. It was complemented by a qualitative study to explore health system and socio-cultural factors that are influence the bypassing of PHC facilities.

The target population for this study are categorized into two. The first category comprised patients 18 years and above who were seeking treatment from the higher level (UDS hospital, Islamic hospital and Upper West Regional Hospital) healthcare facilities in the Municipality. The second were the sampled PHC providers in the Wa Municipality. The PHC providers were considered appropriate for this study because they run the day to day affairs of the PHC facilities and know

the challenges the PHC facilities face in delivering their services to patients. Thus they are in the right position to provide the health system factors influencing the bypassing of PHC facilities.

The formula below was used to determine the sample size for the patients receiving healthcare from the higher level facilities.

$$S = \frac{X^2 NP (1-P)}{d^2 (N-1)} + \frac{X^2 (1-P)}{d^2}$$

Krejcie and Morgan (1994.)

S = required sample size, X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841), N = the population size, P = the population proportion (assumed to be .50 since this would provide the maximum sample size), d = the degree of accuracy expressed as a proportion (0.05).

Taking patient records from four higher level facilities in the Municipality for a week, the total population of patients who sought treatment from these facilities were 833 people. Using 833 as the population, the sample size for this study is 264 patients. A total of 5 in-charges of PHC facilities were selected for the qualitative data.

A multi stage sampling technique was used to sample the respondents for the collection the quantitative data for the study. In the first stage, we adopted a purposive sampling technique to select three (3) higher level facilities in the Wa Municipality since they are the only facilities that provide higher level services and are the first point of referral. Subsequently, a systematic sampling technique was applied to select 264 patients with a uniform interval of 3 patients exiting the facilities over a period of one week. This technique is appropriate for this study as every patient seeking care at the higher level facilities was capable of providing the needed information for the achievement of the research objective and also prevents selection bias. Out of the total sample size of 264 patients, 159 patients were selected from the Upper West Regional Hospital, 49 from the University for Development Studies hospital and 59 from the Islamic hospital base on their weekly patient attendance in the proportion 60.3%, 18.2%, 21.5% respectively.

A sampling frame on the PHC facilities in the study area was developed from the records obtained from the municipal health directorate. A simple random sampling technique was then applied to select 5 PHC facilities in the municipality. A purposive sampling technique was employed to select the in-charge of the sampled five PHC facilities to be interviewed. A purposive sampling technique was subsequently adopted to select 10 patients who had received treatment from the higher level facilities and have bypassed their nearest PHC facility. They were selected in the proportion 5:3:2 from the regional, Islamic and UDS hospital respectively. These patients were interviewed on the socio-cultural factors influencing the bypassing of PHC facilities in the Wa Municipality.

A survey was employed for the collection of quantitative data for this study. A survey was most appropriate in generating quantitative data to ascertain the rate of bypassing and the socio-economic factors influencing the bypassing of PHC facilities. Primary data was obtained from the patients using a structured questionnaire at the PHC facilities after they had received treatment and were exiting the facility using the interviewer administered technique.

Interviews were conducted with the sampled primary healthcare providers and the selected patients who had

bypassed a PHC facility using an interview guide. The interview guide covered topics relating to health system and socio-cultural factors influencing the bypassing of PHC providers by patients. The interview was conducted verbally in English, Wale and Dagaow as preferred by the in-charge of the PHC facilities and patients using the interviewer administered technique. For interviewees who permitted tape recordings, their responses were recorded on tape whilst the response of those who didn't permit tape recordings were written in a book which was letter typed.

Quantitative data was coded and entered into SPSS software package version 21.0 for easy analysis. Univariate (descriptive statistics) and bivariate analysis (cross-tabulation) were conducted on the quantitative data. The results were presented in the form of frequencies, percentages and Chi-Square. The association between respondent's socio-economic variables and bypassing were examined using crosstabs. Only results with significant p values were recorded using the chi square test with a significance level of $p < 0.05$. The qualitative data was transcribed and analyzed using the principle of thematic content analysis. Qualitative data was presented in a narrative form and purely in text.

