WOLKITE UNIVERSTY COLLEGE OF MEDICINE AND HEALTH SCIENCE

DEPARTMENT OF PUBLIC HEALTH

PATIENT SATISFACTION AND ASSOCIATED FACTORS AMONG OUT PATIENT SERVICE AT AGENA HEALTH CENTER, SOUTH ETHIOPIA

BY

1. Sedam Nasir (Bsc candidate)
2. Tsige Adhena (Bsc candidate)
3. Wondishet Wolasa (Bsc candidate)
4. Tsehayneh Abiye (Bsc candidate)

ADVISORS: 1. Abate Lete (Assistant professor)

2.Mr.Anteneh Kassa

A RESEARCH THESIS TO BE SUBMITTED TO WOLKITE UNIVERSITY COLLEGE OF MEDICINE AND HEALTH SCIENCE DEPARTMENT OF PUBLIC HEALTH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN PUBLIC HEALTH

ADVASOR:NAME SIGNTURE

1 _____ 1 _____

2._____ 2. _____

AUGUST, 2023 WOLKITE, ETHIOPIA

Declaration

We Sedam Nasir (Bsc candidate)

Tsige Adhena (Bsc candidate)

Wondishet Wolasa (Bsc candidate)

Tsehayneh Abiye (Bsc candidate), declare that submitted research paper is our orginal work and no part of it has been published any where else in the past.we take full responsibility that in future, found invalid according to the basic rules,the last decision will be of the authorities concerned.any form of plagiarism will lead to disqualification of the paper

1……..

2……

3……..

4.**……**

(SIGNATURE)

DATE:……..

ACKNOWLEDGMENT

First of all we thank God for keeping us healthy all these days and giving us potential of doing this research.

We would also like to thank Wolkite university colledge of health science department of public health for giving us this opportunity to conduct this study.

We would like to give our heart felt thanks to our advisors Mr. Abate and Mr. Anteneh Kassa for all their support through out our preparation of this research and study valuable comments in the development of this study and also to our team mates.

Table of Contents Page

LIST OF TABLES

LIST OF FIGURES

1 ACRONYMS

AHC……Agena Health Center

AOR.....Adjusted odd ratio

COR..... crude odd ratio

CI.....confidence interval

-WKU…… Wolkite University

-ART.....Anti retro viral therapy

BPR……Business Process Reengineering

-ETB.....Ethiopian Birr

GTP……Growth and transformation plan

-MDGs.....Millennium Development Goals

-OPD.....Outpatient department

-SPSS.....Statistical package for Social Sciences

-USA.....United state of America

-HMIS……..Health Management Information system

2 ABSTRACT

Back Ground: Patient satisfaction is one of the main components of quality of care which includes respect for the patient and understanding the need of patient and providing services accordingly. However these efforts are undergoing to improve the service and the needs of the people have not yet been adequately met. Thus, the level of client's Satisfaction particularly with the hospital's outpatient services is not known, and there was no any attempt so far.

Objective: The aim of this study is to assess the level of clients' satisfaction with the services of outpatient service and associated factors in the Agena Health Center, 2023.

Methods and materials: Institutional based cross-sectional study was conducted at Agena health center. The study was conducted on patient coming on a study period and systematic random sampling was done in each ward. A total of 420 patients were interviewed using semi-structured questionnaire. The administered questionnaires were checked for completeness, cleaned manually and will be entered in to SPSS for further analysis

Discussion The study identified that socio-demographic variables like Age, sex, marital status and Occupation had no any significant association with the client's satisfaction. Based on the our study finding there were good client satisfaction among clients who wait for short time were highly satisfied than who wait for long time , respected privacy, appropriate consultation room, clean waitin area, telling the client about their illness, couse, treamen, ways of prevention, and return if it gets worse, those are highly associated with patient satisfaction.

Conclusion: In this study the patient satisfaction is high compared with the previous studies conducted in Ethiopia. There was significant association of client satisfaction with waiting time, respected privacy, appropriate consultation room, clean waitin area, telling the client about their illness, couse, treamen, ways of prevention, and return if it gets worse.

Recommendation:. Health center managers and Woreda Health office needs to improve long waiting, Carry out on job training and education on health service professional behavior and ethics that encompass all service providers in the Health Centers. That can increase the service providers, respect, responsiveness and assure the way privacy and confidentiality of information of their clients will be kept and should work toward improvement of the cleanliness and comfort of waiting areas, especially service room

1: INTRODUCTION

1.1Background

Satisfaction is defined differently by different individuals as a consequence of varying backgrounds and experiences (Williams, Coyle and Healy 1998). Some believe patient or client satisfaction is a relative judgment resulting from comparing perceptions of current health status and what desired and is also "The extent of an individual's experience compared with his/her expectations or need" (Philips 2022). Some others define it as an expression of the gap between the expected and perceived characteristics of service and it is a subjective phenomenon that could be elicited by asking simply how satisfied or not patients concerning the service. Generally there is an agreement that client satisfaction is an integral component of service quality(Chimed-Ochir 2012)). Expanded definitions of health service quality typically make explicit mention of patient/client satisfaction. It comprises both cognitive and emotional facets and relates to previous experiences, expectations and social networks (Slade 2009). It is a more complicated phenomenon that results from interactions between the goals of the patients seeking health care service in each instance, the level and nature of their past experience with health service, the (Carr-Hill 1992).

Asking patients what they think about the care and treatment they have received is an important step towards improving the quality of care, and to ensure that local health service are meeting patients' needs. A useful way of doing this is by carrying out surveys of patients who have used the health service(Johnson, Johnson and Zhang 2005) .It is known fact that clients or patients visiting outpatient service are more mobile than those admitted, hence they have higher chance to go back to the community and communicate with others about their service experience.

Patient satisfaction is an important outcome measure of evaluating the extent to which the health care sector meet patients' need and expectation. More detailed information about the factor affecting satisfaction could possibly assist health care providers and planers to imptove the quality in the provision of health service.the difficulty of measuring patient satisfaction lies in the fact that satisfaction is multidimensional concept with input or determinants are not yet clearly defined. Empirical studies prevail that satisfaction is profoundly influenced by patient related factor, heath care provider characteristics, health system structure and cost.

Moreover, the Health service quality control and approval process in most countries requires that the satisfaction of clients be measured on a regular basis

Expectation about Health facility service may be influenced based on information obtained from others (Fufa and Negao 2019).

