

ASSESSMENT OF PATIENT SATISFACTION AND ASSOCIATED FACTORS
AMONG PATIENT ATTENDING CLINICAL LABORATORY AT WORABE
COMPREHENSIVE SPECIALIZED HOSPITAL, WORABE,ETHIOPIA



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Abbreviation and Acronyms

AIDS	Acquired Immunodeficiency Syndrome
AOR	Adjusted Odd Ratio
ART	Anti Retro viral Therapy
BSc	Bachelor of Science
COR	Crude Odd Ratio
CI	Confidence Interval
ETB	Ethiopian Birr
HIV	Human Immune deficiency syndrome
SPSS	Statistical Package for the social science
SNNPR	Southern Nation Nationality People
TAT	Turn Around Time
WHO	World Health Organization
WCSH	Worabe comprehensive specialized hospital

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ABSTRACT

Background: *laboratory testing is a powerful tool that can help identify disease, monitor diseases progression, and track the effectiveness of treatment. Clinical laboratory services are health care facilities providing a wide range of laboratory procedures which aid the physicians in carrying out the diagnosis, treatment, and management of patients. Customer satisfaction is a pillar for the effectiveness of health care services provided and for the improved patient health status. Health services are in a state of constant and rapid development in response to technological, social and economic changes. This was found to be largely influenced by growing consumer satisfaction and consciousness in health care and countries including Ethiopia, there is an information gap on Patient satisfaction of laboratory related services particularly in worabe comprehensive specialized Hospital as there was no previous study, therefore this study is intended to address the gap on the status of patient satisfaction in laboratory related services.*

Objective: *The objective of this study was to assess patient satisfaction with clinical laboratory services at worabe comprehensive specialized hospital, worabe ,Ethiopia 2023*

Method: *Institutional based cross sectional was conducted. A total of 299 pts was involved in the study using simple random sampling technique. Data were entered into using Epi data version and exported to Spss version 21 for bivariate and multivariate analysis were applied to determine level and predictor of patient satisfaction.*

RESULT: *Out of the 299 patients, the overall level of satisfaction among patients attending clinical laboratory service was 150 (50.2%) satisfied with the laboratory services given in the worabe comprehensive specialized hospital. In Likert Scale, the overall mean rate of satisfaction of patients with laboratory services was 3.7 out of the 5 points. The mean rate of satisfaction for different aspects of laboratory services ranged from 2.87 to 4.24. The highest mean rate of satisfaction were given for cleanliness of the blood drawing area and cleanliness of the hospital with mean rating of 4.24 and 4.22 respectively. Patient satisfaction was lowest with the information given before specimen collection outside laboratory room , test results received on*

time as told and completeness of information on how and when to receive laboratory result. Sex of respondent (AOR=1.623, 95%CI: 1.020-2.581) and marital status (AOR=1.653 95%CI: 1.012-2.701) was significantly associated with patient satisfaction.

Conclusion and recommendation: *The present study showed that overall level of patients' satisfaction with laboratory service in Worabe comprehensive specialized hospitals was not satisfactory. Therefore, staffs of the laboratory, laboratory heads and managers of each section should give attention to their service provision status and staff trainings should be cascaded to each laboratory personnel.*

Keywords: *patient satisfaction, clinical laboratory service: Worabe, Ethiopia*

CHAPTER ONE

1. INTRODUCTION

1.1 Background

Laboratory service in hospital play a critical role in the detection, diagnosis and treatment of disease. Clinical laboratory services help physicians gather important diagnostic information related to various ailments. Satisfaction is not a pre-existing phenomenon waiting to be measured, rather a judgment people made reflecting their experience under specific circumstances. It is also defined as the degree to which desired goals have been achieved and is meaningful output indicators to determine the success of a health care facility(1). Client satisfaction is the level of happiness that clients experience having used a service. It reflects the gap between the expected service and the experience of the service, from the client's point of view (2). Patient Satisfaction is a subjective, non-quantitative state of mind patients have about health services when their expectations have been met or exceeded (3)

Level of satisfaction is essential clinically for the patient, as satisfied patients are more likely to comply with treatment, take an active role in their own care, continue using medical care services and stay within a health provider (where there are some choices) and maintain with a specific system(4). On the other hand, clients who are not satisfied with a service may have worse outcomes than others because they miss more appointments, live against the advice or fail to follow through treatment plans.

Customer satisfaction takes a major role in improving the quality of service and serves as an input in the international organization for standardization (ISO). Laboratory procedures produce a product that is the test result for its customers. If the customers are not well served, the laboratory is not achieving its primary function (5).