IV. RESULTS AND DISCUSSION

A. Socio-demographic and economic characteristics of Respondents

Out of a total of 264 respondents, 150 representing 56.81% are males whilst 114 representing 43.20% are females. 50.8% of the respondents are Christians, 48.9% are Muslims and 0.4% of the respondents practice African traditional religion. With regard to their ethnicity, Dagaaba and Wala were the major ethnic groups representing 37.3% and 34.2% respectively. 16.3% of the respondents had no formal education, 14.8% had basic education, 27.2% had secondary education and 41.7% of the respondents had tertiary education. A total of 224 respondents representing 84.8% of the respondents were employed whilst 40 representing 15.2% were unemployed. The table below illustrates the socio-demographic and economic characteristics of the respondents.

Table 1.0 Socio-demographic and economic characteristics of Respondents.

VARIABLES	CATEGORIES	FREQUENCY	PERCENTAGE
Sex	Male	150	56.82
	Female	114	43.18
Age	(18-34) Younger	98	37.12
	(35-49) Middle	105	39.77
	(50-60+) Older	61	23.11
Religion	Christian	134	50.8
	Others	129	49.2
Ethnicity	Wala	90	34.1

	Dagaaba	98	37.1
	Others	76	28.8
Educational level	Non	43	16.3
	Basic	39	14.8
	Secondary	72	27.2
	Tertiary	110	41.7
Employment status	Employed	224	84.8
	Unemployed	40	15.2
Income level	500 & below	140	53
	501 – 1000	51	25.4
	1001 & above	57	21.6

B. Extent of bypassing of PHC facilities in the Wa Municipality

From the study, it was found that a total of 31 patients representing 11.74% were receiving treatment from their nearest PHC facility, 230 patients representing 87.12% were not seeking treatment from their nearest facility and 3 patients representing 1.14% did not know if the facility they were seeking healthcare was the nearest to their place of residence. Among the 230 patients who were not seeking healthcare from their nearest facility, 66 patients representing 25% were referred from a lower level facility meaning they did not bypass their nearest PHC facility as they had first sought treatment from the nearest PHC facility. 164 patients representing 62.12% of the total respondents were not referred from any facility which means they bypassed their nearest facility whilst 100 patients representing 37.88% of the patients did not bypass their nearest PHC facility. The rate of bypassing of PHC facilities in the Wa Municipality is relatively high compared to other studies where the average bypass rates ranged from 36 percent to 96 percent, as mentioned in the literature review.

Majority of patients representing 114 (69.5%) who bypassed their nearest facility bypassed a health center/CHPs compound, whilst 15.2%, 3.7% and 11.6% of patients bypassed the regional hospital, a district hospital and a clinic respectively. The result is consistent with previous work in other countries (Kruk et al. 2009), including work by Akin & Hutchinson (1999) in Sri Lanka, where it was found that facilities with more doctors and drugs or facilities that were in better state were less likely to be bypassed. The lower level facilities are generally ill-equipped and do not render specialist services (GHS, 2008). The higher level facilities were found to be more equipped in terms of facilities and staff than the lower level facilities. Figure 4.1 below shows the type of facilities most bypassed by patients.