In the study done at Addis Ababa Public facility, respondents reported that they received recommendation to visit the health care facility from others(Tateke, Woldie and Ololo 2012) . It is likely that satisfied cliets recommend the service to others (Provan and Milward 2001) Therefore, assessing clients' satisfaction with the outpatient service through customer satisfaction interview questionnaire is very crucial. Also another study indicated that such a study allow service users' voice to be heard and affirm the importance of their experience for improved health care planning (Donetto, Tsianakas and Robert 2014).

On the other hand, provided that there are no such a study ever conducted in Eza Woreda; it is important to conduct this study at this crucial time for better change (development).

1.2. Statement of the problem

Patent/client satisfaction is the essential indicator that indicates the quality of health service at all level of health care facilities. Although there are no universally accepted measure of client or patient satisfaction, results from different studies are stressing that satisfaction in the health service delivery is directly related to the client/patient satisfactions(Mwanga 2013). To improve health service provided, Health sector managers should differentiate between a factor they control that is part of a wider social and political context (Oliver, Innvar et al. 2014).Today, Assessing client or patient satisfaction with the health service delivery has becomes the crucial part of management strategies for Health care delivery institutions worldwide.

It should also be stressed that Patient satisfaction measures are useful objective measures that can be used to reformulate the delivery of healthcare (Robinson, Callister et al. 2008). In fact, it has been suggested that patient satisfaction is a major quality outcome in itself (Andaleeb 2001). It is indicated that health care systems in most developing countries suffer from serious deficiencies in financial aspect, efficient utilization, equitable distribution and provision of quality good service and are poorly prepared to meet these challenges (Emanuel, Persad et al. 2020). Patients' perceptions about health care systems seem to have been largely ignored by health care managers (Sritharan and Velnampy 2011) .

Their satisfaction depends up on many factors such as: Quality of health service provided, availability of drugs, characters of health service providers, cost of health service, infrastructure of health facilities, physical comfort, and whether to respect their preferences accordingly (Ergler, Sakdapolrak et al. 2011) (14). In our country also different Health indicators (Maternal mortality ratio of 676 maternal deaths per 100,000 live births for the seven year period preceding the survey) researched by EDHS 2011 suggests that there are a lot to work on improvement of health care service delivery (Abdella 2010) . The recent studies done on utilization of health service in different part of our country are also supporting this fact by showing that utilization of services is low (not satisfactory)(Andersen 2008).

The five-year Growth and Transformation Plan (GTP) in Ethiopia aims not only to attain rapid economic growth and to be one of the middle income countries but also seeks to ensure the expansion of quality health service to attain the MDG and insure the welfare of the youth and

women. The Business Process Reengineering (BPR) effort and other quality improvement process initiatives like Balanced Score Card (BSC) being under taken by health facilities are indication of this fact(Cooper, Ezzamel and Qu 2017). People are increasingly concerned about hospital's performance because: Health centers use an increasing proportion of scarce community resources. There are increasing questions about quality and effectiveness. (Bayou 2019). However these efforts are undergoing to improve the service and, the needs of the people have not yet been adequately met. Thus, the level of client's Satisfaction particularly with the hospital's outpatient services is not known, and there was no any attempt so far.

Some medical-care satisfaction studies showed that people with poor health status had Stronger feelings in either direction and that the most satisfied groups were those with good Health or those suffering from chronic diseases.

1.3Significance of the study

The aims of this research at providing information on the assessment of clients' satisfaction with the health service delivery at Agena health center. Assessing the service users feeling and attitude towards the service being provided and identifying the existing gap is important in the improvement of the quality of health service. Improving the quality of health service also increase utilization of health service (Park, Lee et al. 2018) and may leads to creation of competitive good quality service which reduce unnecessary cost that resulted from utilization of alternative inaccessible service provided by profit making private organization. Various studies indicated that satisfied clients are more likely to utilize the service, to comply with the treatment (Oche, Raji et al. 2013) and to maintain harmonious continuing relationships with the service providers, to enjoy better medical prognosis, to have positive attitude of the organizations and to develop thrust.

Assessment of clients' satisfaction with the service provided can be used as a screening tool to identify topic of dissatisfaction (Matzler and Sauerwein 2002). Also conducting such a study

periodically at different level can be helpful for the program managers, advocators and decision and policy makers to design strategy and focus on appropriate interventions that fill identified gaps and mitigate the problem that leads to the advancement of health care units and program. The findings from this study can contribute to improvements in Health sector development planning and implementation of reform program activities that the country is undertaking. It can also be further applied by other government sectors as well as private health organizations that are interested in satisfying their clients' needs and want to increase their client flow. Nationally little was done on assessment of clients' satisfaction at health centers' outpatient department services, while it has very determinant effect to change image of the whole health center. There was no such study ever conducted on this topic and related issue at the study area.

Patient satisfaction and perceived quality service will influence utilization of services, as well as compliance with practitioner recommendations. The findings of the study in general help the health management at a higher level and in particular those looking after the health institutions in the region to understand the extent of the problem in the health centers and other similar health institutions. The study will enhance the capacity to look for possible alternative solutions to health service delivery in collaboration with the AHC. It will also contribute to increase in the knowledge and awareness of the problem areas by concerned bodies including the health center staffs.

: LITERATURE REVIEW

2.1 Overview of Patient Satisfaction

Patient/client/ satisfaction; Now a day in our country Satisfying patient or client is the primary goal of the Government's reform program including the BPR. It has been stated that the effectiveness of health care is determined, in some degree, by consumers' satisfaction with the service provided. Support for this view has been found in studies that have reported a satisfied patient is more likely to comply with the medical treatment prescribed, more likely to provide medically relevant information to the Health care service provider, and more likely to maintain utilization of the service. The logic has been extended to developing countries; patient satisfaction and perceived quality influences health service utilization and compliance with Health service providers' recommendations(Manzoor, Wei et al. 2019). Satisfaction can be

measured indirectly by asking users to rate the quality of service they have received, or report their experiences. In practical terms, approaches that focus on expectations imply that the measurement of satisfaction involves an assessment of both expectations and how experiences compare with them. This creates difficulties when expectations are imprecise or uninformed (Graham and Shier 2014).

They provide Curative care, Transfer Knowledge. Health centers provide the same types of services, but they do not provide the same quality of service. To achieve service excellence, Health centers must require continuous efforts to improve the quality of the service delivery system.