Laboratory testing and services have an important role in the provision of health care and in utilization and reimbursement. When laboratory services are conducted for patients, it serves as a means of early determination for the commencement of treatment. This reduces the risk of

developing long-term complications of diseases for the index patient and also prompt treatment after diagnosis reduces further transmission of the disease to the community (6).

Several pertinent factors have been shown to influence patients' satisfaction with laboratory services including access to the laboratory, hygiene of the environment, waiting time, patient-provider communication, availability of requested tests, availability of space in laboratory, attitude, and competence of laboratory staff patients' socio-demographic characters, physical health status, patients' understanding and expectations from various health care services(7, 8). The general physical appearance of the hospital, as well as the general environment of the premises, also influences the overall satisfaction of the client.

Therefore, this study is designed to contribute an important understanding to the overall level of patient satisfaction with laboratory service and factors influencing quality laboratory service and fills the knowledge gap to improve the quality of clinical laboratory service. However, to the best of our knowledge, there is no study about level of satisfaction of patient on the services at clinical laboratory in worabe hospital. Therefore; the aim of this study is to determine the level of satisfaction of patients on the services at clinical laboratory and identify factors that affect the patients' satisfaction during service delivery.

1.2 Statement of the problem

Medical laboratories play an essential role in determining clinical decisions and providing clinicians with information that assists in the prevention, diagnosis, treatment, and management of diseases. Patient satisfaction an important and commonly used indicator for measuring the quality in health care. Patient satisfaction reflects provider's ability to successfully deliver care that meets patients' expectations and needs A survey conducted with laboratory service in university hospitals showed that the highest dissatisfaction rates were recorded for computerized test requesting and reporting turnaround times of tests, and the schedule of phlebotomy rounds (9). Another satisfaction survey conducted for clinical laboratory and phlebotomy services at a tertiary care unit level revealed that mean satisfaction scores of physicians and nurses were 58.1, while the outpatients' satisfaction score was 70.5(10).

If patients are dissatisfied with the quality of care they receive, they may not adhere to treatment regimen, or they may fail to attend. Laboratory should have a written policy focusing on customer's satisfaction, and should periodically measure and evaluate their customer's satisfaction. In most cases, surveys for laboratory service are conducted, but authorities often fail to integrate the results into the continuous quality improvement and strategic planning processes. Moreover, most of laboratory management, do not often act upon customer service feedback. This study may assist in the evaluation of health care services from patients' point of view. It also facilitates the identification of problem areas and generates ideas for resolving these problems.

Good laboratory services remains a major public health problem in sub-Saharan Africa is characterized by lack of properly designed laboratories lack of national policy and strategy for laboratory services, insufficient funding inadequately trained laboratory staff, weak laboratory infrastructure, old or inadequately serviced equipment, lack of essential reagents and consumables, and limited quality assurance and control protocols, a shortage of laboratory equipment and supplies, insufficient monitoring of the test quality, absence of effective maintenance and spare parts of laboratory equipment and the lack of close follow up, supervision of laboratory staff and government standards for the laboratory testing are among clinical laboratory factors contributing to the limited-service quality(8, 11).

A study conducted in thirty-four health institutions with laboratory service hospitals and regional laboratories in Ethiopia indicates that almost all the health institutions reported a shortage of common supplies and reagents. Common and simple tests were not even done due to severe reagent shortages. The majority of the health institutions reported problems related to maintenance. Weak referral systems and the absence of a quality assurance network were also observed(8).Such things will result in an ineffective diagnostics and inappropriate treatment which can eventually lead to increased morbidity and mortality.

As anew established health facility, hospital laboratory may face different problems including allocation of budget, immediate installation of the diagnostic machine and other else. Mean that service delivery may not as such comfortable and may not address critical test procedures for treatment and follow up of the patient.

Hence, this study will focus assessment of patient satisfaction level at worabe comprehensive specialized hospital.

1.3. Significance of the study

Medical laboratory services are essential in the diagnosis and assessment of the health of patients. The laboratory's aim is not only to provide accurate results but to do so to the right patient within a meaningful timeframe as regards clinical management, using appropriate laboratory procedures and with a respect for ethics, confidentiality and the safety of the patient.

This study aims to identify bottleneck issues for the improvement of laboratory service delivery at Worabe comprehensive specialized Hospital, which can be used as preliminary or baseline information for those who are interested to deal with the same area of study. Additionally the finding of this study, therefore, was helping to identify how much patients are satisfied with the quality of laboratory service as well as factors affecting satisfaction for appropriate action.