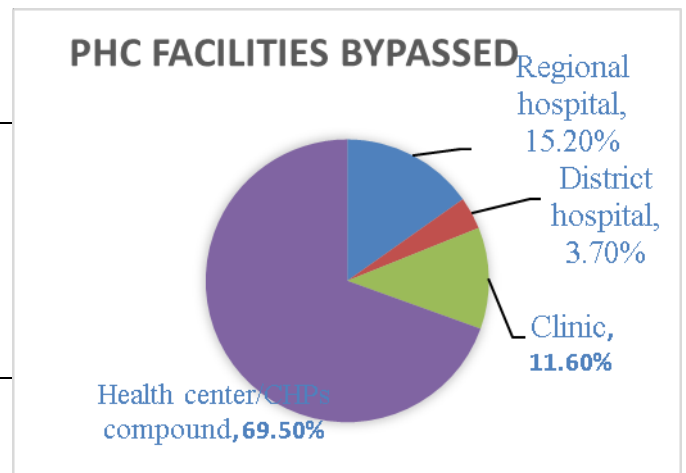


Figure 4.1 PHC Facilities bypassed

C. Reasons for bypassing PHC facilities.

Unavailability of drugs is the major reason for bypassing of PHC facilities in the Wa Municipality. 48.8% of the patients who bypassed their nearest facility did so because of unavailability of drugs. 24.4%, 1.2%, 9.4%, 4.4%, 0.6% and 11.12% of patients who bypassed did so because of unfriendly attitude of staff, PHC facilities did not treat the kind of illness, incompetency of the provider, long waiting time, old equipment at the PHC facilities and low quality of services at the PHC facility respectively. This results confirms the study by Kahabuka et al. (2011) and Akin & Hutchinson (1999) that most people bypass their nearest facilities due to lack of drugs. Figure 4.2 illustrates the reasons for bypassing PHC facilities.

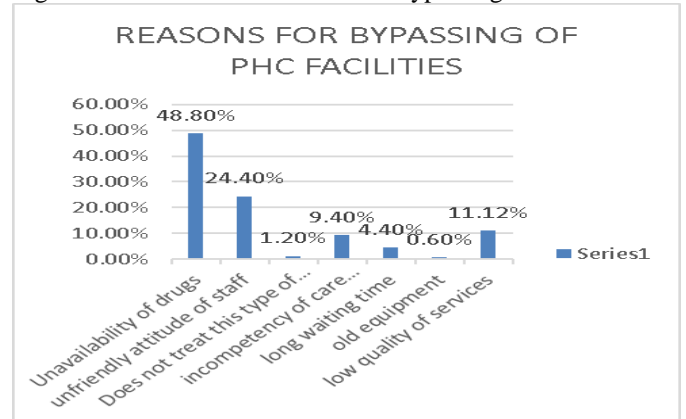


Figure 4.2 Reasons for bypassing of PHC facilities.

D. Bypassing and type of health condition

It was found out that majority of patients who bypassed their nearest PHC facilities bypassed for uncomplicated health conditions such as malaria and anti-natal healthcare. 41 patients representing 29.7% of the patients who bypassed were suffering from malaria. Other patients who bypassed their nearest PHC facilities were seeking anti-natal healthcare and other services such as wound dressing, diarrhea, cough, stomach pain and others. This shows that, patients who bypassed were less likely to be suffering from complicated illnesses than those who did not bypass. This is intuitive in that often patients who are suffering from complicated illnesses are in need of prompt treatment that only more proximate facilities can provide. However, there could be a

possibility that the nearest facilities may not always have the necessary life-saving equipment and professional staff who can handle delicate illnesses adequately. (Quansah 2001; Quansah *et al.*, 2004). Bypassing PHC facilities for maternal healthcare services such giving birth could result to infant and maternal mortality due to the delay involved in bypassing nearest PHC facilities. Figure 4.3 below illustrates the type of health condition patients who bypassed were suffering from.