2.2 Magnitude of Outpatient Satisfaction

Studies showed that patient satisfaction is one of the outcome measures of patient care in addition mortality and morbidity and predicts treatment utilization and adherence. Patent satisfaction had been unimportant issue for health care managers and health care providers.Various dimension of patient satisfaction have been identified outpatient service, as well as from medical care to interpersonal communication.Well-recognized criteria include responsiveness, communication, attitude clinical skills, comforting skills and food service . Several factors including patient's age, educational level, health status and the severity of illness influences satisfaction on care services. The relationship between health care providers and patients (interpersonal skills) has also been reported to the most influential factor for patient satisfaction.

A study done in rural Bangladesh to assess the degree of client satisfaction and quality of health care provided, It is found that the most powerful indicator of client satisfaction is provider behavior especially respect and politeness. For patients these aspects are more important than technical competence of the provider. Furthermore; a reduction in waiting time (on average >30minutes) was more important than prolongation of quite short consultation period (on average 2min.22sec.), 75% being satisfied.

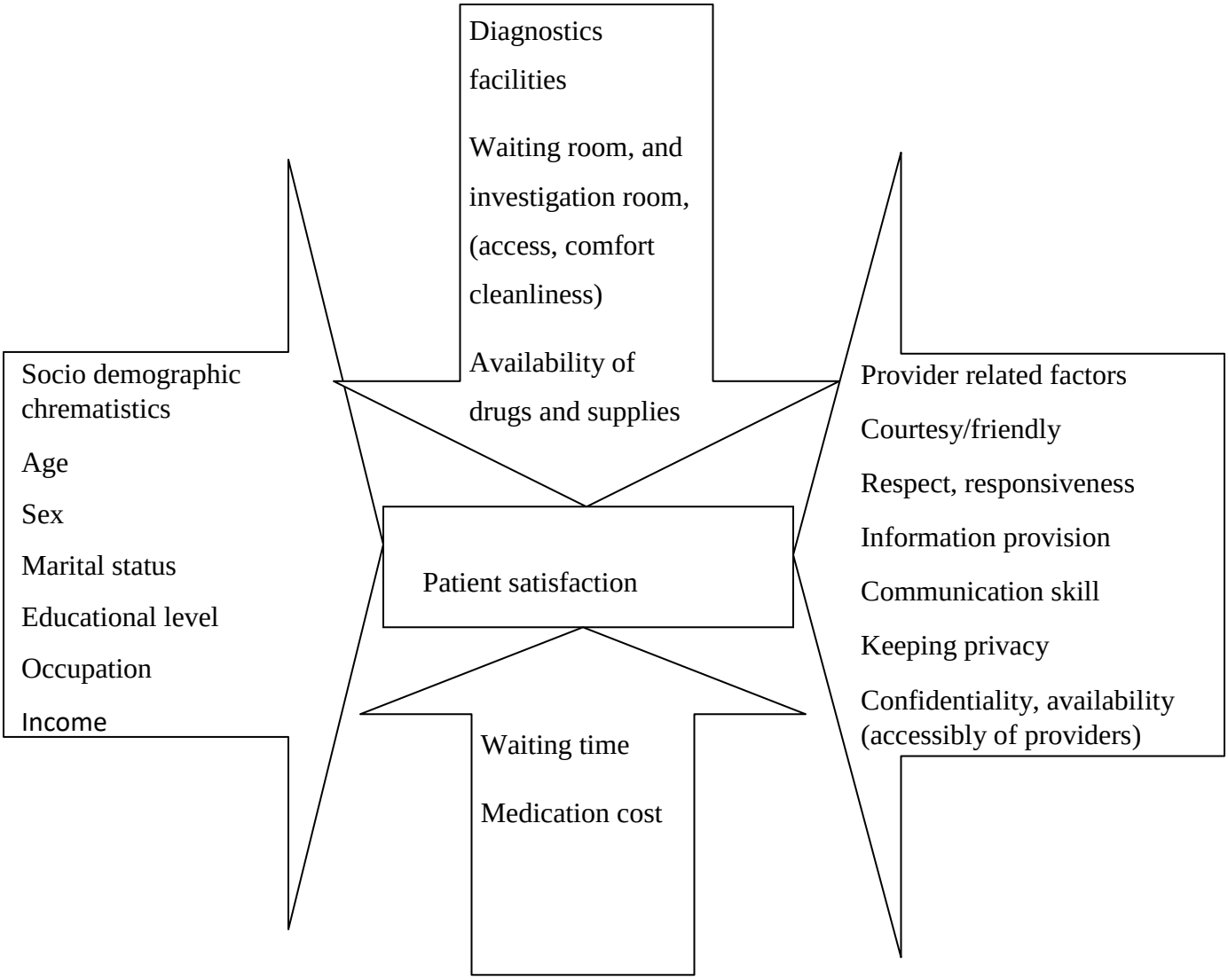
2.3 Factors Affecting Patient Satisfaction

In Ethiopia the factors related to quality in relation to clients satisfaction like waiting time in the Registration, examination rooms, laboratory procedures and availability of drugs and supplies in The Health center pharmacy, courtesy of the health professionals and provision of information by the Health professionals are some of the factors that affect the satisfaction of clients.

A study in Jimma hospital showed 57.1% level of satisfaction with outpatient health services. The most frequently faced problems affecting utilization leading to dissatisfaction were, failure to obtain prescribed medications from the hospital pharmacy, long waiting time preceding Consultation and difficulty to locate different section easily.

Therefore, patient satisfaction is considered to be a health care outcome &predictor of treatment utilization &adherence to the care & support, this study will be conducted to assess the level of satisfaction of out- patient services in AHC Gurage Zone South Ethiopia.

3. CONCEPTUAL FRAME WORK



4: OBJECTIVE

4.1. GENERAL OBJECTIVE

To assess the patient satisfaction and associated factors among out patient service of AHC, Gurage Zone, South Ethiopia 2023.

4.2. SPECIFIC OBJECTIVES

1 .To access the level of clients' satisfaction with outpatient clients of AHC

2. To identify factors associated with the client's satisfaction in outpatient department

5: METHODS AND MATERIAL

5.1. STUDY AREA AND PERIOD

Ezha Woreda is located in Gurage, SNNP, Ethiopia, at the distance of about 130 Kms from Addis Abab a.Agena health center found in Ezha Woreda. It is one of the four health centers of Ezha woreda and it has 10 catchments health post with total population of 30790. It has 33 health professionals and 15 supportive staffs. In the Woreda there is one primary Hospital, four Health Centers. The study tries to focus on one of important component of the primary Health care center.