CHAPTER TWO

2. Literature review

2.1. Patient Satisfaction towards clinical laboratory

In developed countries, health services are in a state of constant and rapid development in response to technological and social and economic changes, both domestically and internationally. This was found to be largely influenced by growing consumer consciousness in health care and expectations for higher quality consumer-oriented services, growing awareness of the medico-legal implications of services (12). However, for developing countries, there still exists a lack of up-to-date laboratory infrastructure and competent scientists qualified to render effective services to patients(13). Thus, the problem of relying on clinical diagnosis in some African regions with a high prevalence of infectious diseases has led to misdiagnosis and consequently treatment failure or delay; this has potentially increased mortality and morbidity.

In a study conducted at King Abdullah Medical City, Makkah, Saudi Arabia 435 patients were interviewed and their mean satisfaction was 4.51 ± 0.32 out of 5. Respondents were satisfied with the Availability of laboratory tests. However, they were dissatisfied with the Explanation of the phlebotomy cautions by the phlebotomist (75.4%) (14).

A facility based cross sectional study conducted in Awi zone, Amhara region, North West Ethiopia with a 98.7 % response rate showed that Over half (52.6 %) of the patients were satisfied with the malaria diagnostic service According to the open ended responses, most of the patient was satisfied due to the use of confirmatory laboratory examination and the timeliness of the diagnosis. And other important information stated for their satisfactions were laboratory professional's respect and work ethics including the presence of health professionals in the health facility when needed. Very few respondents however, were dissatisfied because of shortage of essential materials for the diagnostic service and inconsistencies in laboratory results(15).

A cross sectional study conducted at selected government hospitals in eastern Ethiopia at Dill Chore, Jugal, Hiwot Fana and Bisidimo hospitals from 429 patients 87.6% were satisfied with the laboratory services. The lowest rate satisfaction were on cleanness of latrine to collect specimens and availability of laboratory staff on working hours respectively.

Sixteen to fifteen patients' satisfaction was different among the study hospitals. Most of the clinical services providers (80%) were also satisfied with the laboratory services.

A study conducted at Tikur Anbessa specialized hospital, Addis Ababa, Ethiopia with a response rate of 210 (100%) revealed that the overall level of patient satisfaction toward clinical laboratory services resulted in 59.7%. The Likert scale results of patient satisfaction of the laboratory services with mean rating values were arranged from 3.05 (± 1.12) to 4.12 (± 1.08) out of a possible 5 (16). Higher mean rating of satisfaction was obtained for cost of the laboratory service (4.12)

According to a study conducted with 422 patients, 255 (60.4%) were satisfied in Nekemte Referral Hospital, Oromia, Ethiopia, 75 (17.8%) were neutral and 92 (21.8%) were dissatisfied with the laboratory services given. In the Likert Scale, the overall mean rate of satisfaction of patients with laboratory services in the Nekemte referral hospital was 3.65 out of the 5 points (17).

Institutional based Study conducted on perceived patient satisfaction with in-patient services at Jimma University Specialized Hospital, Southwest Ethiopia showed that overall net patient satisfaction was 117 (61.9%) from a total of 189 patients participated (18). Moreover a similar study on HIV/AIDS patients' satisfaction on ART laboratory service in selected governmental hospitals, Sidama zone, southern Ethiopia showed that the overall HIV/AIDS patient satisfaction on ART laboratory service was 85.8% and 95.7% in Hawassa University Referral Hospital and Yirg-Alem Hospital respectively (19).

2.2. Factors Affecting Patient Satisfaction

Individual's perspectives of health services may vary and this could influence how they judge satisfaction with healthcare services they obtained. Some socio-demographic characteristics could be responsible for this such as the patient's educational status, the geographical location of patients and socioeconomic status, etc. Characteristics such as age, educational level, health status and amount of information conveyed by the health care provider are significant predictors of health care satisfaction (20).

A Tanzanian study at public and private laboratories on patient satisfaction showed, the percentage of dissatisfaction with both public and private laboratory services, ranged from 4.3% to 34.8%, with most of the variables being more than 15%. Patients who sought private laboratory services were less dissatisfied with the cleanness than those sought public laboratory service for the same services of cleanness. Patients with higher education were more likely to be dissatisfied with

privacy and waiting time in both private and public facilities. Patients with secondary education were more likely to be dissatisfied with the waiting time and result notification than those with lower education(21).

Study at Lebanese patients revealed that the majority of patients (76.34%) were dissatisfied with the quality of services delivered in the six hospitals they studied. Results did not show significant associations between patient satisfaction, the hospital's geographic location, and any of the patient's socio-demographic characteristics. Although not statistically significant, the study results supported the trend identified in the literature, namely that educational level and monthly income are inversely proportional to patient satisfaction, whereas age is directly proportional to patient satisfaction(22).

