### **Original Research Article**

## •

# Factors influencing patient satisfaction with waiting time: assessment of out patients' sociodemographic characteristics.

ABSTRACT (ARIAL, BOLD, 11 FONT, LEFT ALIGNED, CAPS)

**Aims:** The study was structured to determine socio-demographic characteristics that influence clients' satisfaction on waiting time for health service delivery at the Out-patient Department.

**Methods:** The study was a cross-sectional descriptive study among clients who attended Out-Patient Departments for health services during the study period; November, 2015 to October, 2016. A total of one thousand (1000) clients made of 404 males and 596 females participated in the study. The data was collected using a questionnaire. The literates were given the questionnaire to fill while it was translated to the illiterates and responses written into the questionnaire. Questionnaires were collected same day. Crosstabulation of satisfaction with time spent and socio-demographic characteristics with chi square test was performed.

**Result**: The result shows that age, educational level and occupation of clients have significant influence on the satisfaction with the time clients spend at the hospital. The average time spent at the Out-Patient Departments was between 1-4 hours to receive health services. Clients did not meet their expectation of time spent at the Out-Patient Departments.

**Conclusion:** Clients' satisfaction with time spent at the Out-Patient Departments was influenced by the age, educational level and occupation of the clients. Clients within the ages of 20 to 49 years were more dissatisfied with time spent than the teenagers and elderly.

Keywords: [Clients' Satisfaction; Out-Patient Department; Waiting time; socio-demographic characteristics }

#### 1. INTRODUCTION

 The Out-Patient Departments (OPDs) are often one of the first points of contact between patients and hospital. It is recognized as the face of any hospital. It often influences patients' sensitivity towards the hospital as it is the first point of call [1]. The amount of time a patient spends at the OPD has often been used as a measure of patient satisfaction with the service being provided [2]. A patient's experience of waiting can radically influence his/her perceptions of service quality as well as the utilization of health care services [3]. Thus, patients perceive long waiting times as barriers to actually obtaining services [4]. It is difficult to sell services if clients who are the customers are dissatisfied with the waiting time which is the length of time from when the patient entered the outpatient clinic to the time the patient actually leaves the OPD [5, 6].

Patient's satisfaction can be improved when health workers meet their expectations and decrease the total time spent in a clinic [7]. Waiting time is one of the most noticeable signs of good health care service and is often used as a key performance indicator of health performance especially for out patients' clinics. Long waiting time by OPD patients in Ghana was a big challenge at hospitals. This situation sometimes turns visible when the patient get agitated and shouts at the staff for the delay in the OPD procedures. Some patients arrived with pain and grief and ended up being delayed which

often led to worsening conditions of the patients. An average of 95 minutes was reported in Nakawa Division Kampala District for new patients waiting time at the facility [2]. This had created patient's dissatisfaction and led to some patients going back home not attended to. The Institute of Medicine (IOM) recommends that, at least 90% of patients should be seen within 30 minutes of their scheduled appointment [1]. This is however, not the case in most developing countries, as several studies have shown that patients spend 2-4 hours in the outpatient departments before seeing a doctor. This problem had led to patients' conditions worsening sometimes leading to death. In Ghana, concerns have been raised about waiting times being long for outpatient health care delivery. Waiting times for seeking treatment at the hospitals are reported to be high in Ghana, especially in public hospitals and private hospitals accredited with the National Health Insurance Scheme. It has been established [2] that consulting a doctor takes an average of four hours, and costs eight times more than selfmedication in Ghana. In spite of the fact that there are several complaints from clients/patients regarding the waiting time to access health services at OPD, a review of literature showed that no study has been conducted in Ghana to examine the socio-demographic characteristics influencing clients' satisfaction with waiting time for OPD services. Knowing the socio-demographic characteristics influencing clients' satisfaction or dissatisfaction of OPD services will help healthcare managers to address clients' dissatisfaction of health services in healthcare institutions. The objectives of this study were to determine the socio-demographic characteristics that influence clients' satisfaction and the average time spend at the OPDs of hospitals in Ghana.

#### 2. MATERIAL AND METHODS

The study design was a descriptive cross-sectional study that explored the patients' satisfaction on waiting time to receive outpatient department health care. The study was conducted from November, 2016 to October, 2017 at the OPDs of eleven hospitals in six regions of Ghana. The study sample included patients who utilized health services at the OPD clinics of the selected hospitals and were available at the time of data collection. A simple random sampling was applied for the selection of the regions as well as the eleven hospitals. In each hospital, a convenience sampling technique was used to sample a minimum of 60 clients to a maximum of 100 clients. In all, 1000 clients were interviewed. Interviews with the patients were guided by a structured questionnaire that was designed by the authors under the guidance of peer review committee and were intended to obtain information about waiting time and patients' satisfaction dimensions with it. Prior to the actual data collection, the questionnaire was pilot tested and modification was made as necessary. An interviewer was sent to each of the selected hospitals. Series of meetings were held with interviewers from construction of the items to modification to ensure that they had a clear understanding and unbiased approach to the data collection process.