An institutional based crosssection study design was conducted at AHC. The study was conducted from July to August 2023.The Health center delivers services such as diagnosis, delivery, treatmen, health education and laboratory investigation .

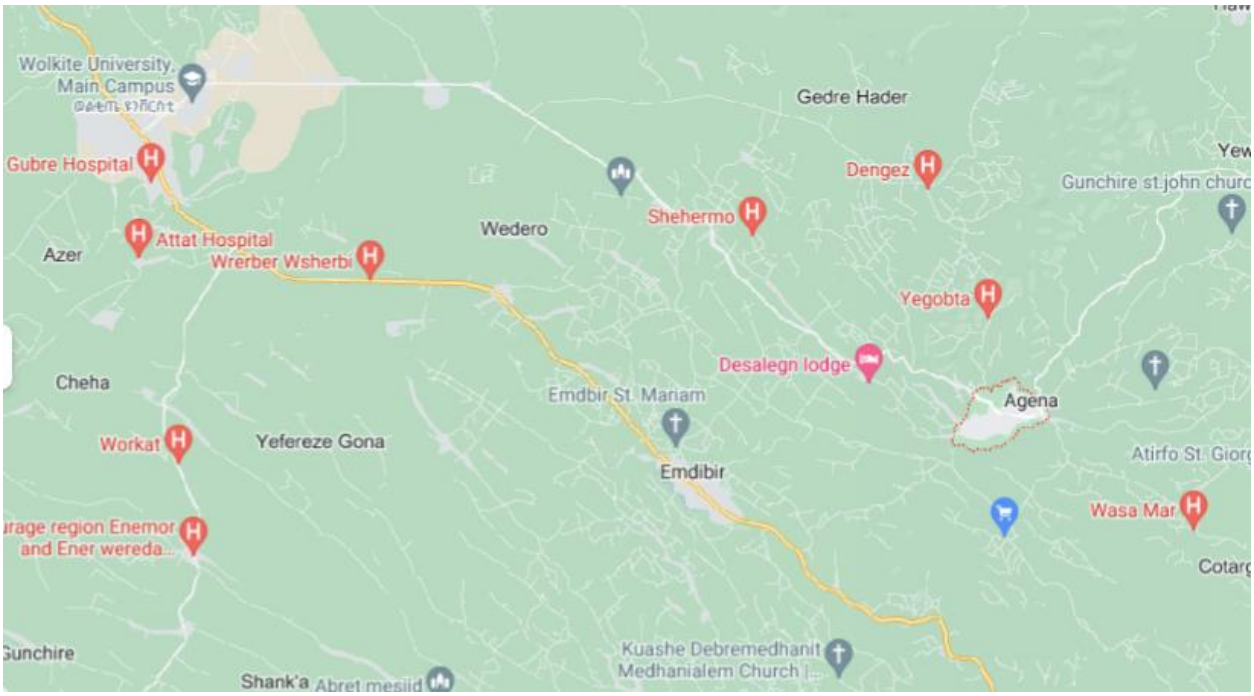


Figure 1 Map of Agena town

5.2. STUDY DESIGN

An institutional based cross-sectional study design was conducted

5.3. POPULATION

5.3.1 SOURCE POPULATION

People who came to out patient department at Agena Health health center

5.3.2 STUDY POPULATION

The study population was clients coming to the outpatient departments at Agena Health center during the study period

5.3.3 STUDY UNIT

Selected participants/clients coming to the outpatient departments

5.3.3.1. INCLUSION CRITERIA

Adult clients coming to outpatient department of AHC during the data collection

5.3.2. 2. EXCLUSION CRITERIA

Very seriously ill clients who hadn't have somebody to accompany them because of the difficulty of interviewing such cases (getting the consent, lack of tolerance of the pain or illness and etc). Children who are under 15 and who cannot give consent form.

5.4. SAMPLE SIZE

The sample size was calculated using single population proportion formula with the following assumptions; proportion 0.54(95 % confidence interval ($Z\alpha/2 = 1.96$), and 5 % margin of error.

Then; $n = \underline{z^2\ p * q\ /e^2}$

Where, z= 1.96 from the table of Z-distribution at 95% confidence interval

P (proportion) (the level of satisfaction) success rate(Zhao 2021).

q= 1-p (failure rate)

q=1-p =1-0.54 = 0.46 e = (margin of error) =5%

p=0.54

n= (1.96)2(0.54) (0.46)/ (0.05)2 =382 (We considered 10% contingency)

10% *386 = 38; 38+382 = 420

5.5. SAMPLING TECHNIQUE AND PROCEDURE

Systematic random sampling method was used and we calculated the sampling fraction or K by using the total population number that was planned may come AHC in study period divided by our sample size and the first subject or client was randomly selected and it was 1.

Total population that was planned =1300

Our sample size=420

K=1300/420=3.09~3

K=3(1, 4, 7, 10, 13….)

5.6. VARIABLES OF THE STUDY

5.6.1. DEPENDENT VARIABLE

Patient satisfaction level (satisfied, dissatisfied).

5.6.2. INDEPENDENT VARIABLES

Socio demographic factors like age, sex, marital status, educational status, occupation.

Waiting time to get Health center outpatient services, availability of drugs and service

Health center facilities: Health center's service facilities include the registration room, examination room, laboratory room, prescription of drugs and supplies (pharmacy)

Instructions given by care providers: provider told illiness, treatment,cause and prevention.

5.7. OPERATIONAL DEFINITION

Dissatisfied: one's below expectation score. Measured as patient/client satisfaction scores below 75% based on satisfaction tool measurements **(Marama, Bayu et al. 2018)**.

Satisfied: one's expectation score, described as patient/client satisfaction scores above 75% based on satisfaction tool measurements(Marama, Bayu et al. 2018)

Patient satisfaction: Patient satisfaction was defined as the patients' opinion about health care delivery Services in Agena health center. The main indicators of patients' satisfaction level used in current Research were convenience, politeness, and quality of care.

Outpatient Department: An Outpatient Department is defined as a Health center department, which is Primarily designed to accommodate the clinical consultants and the members of Their teams to provide medical consultation and primary health care services.

Waiting time: the time gap between the patient's arrival at the service delivery point and the time the patient received health service.