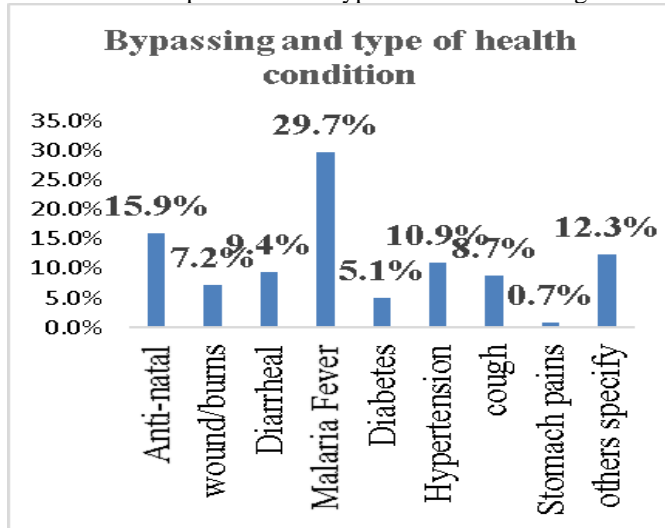


Figure 4.3 Bypassing and type of health condition

E. Socio-economic factors influencing bypassing of PHC facilities in the Wa Municipality

Results from the study shows that there is a significant association between age, religion, ethnicity, employment status, occupation and level of income of the patients and bypassing. It was realised that, patients who fall within the younger age group (18-34), 84% of them bypassed their nearest PHC facilities whilst 16% did not bypass their nearest PHC facility. Thus patients who fall within the younger age group are more likely to bypass than those in the middle and older age groups. Majority of patients who bypassed their nearest facilities were Muslims. Among the Muslims, 83.8% bypassed their nearest PHC facility whilst 16% did not bypass their nearest PHC facility. This shows that Muslims are more likely to bypass than other religious groups. Majority of patients who bypassed their nearest PHC facilities are Wala. 83.5% of Wala bypassed their nearest PHC facilities whilst 16.5% did not bypass. Among the Dagaaba ethnic group, 66.6% bypassed their nearest PHC facility whilst 33.4% of Dagaaba did not bypass. Majority of patients who bypassed were gainfully employed. 56.5% of patient who were employed bypassed their nearest PHC facility whilst 43.5% did not bypass their nearest PHC facility. Among the unemployed patients, 93.9% bypassed their nearest PHC facility whilst 6.1% did not bypass. Majority of patients who bypassed the PHC facilities closest to them earn GHS 500 and below. Among this group of patients, 74.8% of them bypassed their nearest PHC facility whilst 25.2% did not bypass.

The association between PHC facility bypassing and sex of respondent, level of education attained and ownership of means of transport were statistically insignificant as they had a P-value of 0.295, 0.386 and 0.463 respectively. The results from this research are in line with study results from previous studies by Akin & Hutchinson, (1999), Bronstein & Morrissey, (1991), Goodman *et al*, (2008), Basu (2005) and Radcliff *et al* (2015).

Age, income level and employment status are socio-economic factors that are significantly associated with bypassing of PHC facilities in the Wa municipality. However it was found that unlike the study by Ona *et al*, (2016), employment status of the patients had a strong association with the patients bypassing behaviour.

Also, unlike previous studies in low and middle income countries which demonstrated that educated individuals are more likely to bypass facilities (Akin & Hutchinson 1999), this study did not find any association between educational attainment and bypassing. 68.9% of the study sample population attained secondary education or higher, which suggest that the less educated were not greater and therefore, the effect of education wasn't underestimated in our study. There was no significant association between bypassing of PHC facilities and ownership of means of transport as suggested by Basu, 2005. This goes on to suggest that patients are willing to spend on transportation in order to seek healthcare from facilities they perceive to be well equipped and deliver better services.

The study also adds to knowledge by identifying other socio-economic factors such age, religion and ethnicity that influence bypassing of PHC facilities. This implies that the mere availability of health facilities proximate to patients does not guarantee the utilization of the facility by patients. Other key socio-economic factors such as age, income level, religion, ethnicity, occupation and employment status of patients great influence the utilization of the PHC facilities hence they should not be overlooked when developing health policies. The fact that majority of people who bypassed the closest PHC facilities to them earn Ghs 500 and below could imply that these patients are spending a greater part of their income on healthcare. This could possibly contribute to catastrophic expenditure by patients. Table 4.2 below shows the socio-economic variables and how their degree of influence on bypassing of PHC facilities in the Wa Municipality.