- The questionnaire was structured in English and the translation to the local language, Twi was practiced by all the interviewers to be translated to those who could not read and write.
- Ethical approval was sought and permission sought from the hospital authorities. The permission of the various heads of the outpatient departments was also sought while informed verbal consent of the patients was obtained and each patient enlisted was given the option to opt out when necessary. The patients were assured of confidentiality of the information collected and that information collected would not affect the care they would receive. They were told that participation to the study was voluntary.
  - All data were analysed by using Statistical Package for Social Sciences (SPSS version 20). Cross tabulation was done on the socio-demographic characteristics with time spent in the OPDs and performed Chi-square test to identify their relationship with satisfaction level. The significance level of 0.05 was adopted for the statistical tests performed on this study.

#### 3. RESULTS AND DISCUSSION

Table 1 indicates the background data of respondents and their satisfaction with time spent in the OPD to receive health services. Majority (29.2%) of the clients attending to the hospitals were within the age range of 20 - 29 years. There was a significant difference (p < 0.05) between the age ranges and satisfaction with the time spent in the OPD. The age range, 20 - 29 years were the most dissatisfied (37.3%) with the time spent at the OPD. Majority (59.6%) of the clients were females and

Christians formed 73.7% of the clients seeking health services in the OPD. There was however no significant association between gender and satisfaction with time spent in the OPD. Majority (32.2%) of clients had their highest education being basic education (primary and Junior High School). There is significant difference (p = 0.000) between the level of education of clients with satisfaction with time spent in the hospital OPD. Majority (32.2%) of the clients were self-employed (tailoring/seamstress, traders and artisans), 12.1% farmers and 12.4% unemployed. On satisfaction with time spent in the hospital, there was significant difference (p = 0.001) among the occupational distributions of respondents. Table 1 also showed that as high as 81.2% of the clients held valid national health insurance cards to access health services in Ghana. There was however no significance difference between NHIS cards holder and the non-NHIS card holders in terms of the satisfaction with the time spent in the OPD for health services.

Table 1: Socio-demographic characteristics of clients and their satisfaction with time (n= 1000)

Variables	Patients (%)	Satisfaction with time (n=		P Value
		Satisfie	Unsatisfie	
		d	d	
Age (In years)				
15 – 19	108 (10.8)	75	33	
20 – 29	292 (29.2)	183	109	
30 – 39	229 (22.9)	150	79	0.035
40 – 49	173 (17.3)	113	60	
50 – 59	110 (11.0)	86	24	
60+	88 (8.8)	66	22	
Gender of Respondents				
Male	404 (40.4)	261	143	0.135
Female	596 (59.6)	412	184	
Marital Status				
Single	345 (34.5)	222	123	
Married	529 (52.9)	363	166	0.494
Divorced/Separated	62 (6.2)	42	20	
Widow/widower	64 (6.4)	46	18	
Religious affiliation of respon	dents			
Christians	737 (73.7)	493	244	
Moslems	237 (23.7)	163	74	0.846
African traditional believers	26 (2.6)	17	9	
Educational level of respondents	3			
No formal education	122 (12.2)	85	37 (30%)	
Basic education (primary/JHS)	322 (32.2)	237	85 (26%)	0.000
Secondary education	258 (25.8)	183	75(29%)	

Tertiary	education	298 (29.8)	168	130	
(college/u	university)			(44%	
				)	

Table 1 (Continued): Socio-demographic characteristics of patients and their satisfaction with time (n= 1000)

Variables Patients (%) Satisfaction with time p Value

Satisfied Dissatisfied

Occupation of respondents				
Self-employed ( e.g.	326 (32.6)	241	85 (26%)	
traders/tailors/artisan)				
Unemployed	124 (12.4)	85	39 (31%)	0.001
Farmers	121 (12.1)	83	38 (31%)	
Students	192 (19.2)	129	63 (33%)	
Government employee	237 (23.7)	135	102	
			(43%	
			)	
NHIS Status			J.	
Valid NHIS Card	812 (81.2)	557	255	0.069
No valid NHIS card	188 (18.8)	116	72	
Type of visit				
First visit	367 (36.7)	238	129	
Review	576 (57.6)	398	178	0.369
Referred	57 (5.7)	37	20	

Figure 1 showed that over half (51.9%) of the clients expected to spend a total time of 1- 2 hours though 38.1% actually spent their expected time of 1- 2 hours. As high as 23.2% of clients spent 5 - 6 hours in the OPD for health services.