Waiting time to receive medication: Patient waiting time has been defined as 'the length of time from when the patient entered the pharmacy to the time the patient actually received his or her prescription and left the pharmacy

5.8. DATA COLLECTION TOOLS AND TECHNIQUES

Data was collected using structured questionnaire which was constructed by the group members. The questionnaire was first prepared in English then translated to local language (Amharic) and data was collected by face to face interviewing. The data collection will be taken place from July to August 2023. All returned questionnaire was checked for completeness and eligibility.

5.9. DATA QUALITY CONTROL

The quality of data was ensured through training of data collecter and reviewing each questionnaire daily. Daily information exchange including by telephone was a means used to correct problems during the course of the-data collection. Data consistency and completeness was made throughout the data collection, data entry and analysis.

5.10. METHOD OF DATA PROCESSING AND ANALYSIS

The data collection tool (questionnaire) was checked for completeness and data was cleaned manually and coded, entered, stored and analyzed by using SPSS version 21 computer program. Frequencies and cross tabulations was used to summarize descriptive statistics of the data.Bivariable and multivariable analysis was used primarily to check which variables have association with the dependent variable by using P value < 0.05 and confidence interval of 95%.

5.11. ETHICAL CONSIDERATION

Ethical clearance was obtained from Wolkite University College of health science and departmentof Public Health and Communication was made through formal letter obtained from

the WKU and permission letter obtained from AHC administration. After the purpose and objective of the study had been informed, verbal consent was obtained from each study participants. Participants were also informed that participation would be on voluntary basis and they could withdraw from the study at any time if they were not comfortable about the questionnaire. In order to keep confidentiality of any information provided by study subjects, the data collection procedure was anonymous. For subjects who might found to be sick during the time of data collection health care would be arranged

5.11. EXPECTED OUTCOME

This study was expected to reveal the current status and level of patient satisfaction in outpatient management of AHC in SNNP region, Guraghe zone

5.12. DISSEMINATION OF THE RESULT

The findingsof the study was forwarded to AHC and College of medicine and health science department of public health and other primary hospitals. An attempt will made to present the findings in different conferences and workshops and was sent to publication on scientific journals

6. RESULTS

6.1 Socio demographic characteristics

A total of 420 clients were included in the study where all participated in the study giving a response rate of 100%. The age group of the majority respondents' was (15-30) and their frequency was 156(37.1%). Out of 420 clients who responded 233(55.5%) were males and 187(44.5%) were females.Regarding marital status of respondents; married 292(69.5%) followed by single 125(29.8%). Based on educational status 134(31.9%) of participants were didn't attend formal education and on other hand 92(21.9%) of the respondents' were government employee.

Table 1: Socio-demographic characteristics of the respondents in Agena Health Center in 2023

VARIABLE	Frequency (n)	PERCENT (%)
Sex		
Male	233	55.5
Female	187	44.5
Age		
15-30	159	37.1
31-45	120	28.6
46-60	94	22.4
>60	50	11.9
Educational Status(n=420)		
1-no formal education	134	31.9
2-Grade 1-8	91	21.7
3-Grade 9-12	106	25.2
4-Diploma and above	89	21.2
Marital status(n=420)		
1.single	125	29.8
2.married	292	69.2
3.divorced	3	0.7
Occupation status (n=420)		
1 -Governmental employee	92	21.9
2-Merchant	82	19.5
3-Farmer	91	21.7
4- daily worker	16	3.8
5-Other(specify)	139	33.1

Monthly income(n=420)		
1)<1000	9	2.1
2)1000-2500	48	11.4
3)2500-5000	59	14
4)>5000	59	14
5)unknown	245	58.3

6.2 Institutional aspect and pattern visit of out patient satisfaction in AHC

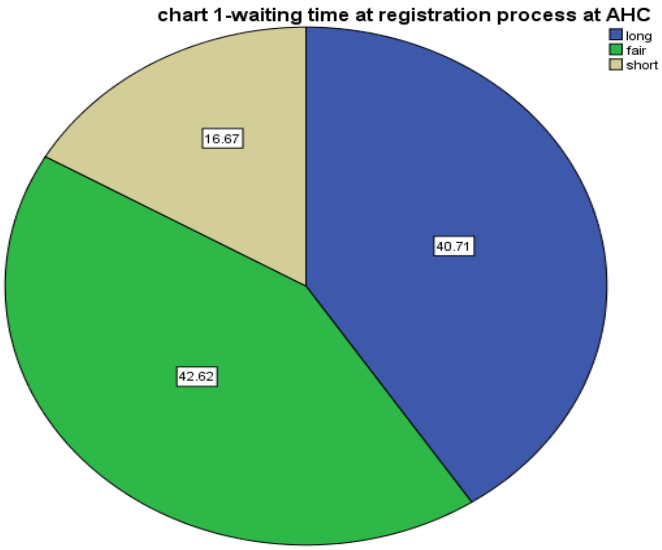


Figure 2 the frequency of clients who responded on waiting time at registration process long, fair and short in AHC in 2023

Table 2 the frequency patient on Institutional aspects and pattern visit of out patient satisfaction AHC 2023

Institutional aspects and pattern	Number	Percentage
Registration time done timely (n=420)		
Agree	269	64
Disagree	151	36
Waiting time to service provider		
<30''	180	42.9
31''-60''	140	33.3
>60''	100	23.5
Laboratory / X-ray/ultrasound ordered		
Yes	420	100
No	0	0
Lab waiting time		
Long	214	51
Short	206	49
Availability prescribed drug		

All	224	53.3
Some	192	45.7
None	4	1
Waiting time to receiving medication		
Long	193	46
Fair	160	38.1
Short	67	15.9
Type of visiting		
New	195	46.4
Repeat	225	53.6
Frequency of visit for the last 12 month		
0	195	46.4
1-4	192	45.7
>4	33	7.9
Knowing service provider		

Very well	72	17.1
Well	106	25.2
Know little bit	96	22.9
Not at all	146	34.8
Privacy of consultation room appropriate		
Yes	355	84.5
No	65	15.5
Privacy respected during consultation		
Yes	349	83.1
No	71	16.9
Clean waiting area		
Yes	344	81.9
No	76	18.1
Clean consultation room		

Yes	356	84.8
No	64	15.2
Interviewing language you understand		
Yes	384	91.4
No	36	8.6