TABLE 4.2 SOCIO-ECONOMIC FACTORS INFLUENCING BYPASSING OF PHC FACILITIES IN THE WA MUNICIPALITY

Variables	Categories	Bypass	Not	Chi-square	P-value
		ed	bypasse		
		FRE (%)	d FRE (%)		
Sex	Male	90 (67.7%)	43 (32.3)	1.09	0.29
	Female	74 (74%)	26 (26%)		
Age	(18-34) Younger	68 (84%)	21 (16%)	33.51	0.00
	(35-49) Middle	66 (70%)	28 (30%)		
	(50-60+) Older	30 (60%)	20 (40%)		
Religion	Christian	66 (56.9%)	50 (43.1%)	20.29	0.00
	Others	98 (83.8%)	19 (16.2%)		

Ethnicity	Wala	66 (83.5%)	13 (16.5%)	33.99	0.00
	Dagaabas	60 (66.6%)	30 (33.4%)		
	Others	38 (59.4%)	26 (40.6%)		
Educationa l status	Non	25 (67.6%)	12 (32.4%)	7.42	0.38
	Basic	29 (82.9%)	6 (17.1%)		
	Secondary	42 (68.9%)	19 (31.1%)		
	Tertiary	68 (68%)	32 (32%)		
Employme nt status	Employed	133 (56.5%)	67 (43.5%)	10.23	.001
	Unemployed	31 (93.9%)	2 (6.1%)		
Occupatio n	Informal	97 (58.9%)	34 (51.4%)	32.26	0.00
	Formal	55 (41.1%)	32 (48.6%)		
Income level	GHS500 and below	89 (74.8%)	30 (25.2%)	21.09	0.02
	GHS501 – 1000	43 (69.4%)	19 (30.6%)		
	GHS1001 and above	32 (61.5%)	20 (38.5%)		
	Ownership	101(68.7%)	46 (31.3%)	0.53	0.46
Yes	63 (73.3%)	23 (26.7%)			
No					
Means of transport					

F. Health system factors influencing bypassing of PHC facilities.

1) Lack of drugs

The problem of lack of drugs at PHC facilities is a major factor influencing the bypassing of primary healthcare providers in the Wa municipality. All the in-charge of the five PHC facilities that were interviewed raised serious concern about unavailability of drugs for treating patients and as a result, the patient bypass their facilities with the perception that the higher level facilities will give the needed services. They attributed the lack of drugs to the inefficiencies of the national health insurance scheme.

“if we diagnose patients of illness and don’t have drugs for them, tomorrow he/she won’t come again because there are no drugs... When we request for ten boxes of paracetamol at times, you are given only one.... Why should the patients waste their time and come here and not get the needed treatment? Tomorrow he/she won’t come again..... (In-charge of the PHC facility)”

As a result of lack of drugs, some PHC facilities result to giving the patients part treatment and ask the patients to buy the rest of the medication elsewhere.

“Because we don’t have enough drugs to fully treat patients, we often have to manage the drugs we have. We have to try as much as possible to give the patient something and ask him/her to buy the rest outside because the rest of the patients won’t get some if we give all to one patient. As to whether the patient buys the rest... we can’t best tell” (In-charge of the PHC facility)”

2) Attitude of staff

Attitude of health workers towards patients is a key determinant of the patient’s satisfaction with the healthcare providers. It was mentioned from the interview with the PHC facilities that, patients often complain about the behaviour of some of the health staff towards them. At times it results to exchange of unpleasant words which prevents the patients from seeking care from the PHC facility again.