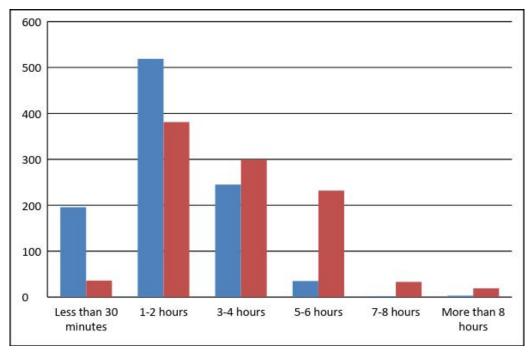


Figure 1: Comparison of expected and actual time spent at the OPD

Table 2: Satisfaction with the overall time spent in the OPD to receive services

Table 2 showed that majority, 67.3% were satisfied with the total time spent with 32.7% were dissatisfied.

Variable	Frequency	Percent
Satisfied	673	67.3
Dissatisfied	327	32.7
Total	1000	100.0

#### 

#### **DISCUSSION**

The present study found majority (29.2%) of the clients who were interviewed were within the age range of 20 - 29 years, followed by 30 - 39 years (22.9%) and the least interviewed were 60 years and above (8.8%). There was a significant difference (p < 0.05) between the age ranges of participants and their satisfaction with the time spent in the OPD. The age range, 20 - 29 years were the most dissatisfied (37.3%) with the time spent at the OPD and 30 - 39 years having 34.5% being dissatisfied. This probably could be due to the fact that, the youthful age group might be engaged at work and might consider time spent to be too long. Also, 20 - 29 years age group dissatisfaction be due to the fact that more attention was paid to the elderly by health personnel than the younger clients. This is similar to a study conducted in Ghana [8] where the elderly was more satisfied than the younger age group. Other studies [9, 10] found age to be a significant predictor of clients' satisfaction. However, there was a report in a study [11] where researchers did not find a correlation between age and patient satisfaction.

With regards to gender, this present study revealed that, majority (59.6%) of clients were females and the males were 40.4%. In a similar study [12] at Naded, India, 40.3% were males and 59.7% were females. Other studies [7, 13] showed similar trends of 54.1% women and 45.9% men and are more 54.07% female patients and 45.93% male patients respectively. This means that many women attend hospital than men. This might be due to traditional dogmas where men are supposed to exhibit their masculinity by being tolerant to pain than women. On the bases of satisfaction with time spent at the OPDs, there was no significant difference between men and women though numerically more women (69%) were satisfied than the men (65%). This agreed with study at Jordan [14] where gender

- seemed to be unimportant regarding patients' satisfaction of healthcare services. However, higher satisfaction was reported among males than females [10].
- Moreover, this present study found no significant differences between marital status as well as religious affiliations of the participants' satisfaction on the time spent in the OPD.
- 147 Concerning educational level of participants, majority (32.2%) obtained basic education (primary and Junior High School) as highest education, followed by tertiary education (29.8%), secondary school 148 149 (25.8%) and no formal education (12.2%). There was significant difference (p < 0.05) between the 150 levels of education of clients on the satisfaction with time spent at the hospital OPDs. The study 151 revealed that, clients with tertiary education were the most (44%) dissatisfied with the time spent for 152 health services at the OPD. Thus, those without or low level of education were more satisfied (74%) with the time spent than those with higher education. This agrees with study in Ghana [8] where in-153 154 patients with higher education were more dissatisfied with the services provided. This could be due to 155 the fact that more educated persons understand their rights and higher expectations for health 156 services. They might have had access to information on how long to wait at the OPD for health 157 services through reading of which those with low or no education would lack. There is nothing for the 158 illiterate to compare with and therefore satisfied with whatever time spent at the OPD. In a similar 159 study at Jordan [14] less educated patients tend to have high satisfaction and those who attained higher educational level were not satisfied with their care [15]. In addition, clients with low education 160 161 were more passive and less critical about how they were treated by health personnel [16].
  - The present study, revealed majority (32.2%) of the clients were self-employed e.g. tailoring/seamstress, traders and artisans, 12.1% farmers and 12.4% unemployed. On satisfaction with time spent in the hospital, there was significant difference (p < 0.05) among the occupational distributions of respondents. The most (43%) dissatisfied clients were the Government employees and the self-employed e. g. tailoring/seamstress, traders and artisans were the most satisfied (74%) with the time spent at the OPD. This might be due to Government employee being given time scheduled to be at work than other workers who might not be given such scheduled. For instance, farmers might not be in so much hurry. The present study revealed that as high as 81.2% of the clients held valid national health insurance cards to access health services in Ghana. There was however no significance difference between NHIS cards holder and non-NHIS card holders in terms of the satisfaction with the time spent in the OPD for health services.