Table 3; Patient interaction with health care provider of AHC in 2023

VARIABLE	NUMBER	PERCENT
Provider told your illness		
Yes	367	87.4
No	53	12.6
Provider told to return		
Yes	343	81.7
No	77	18.3
Provider told you about your treatment		
Yes	349	83.1
No	71	16.9
Provider told you ways of prevention for farther recurrence		
Yes	344	81.9
No	76	18.1
Consultation duration in minute		
<10	139	33.1
11-20	201	47.9
>20	80	19

Perceived Consultation duration		
Long	114	27.1
Fair	196	46.7
Short	110	26.2
Perceived empathy		
Low	127	30.2
Middle	130	31
High	163	38.8

6.3 The type of visit with client's level of satisfaction

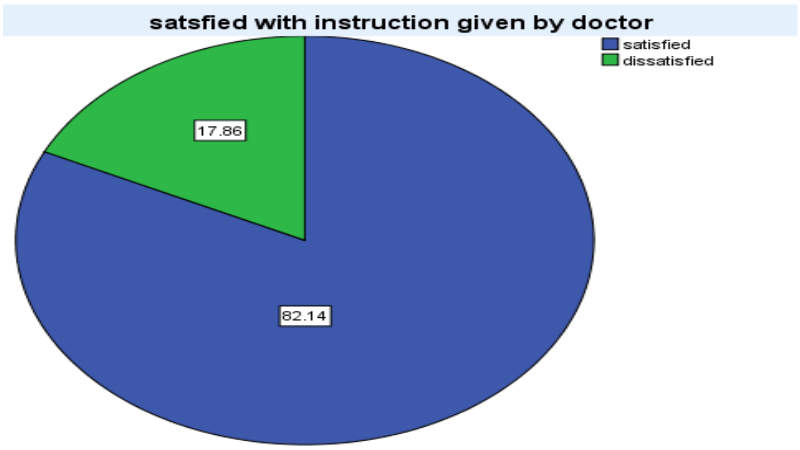


Figure 3 patient satisfactionwith instructions given by doctor in AHC 2023

Figure 4patient satsfactionwith amount of time spent in health facilityin AHC 2023

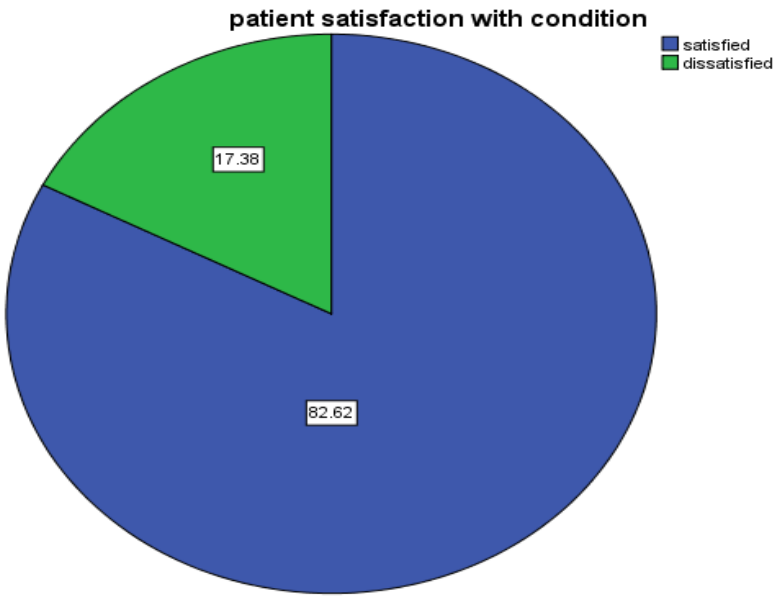


Figure 5 patient satisfaction with conditions in the health facility (privacy, cleanes, respect etc) of the consultation room in AHC 2023

6.4 Associated Factors associations with patient satisfaction

Bivariable and multivariable logistic regression analysis were done to identify predictors associated with the dependent variable. On bivariable analysis nine variables were found to be significant at p-value of 0.25.

In the multi-variable logistic regression analysis eight explanatory variables,Those patient who their privacy of consultation room was good were 5.74 times more satisfied than whom not by [AOR=5.74, 95%CI[1.69,19.51]] ,Those patient whom their weating area for service is clean were 1.83 times more satisfied than whom not[AOR=4.668, 95%CI[1.83,11.93]] , Those client whom provider told the cause of their illness were 4.97 times more satisfied than whom not[AOR=4.97,95%CI[1.88, 13.13]] ,Those client whom provider told them to return if it get worse were 12.30 times more satisfied than whom not[AOR=12.30,95%CI[4.87,31.10]],Those clients whom provider told them about prevention of illness were 4.01 times more satisfied than whom not[AOR=4.01, 95%CI[1.48,10.87]], at P-Value < 0.05 and 95% CL.

Table 4 Bi-variable and Multivariable analysis of factors associated to patient satisfaction among out patient in AHC 2023

Variable	Category	Satisfaction status		COR [CI 95%]	AOR[CI 95%]	P value
		Satisfied	Dissatisfied			
Waiting time to receive medication	Long	69	124	1		
	Fair	96	64	2.69[1.75, 4.15]	2.24[1.39, 3.62]	0.001
	Short	45	22	3.67[2.04, 6.623]	2.87[1.50, 5.50]	0.001
Privacy of consultation room	Yes	335	20	73.97[34.18, 160.11]	5.74[1.69, 19.51]	0.005
	No	12	53			
Privacy respected during consultation	Yes	334	15	99.34[44.93, 219.61]	13.35[4.02, 44.23]	0.000
	No	13	58			
Clean waiting area	Yes	321	23	26.83[14.21, 50.66]	4.66[1.826, 11.93]	0.001
	No	26	50			
Provider told cause of illiness	Yes	307	17	27.63[14.77, 52.11]	4.97[1.88, 13.13]	0.001
	No	38	58			
Provider told to return if it gets worse	Yes	327	16	6.99[32.33, 138.76]	12.306[4.87, 31.06]	0.000
	No	18	59			
Provider told you about treatment	Yes	328	21	49.16[24.60, 100.03]	5.19[1.81, 14.84]	0.002
	No	17	54			
Provider told you ways of prevention	Yes	319	25	24.53[13.13, 45.83]	4.01[1.48, 10.87]	0.006
	No	26	50			

7. DISCUSSIONS

The result of this study pointed out that overall satisfaction with the health service delivered in the outpatient department was 301(71.6 %) with CI [70.4, 72.8] This result is comparable with the result from similar study conducted at Jimma Specialized Hospital which showed 77% of overall satisfaction and far higher than 43.6% of satisfaction result of study done on Tigray Zonal Hospital (35, 36). But it is lower than 86.67% of overall satisfaction obtained from study in Thailand (Jemal, Kure et al. 2021).