A hospital-based cross-sectional study at Debre Markos hospital patients shows that the overall level of satisfaction towards clinical laboratory services was 48.3%. Patients with no occasion of missing laboratory results had diplomas and above educational level and who reported no place in the laboratory to put personal things were significant factors (23)].

A study on HIV/AIDS patients' satisfaction on ART laboratory service at selected governmental hospital, Hawassa University Referral Hospital and Yirgalem Zonal Hospital ART laboratories southern Ethiopia shows the rate of satisfaction of patients was statistically different among the study hospitals. The Liker scale results of patient satisfaction of the laboratory services revealed that the mean rating values ranged from 3.07 (± 0.96) to 4.25 (± 0.56) out of a possible 5. While the patients were satisfied with the quality of laboratory in general and cleanliness and attractiveness of the laboratory room, they were dissatisfied with the location and cleanliness of the latrines used for specimen collection and information provided to patients during specimen collection (19).

Cross-sectional antiretroviral therapy clinics study on patients satisfaction with laboratory services at Addis Ababa hospitals with overall satisfaction of 85.5% shows overall satisfaction of clients toward ART monitoring laboratory services has statistically significant association with waiting time to get blood drawing service, availability of place in blood drawing room to put client personal things, provision of information regarding bruise due to blood draws, availability of ordered laboratory tests. Variables that have statistically significant associations were waiting time to get blood drawing service, availability of ordered laboratory tests and waiting time to get laboratory results. Clients who waited less than 30 minutes to get blood drawing services were 7.5 times more

likely to be satisfied than those who waited more than 30 minutes. Moreover, those clients who waited less than two hours to get laboratory results were five times more likely to be satisfied than those who waited more than two hours and clients who got all requested laboratory tests 2.3 times likely to be satisfied than those who did not get the information.