#### 4. CONCLUSION

162

163

164 165

166

167

168

169

170

171

172

173

174 175

176

177

178 179

180

181

182 183

184

The most likely background characteristics that influence client with waiting at the out-patient departments are the age, educational level and occupation of the clients. In the other hand, sex, marital status, religious affiliation of respondents, possessing of National Health Insurance Scheme and type of visit had no influence on clients' satisfaction for waiting time. Majority of the clients spent an average of 2.5 hours in the hospital OPDs to access health services in Ghana. About one-third of clients visiting out-patient departments of the hospitals were not satisfied with time spent to obtain health services.

#### REFERENCES

- 185 1.Varma EL, Pandit A. Impact of OPD waiting time on patient satisfaction. International Education and Research Journal. 2016 Aug 19;2(8).
- 2. Mpaata J, Albert A. Reduction of Kiswa Hciii new OPD attendants' waiting time in Nakawa division Kampala District. Medicines and Health Service Delivery Monitoring Unit (MHSDMU) Uganda Kampala, 2012.
- 3. Afolabi MO, Erhun WO. Patients\'response to waiting time in an out-patient pharmacy in Nigeria.
  Tropical Journal of Pharmaceutical Research. 2003;2(2):207-14.
- 4. Kurata JH, Nogawa AN, Phillips DM, Hoffman S, Werblun MN. Patient and provider satisfaction with medical care. The Journal of family practice. 1992 Aug;35(2):176-9.

- 5. Mackey TA, Cole FL. Patient waiting time in a nurse managed clinic. The Internet Journal of Advanced Nursing Practice. 1997;1(1).
- 6. Dinesh TA, Singh S, Nair P, Remya TR. Reducing waiting time in outpatient services of large university teaching hospital-A six sigma approach. Management in health. 2013 Oct 4;17(1).
- 7. Ogunfowokan O, Mora M. Time, expectation and satisfaction: patients' experience at National Hospital Abuja, Nigeria. African journal of primary health care & family medicine. 2012;4(1).
- Dzomeku VM, Ba-Etilayoo A, Perekuu T, Mantey RE. In-patient satisfaction with nursing care: a case study at Kwame Nkrumah University of Science and Technology hospital. International Journal of Research in Medical and Health Sciences. 2013;2(1):19-24.
- 9. Jackson JL, Chamberlin J, Kroenke K. Predictors of patient satisfaction. Social science & medicine.
   204 2001 Feb 1;52(4):609-20. J
- 205 10. Ottosson B, Hallberg IR, Axelsson K, Loven L. Patients 'Satisfaction with Surgical Care Impaired by Cuts in Expenditure and After Interventions to Improve Nursing Care at a Surgical Clinic. International Journal for Quality in Health Care. 1997 Jan 1;9(1):43-53.
- 208 11. Wallin E, Lundgren PO, Ulander K, von Holstein CS. Does age, gender or educational background effect patient satisfaction with short stay surgery?. Ambulatory Surgery. 2000 Apr 1;8(2):79-88.
- 211 12. Aswar Nandkeshav R, Kale Kalpana M, Rewatkar Mangesh P, Jain Akanksha BB. Patients'
   212 Waiting Time and Their Satisfaction of Health Care Services Provided at Outpatient Department
   213 of Government Medical College, Nanded (Maharashtra, India).-. International Journal of Health
   214 Sciences and Research (IJHSR). 2014;4(4):21-7.
- 13. Patel R, Patel HR. A study on waiting time and out-patient satisfaction at Gujarat medical
   education research society hospital, Valsad, Gujarat, India. International Journal Of Community
   Medicine And Public Health. 2017 Feb 22;4(3):857-63.
- 218 14. Alasad JA, Ahmad MM. Patients' satisfaction with nursing care in Jordan. International Journal of Health care quality assurance. 2003 Nov 1;16(6):279-85.
- 15. Pink GH, Murray MA, McKillop I. Hospital efficiency and patient satisfaction. Health Services
   Management Research. 2003 Feb 1;16(1):24-38.
- 16. Calnan M. Examining the general practitioner's role in health education: A critical review. Family practice. 1988 Sep 1;5(3):217-23.