The study identified that socio-demographic variables like Age, sex, marital status and Occupation had no any significant association with the client's satisfaction. Based on the our study finding there were good client satisfaction among clients who wait for short time were highly satisfied than who wait for long time , respected privacy, appropriate consultation room, clean waitin area, telling the client about their illness, couse, treamen, ways of prevention, and return if it gets worse, those are highly associated with patient satisfaction.

The result of this study further revealed that nearly quarter 65(12.5%) of respondents answered that their privacy were not kept properly due to absence of screens (curtain) or private rooms, while they were having Physical Examination by their physicians or health workers.

The study also indicated that the level of satisfaction of clients with instructions given by care provider is highest 347(82.62%), followed by conditions (privacy room, cleaness of waiting area, respect given by health staff). The highest dissatisfaction 210(50%) was with waiting time of service at out patient at the Health center. The study attempts to asses relation ship between patient satisfaction and institutional aspects and also it tried to reveal whether there is any association between socio-demografic character and other health related issues with level of satisfaction.

Across the USA and Europe, consumer satisfaction is playing an increasingly important role in quality of care reforms and health-care delivery more generally .Research on health system satisfaction, which is largely comparative, has identified ways to improve health, reduce costs and implement reform .Patient satisfaction has been given a lot of importance in recent years but still a lot more should be done in this field.

Out Patient Department is considered to be the first point of contact of Health facilities with patients that's why it has significant influence on patient satisfaction level. Health facilities are an important part of any health system. To achieve service excellence, Health facilities require continuous efforts to improve quality of the service delivery system. Besides, improving quality service is one of strategies play a significant role in increasing patient satisfaction.

In the developing world have shown a clear link between patient satisfaction and variety explanatory factors, among which service quality has been prominent.This link is also important in the health sector of Ethiopia.

The study further depicted that dissatisfaction with perceived overall service time had significant association and negative predictive effect on clients' satisfaction at outpatient services.

This variation may exist due to variability in time of study, and variability of setting. Also there are different reforms being implemented to improve service quality and to health needs of the citizens. Those improvements may reduce dissatisfaction through improvement of service time

8. Strength and limitation of the study

8.1 Strength of the study

Participation of clients was also generally satisfactory.

It is also based on updated soft wear to analyze the gathered data.

8.2 Limitations of the study

Some sort of desirability bias may not be eliminated even the survey was unknown.under or over reporting of information cannot be rule out.

It is also prone to selection bias

9. Conclusion

In this study the patient satisfaction is high compared with the previous studies conducted in Ethiopia. There was significant association of client satisfaction among clients who wait for short time, respected privacy, appropriate consultation room, clean waitin area, telling the client about their illness, couse, treatment, ways of prevention, and return if it gets worse.

10. Recommendations

- Still the Health center managers and Woreda Health office needs to improve long waiting through creation of accountability and responsibility of service providers as well as through application of better management system and sticking to reform programs like balanced score card to motivate the service provider by creating sense of competition.
- Carry out on job training and education on health service professional behavior and ethics that encompass all service providers in the Health Centers. That can increase the service providers' courtesy, respect, responsiveness and assure the way privacy and confidentiality of information of their clients will be kept.
- The Health center management bodies together with Woreda Health Office should work toward improvement of the cleanliness and comfort of waiting areas, especially service rooms
- Do more research on patient satisfaction in different health institution
- Conduct a research in Ezha Woreda which can cover all health facility
- Researchers to find out more result and reassess the factors that decreases the client satisfaction which results in decreasing the service utilization.

11.,REFERENCES

Abdella, A. (2010). "Maternal mortality trend in Ethiopia." Ethiopian Journal of Health Development **24**(1).

Andaleeb, S. S. (2001). "Service quality perceptions and patient satisfaction: a study of hospitals in a developing country." Social science & medicine **52**(9): 1359-1370.

Andersen, R. M. (2008). "National health surveys and the behavioral model of health services use." Medical care: 647-653.

Bayou, N. B. (2019). "Quality of birthing care in low income settings: the case of Ethiopia."

Carr-Hill, R. A. (1992). "The measurement of patient satisfaction." Journal of public health **14**(3): 236-249.

Chimed-Ochir, O. (2012). "Patient satisfaction and service quality perception at district hospitals in Mongolia." Ritsumeikan J Asia Pacific Studies **31**: 16-12.

Cooper, D. J., M. Ezzamel and S. Q. Qu (2017). "Popularizing a management accounting idea: The case of the balanced scorecard." Contemporary Accounting Research **34**(2): 991-1025.

Donetto, S., V. Tsianakas and G. Robert (2014). "Using Experience-based Co-design (EBCD) to improve the quality of healthcare: mapping where we are now and establishing future directions." London: King's College London: 5-7.

Emanuel, E. J., et al. (2020). Fair allocation of scarce medical resources in the time of Covid-19, Mass Medical Soc. **382:** 2049-2055.

Ergler, C. R., et al. (2011). "Entitlements to health care: why is there a preference for private facilities among poorer residents of Chennai, India?" Social science & medicine **72**(3): 327-337.

Fufa, B. D. and E. B. Negao (2019). "Satisfaction of outpatient service consumers and associated factors towards the health service given at Jimma Medical Center, South West Ethiopia." Patient related outcome measures: 347-354.

Graham, J. R. and M. L. Shier (2014). "Profession and workplace expectations of social workers: Implications for social worker subjective well-being." Journal of Social Work Practice **28**(1): 95-110.

Jemal, M., et al. (2021). "Nurse–physician communication in patient care and associated factors in public hospitals of harari regional state and dire-dawa city administration, eastern ethiopia: a multicenter-mixed methods study." Journal of Multidisciplinary Healthcare: 2315-2331.

Johnson, C. M., T. R. Johnson and J. Zhang (2005). "A user-centered framework for redesigning health care interfaces." Journal of biomedical informatics **38**(1): 75-87.

Manzoor, F., et al. (2019). "Patient satisfaction with health care services; an application of physician's behavior as a moderator." International journal of environmental research and public health **16**(18): 3318.