“The attitude of some health workers towards patients is very bad...!! Like my formal community health nurse, there was a language barrier between her and the patients because she couldn’t speak Wa... and here too if you start speaking English with the locals they feel you are trying to intimidate them... sometimes the community health nurse even gets angry and tells the patients not to come here again.... Finally I had to call for her transfer” (In-charge of a PHC facility)”

3) Lack of diagnostic facilities and equipment

Lack of diagnostic facilities and equipment is another factor that is perceived by health staffs to have great influence on the bypassing behaviour of patients in the Wa municipality. The facilities interviewed lamented about the lack of basic diagnostic equipment such as the thermometer, scale and BP apparatus etc. The absence of these equipment makes patient rate services received at the PHC facilities as low quality services.

“When patients come to the facility, the first treatment is to take their vital signs. Without the necessary equipment, we are unable to do that. No patient will want to come to a facility where he/she cannot be properly diagnosed and treated..... they will surely leave to a different facility with better and sophisticated apparatus because they will get better treatment there... if we had our own diagnostic facility it would have been a lot more easier for the patients” (Incharge of a PHC facility)”

As a result of lack of equipment for diagnosis, one in-charge reported that their facility always referred patients to a private medical lab for diagnostic services. He said the patients don’t often come back.

“When we want to be really sure of the illness we are treating, a lab examination is always required especially when dealing with malaria cases, which of course is the most reported case. We always refer our patients to Kaara diagnostic center which is a private facility. Most often when you ask patients to do a lab test and come back with the result, they often don’t come back again.... if we had our own

diagnostic facility it would have been a lot more easier for the patients and for us....” (In-charge of a PHC facility)

The lack of equipment and facilities at some of the PHC facilities prevents them from rendering services that their staff can effectively deliver. This makes their staff redundant and underemployed. Due to their inability to render their mandatory services, patients bypass their facility to other facilities which can provide such services.

“We are supposed to perform deliveries here, but because we don’t have a delivery bed and the needed apparatus, our midwife cannot perform deliveries.... Because of this, we don’t perform deliveries here although we have a trained midwife... pregnant women will surely bypass this facility because the services they required cannot be provided”. (In-charge of a PHC facility)

4) Over crowding

Overcrowding at some of the PHC facilities influences patient’s bypass behavior. On some particular days such as Mondays and Saturdays, the number of patients who report to the PHC facilities are relatively high compared to other days. This incidence of overcrowding is also as a result of increase in population in the catchment areas of the PHC facilities.

“During the rainy season like this time, we usually experience an increase in the number of patients who report at the facility. Majority of this patients usually come for malaria treatment and because they are farming, they also come with skin rushes or body pains. When some patients come and they see that the number of people seeking healthcare are many, they just get on their bikes and leave....,” (In-charge of a PHC facility)

5) Poor access road

Good access road is an enabling factor for seeking healthcare services at a facility nearer to patients. Though the PHC facility is nearer to patients, poor access roads makes them inaccessible by means of transport such as car and tricycles. The distance is shorter but the time taken to get to the facilities is usually longer.

“Our road is very bad... Imagine transporting a pregnant woman to this facility for child birth...., when it rains this facility is usually cut off from the main road... We have written to the Municipal Assembly but they have not come to our aid yet...., because the road is not good the patient will definitely prefer to go to UDS hospital or to the regional hospital....,” (In-charge of a PHC facility)

The results from this study on the health system factors influencing bypassing is to a large extent in line with the study by Kahabuka et al., 2011; Kanyora & Njogu, 2013 as they both results present lack of drugs, poor attitude of staff, lack of diagnostic facilities, overcrowding and poor access roads as the health system factors influencing bypassing of PHC facilities. This study however, did not see lack of skilled staff and overall poor services at the PHC facilities as factors influencing bypassing of PHC facilities as proposed by Kahabuka et al., 2011; Kanyora & Njogu, 2013.

G. Socio-cultural factors influencing bypassing

1) Social relation

Patients who bypassed the closest PHC facility did so because the facility they were seeking treatment was recommended by a friend or family relation, or they knew someone working at the higher level facility.