Marama, T., et al. (2018). "Patient satisfaction and associated factors among clients admitted to obstetrics and gynecology wards of public hospitals in Mekelle town, Ethiopia: an institution-based cross-sectional study." Obstetrics and gynecology international **2018**.

Matzler, K. and E. Sauerwein (2002). "The factor structure of customer satisfaction: An empirical test of the importance grid and the penalty-reward-contrast analysis." International journal of service industry management **13**(4): 314-332.

Mwanga, D. M. (2013). Factors affecting patient satisfaction at Kenyatta national hospital, Kenya: A Case of cancer outpatient clinic, University of Nairobi.

Oche, M., et al. (2013). "Clients' satisfaction with anti retroviral therapy services in a tertiary hospital in Sokoto, Nigeria." J AIDS HIV Res **5**(9): 328-333.

Oliver, K., et al. (2014). "A systematic review of barriers to and facilitators of the use of evidence by policymakers." BMC health services research **14**: 1-12.

Park, M., et al. (2018). "Patient-and family-centered care interventions for improving the quality of health care: A review of systematic reviews." International journal of nursing studies **87**: 69-83.

Philips, C. (2022). "Patients' Satisfaction on Quality of Primary Health Care Services in Calabar, Cross-River State, Nigeria."

Provan, K. G. and H. B. Milward (2001). "Do networks really work? A framework for evaluating public-sector organizational networks." Public administration review **61**(4): 414-423.

Robinson, J. H., et al. (2008). "Patient-centered care and adherence: Definitions and applications to improve outcomes." Journal of the American Academy of Nurse Practitioners **20**(12): 600-607.

Slade, M. (2009). Personal recovery and mental illness: A guide for mental health professionals, Cambridge University Press.

Sritharan, V. and T. Velnampy (2011). Service quality and customer satisfaction: A study of selected private hospitals in Jaffna District, Sri Lanka. Proceedings of International Conference on Business Management. India: Annamalai Nagar University.

Tateke, T., M. Woldie and S. Ololo (2012). "Determinants of patient satisfaction with outpatient health services at public and private hospitals in Addis Ababa, Ethiopia." African Journal of Primary Health Care and Family Medicine **4**(1): 1-11.

Williams, B., J. Coyle and D. Healy (1998). "The meaning of patient satisfaction: an explanation of high reported levels." Social science & medicine **47**(9): 1351-1359.

Zhao, Q. (2021). Applied Statistical Methods for High-Dimensional Generalized Linear Models, Stanford University.

9.ANEXIE

9.1English version quesionerie

9.1.1 Identification and general information

Greetings:

Dear participants

Good morning/afternoon, my name is ---------- we are working on a research study regarding ……., which is conducted by ……. we are from WKU and Department of public health and we have permission from the university and this AHC .If you would like to participate on this self-administer questionnaire. This may take 15 minutes. All the information that you are going to provide us will remain confidential and you don't need to mention your name. For this reason, we kindly request you to give us your sincere and truthful answer. All this is completely on voluntary bases and you have the right to refuse from participation. Participation or non-participation and refusal to answer questions will have no effect on your life. If you have further questions or would like to know the results of this study, please feel free to contact the principal investigators; with the following address.

Name of principal investigators:

1. Sedam Nasir (Bsc candidate)
2. Tsige Adhena (Bsc candidate)
3. Wondishet Wolasa (Bsc candidate)
4. Tsehayneh Abiye (Bsc candidate)

Consent Form

Could I have your permission to continue?

Yes 2. No, Stop

GENERAL INSTRUCTION

All questions have pre-coded response. It is therefore very important to follow the following instructions while we are interviewing respondents and recording their answers.Ask each question exactly as it is written on the questionnaire. Do not read the pre code response to respondents. Listen only to the response of respondents. Circle the response in the response column that best matches the answer of the respondent

Witness: Signature_____ Date _____ Data collector:

Name_____ Signature_____ Date_____

Result: 1. Questionnaire completed _____

Questionnaire partially completed _____

Participant refused _____

Others (please Specify) _____

Checked by Supervisor:

Name _____Supervisor's Signature _____Date _____

Section one: Socio – demographic characteristics

S.N	QUESTIONS	RESPONSE	Remark
1	Sex	1.Male 2.Female	
2	Age(in years)	_____	
3	Marital Status	1-Single 2-Married 3-Divorced 4-Widowed 5. Others(specify)	

4	Educational Status	1-No formal education 2-Grade 1-8 3-Grade 9-12 4-Diploma and above	
5	Occupation status	1-Governmental employee 2-Merchant 3-Farmer 4-daily worker 5-Other(specify)	
6	Monthly income	_____ birr	

Section two: Institutional aspect and pattern of visit

QN	Question	Response	Remark
7	Waiting time in registration process	1.long 2.fair 3.short	
8	Registration time done timely	1. Agree 2. disagree	
9	Waiting time to service provider	<30 minute 31-60 minute >60 minute	

10	Laboratory / X-ray/ultrasound ordered	yes no	
11	Laboratory/x-ray/ultrasound result waiting time	Long short	
12	Availability prescribed drug	All some none	
13	Waiting time to receiving medication	Long .fair .short	
14	Type of visiting	New Repeat/follow	
15	Frequency of visit for the last 12 month	_____ times	
16	Knowing service provider	very well well Know little bit Not at all	
17	Privacy of consultation room appropriate	Yes .no	
18	Privacy respected during consultation	Yes .no	

19	Clean waiting area	Yes no	
20	Clean consultation room	1.Yes 2.No	
21	Interviewing language you understand	Yes no	

Section three: Patient interaction with health care provider

QN	Question	Response	Remark
22	Provider told your illness	Yes no	
23	Provider told the cause of your illness	1.Yes 2.no	
24	Provider told to return if it gets worse	Yes no	
25	Provider told you about your treatment	Yes no	
26	Provider told you ways of prevention for farther recurrence	Yes no	
27	Consultation duration in minute	_____ in minutes	

28	Perceived Consultation duration	Long Fair short	
29	Perceived empathy	Low Middle high	

Section four: patient satisfaction

3 2	I am satisfied with instructions given by the doctor on investigations/prescriptions	1.Satisfied 2.Dissatisfied	
33	I am satisfied with the amount of time spent with the doctor	1.Satisfied 2.Dissatisfied	
34	I am satisfied with the condition (comfort, privacy etc.) of the consulting room	1.Satisfied 2.Dissatisfied	