“I used to go to the CHPS compound around my area. But the quality of service was generally poor. When I fell sick this time round, one of my church members who came to visit me recommended that I should come to this hospital. She has been here before and she said they treated her well. If not for her advice I wouldn’t have come here...”,(female patient receiving treatment from the UDS hospital)

Some patient who bypassed their nearest PHC facilities did so because they knew a health worker at the higher level facility. They believe that, because they know the health workers, they will receive quality treatment and also skip the bureaucratic procedures before receiving treatment.

“One of my high school mates is a nurse here.... I got to know she works here when I came here the last time to receive treatment. She helped in getting my folder quickly and I was able to receive treatment in time.... When my little girl fell sick, I gave my friend a call and she said I should come....,” (A male, Regional hospital)

2) Social status

Social status brings some form of high self-esteem to people within societies especially the rich and the highly educated. This self-esteem influences their health seeking behaviour and for that reason they feel they will lose their respect if they receive healthcare from their nearest PHC facilities. This therefore drives people with high social status in societies to bypass their PHC facilities to higher level and private healthcare facilities.

“Some people such as the highly educated and affluent, do not receive healthcare from their nearest PHC facilities because of their social status. Some Alhajis and rich business men do not seek healthcare from their nearest PHC facilities because they don’t want to be seen as receiving cheap healthcare from these PHC facilities and as a result they prefer to go to higher level facilities especially to private facilities..” (Patient, Islamic hospital)

The results from this study on the socio-cultural factors influencing bypassing of PHC facilities are not in line with the results from the literature review which identified race and inferiority as the socio-cultural factors influencing health seeking behaviour (Bailey, 1987). This presents social relations, intra-ethnic conflict, social status and religion as the socio-cultural factors influencing bypassing of PHC facilities.

V. CONCLUSION

Bypassing of PHC facilities is a health seeking behaviour which suggests patients quest for health services they perceive to be of better quality and the power of patients in making health decisions and hence the need to always involve them in the development of health policies. It also indicates the inefficiencies in the health system policies such as the NHIS and the referral policy.

This study has shown that a significant number of patients who seek medical care at the higher level facilities bypass

lower level facilities. It is significant to note that, some patients also bypassed higher level facilities to other higher level facilities. Majority of patients bypass their nearest facilities to seek healthcare for uncomplicated health conditions which could have been treated at the lower level facilities. This shows the lack of confidence in the lower level facilities and the patient's willingness to travel further away to receive the best possible healthcare. Among the major factors influencing bypassing, the health system issues are the most pressing factors requiring agent attention from stakeholders in the health sector. Unavailability of drugs, lack of diagnostic facilities and unpleasant attitude of staff puts the patients in a tight spot to bypass. Also, in accessing the socio-cultural factors that influence the bypassing behaviour of patients, it has been realized that Social network was the main factor that influenced the bypassing behaviour of patients in the municipality followed by Believe systems/perception, Social status, Religion and Ethnicity respectively.

VI. RECOMMENDATION

The ministry of health in collaboration with other relevant stakeholders should organize trainings on patient-staff relationship for the health workers in the municipality. Efforts should be made by the Ministry of Health and the National Health Insurance Authority to pay off their debt to suppliers of medicine. The NHI policy should be reviewed by the government to ensure that patients bear half the cost of treatment. This will reduce the financial burden on the NHIS.

To prevent from bypassing health care facilities near them, the government through the ministry of health in collaboration with the municipal assembly should equip the PHC facilities by providing them with deliverables and relevant equipment to improve diagnosis, treatment and monitoring of the patients' illness as well as complications associated with the chronic illnesses thus minimize the logistic challenges the PHC facilities are experiencing.

Finally, the Ministry of Health in collaboration with the Municipal Assembly and the Information Service Department should undertake a thorough sensitization exercise on the importance of patronizing PHC services.

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