Conceptual framework

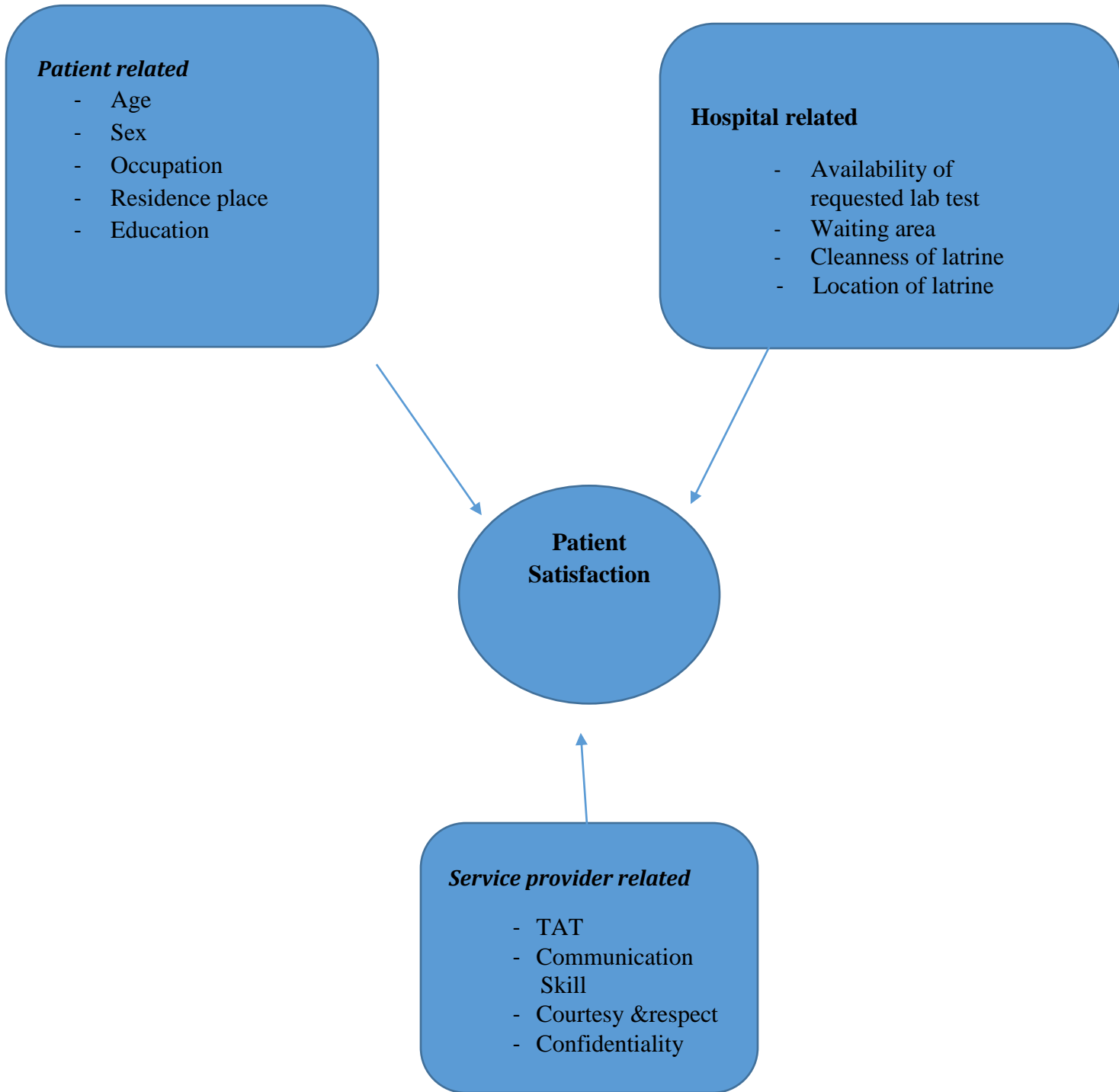


Figure 1 : Conceptual framework showing factors associated with patient satisfaction on clinical laboratory services

CHAPTER THREE

3. The Objective of the Study

3.1 General objective

- To assess patient satisfaction and associated factors among patient attending clinical laboratory at Worabe comprehensive specialized hospital, Worabe, Ethiopia, 2023.

3.2. Specific objective

- To assess patient satisfaction level on clinical laboratory service provided by Worabe comprehensive specialized Hospital Worabe, Ethiopia, 2023.
- To determine factors associated with patient's satisfaction level at Worabe Comprehensive specialized hospital Worabe, Ethiopia, 2023.

4. Materials and Methods

4.1. Study area and period

The study was conducted in Worabe comprehensive specialized hospital from May 15-June 20 2023. The hospital is found in Worabe town which is located in the SNNPR regional state, silte zone. The town is found at 170 km from Addis Ababa and 120 kms in the Southeast from Wolkite town.

According to the 2007 National Housing and Population Census, the projected population of Worabe town for the year 2014/15 was about 15,920 and the estimated number of households was 3249. According to the town administration report the town has Six Kebeles (32). The Zonal administration is bounded in the North by Guragae Zone, in the West Hadia Zone, in the South East by Alaba Special Woreda and in the East by Oromia Regional State.

Worabe comprehensive specialized hospital it provides various health services for residents. The service includes child delivery, ante-natal and postnatal care, in addition, provides anti-retroviral therapy, laboratory and Tuberculosis/HIV collaborative care services and other routine medical cares for outpatient and inpatient attendants.

4.2. Study design

Institutional based cross sectional descriptive study was conducted on patients who attend laboratories at WCSH which are the main hospitals that serve a large population in SNNPR region was used to assess patient satisfaction.

4.4 Population

4.4.1 Source population

Patients visiting laboratory of Worabe comprehensive specialized Hospital were the source of population.

4.4.2 Study population

All patients visiting the clinical laboratory of Worabe comprehensive specialized Hospital during the study period would be study population.

4.5. Variables of the study

4.5.1. Independent variable

- Socio-demographic characteristics
- Sex
- Age
- Marital status
- Level of Education
- Estimated monthly income
- Availability of requested lab test
- Waiting area
- Cleanness of latrine
- Location of latrine
- TAT
- Communication Skill
- Courtesy & respect
- Confidentiality

4.5.2. Dependent variable

- ❖ Patient satisfaction

4.6. Eligibility criteria

4.6.1. Inclusion criteria

patients aged 18 years and above or proxy respondents for children plus care givers who were receiving laboratory service during the study period were included in the survey and requested for microbiology, clinical chemistry, hematology, serology, and parasitology and urine analysis tests were recruited as respondents and were included in the study.

4.6.2. Exclusion Criteria

Those critically ill and mental disorder patients who were unable to provide a response and don't have any caretaker at the time of study were excluded.

4.7. Operational Definition

Patient satisfaction: Patient's satisfaction towards clinical laboratory service is measured by different parameters. The parameters include cleanliness of the hospital, cleanliness and comfort of waiting area, availability of laboratory staff on working hours, friendliness of staff, location of the laboratory in the hospital, latrine accessibility and availability, latrine cleanliness and comfort, the cost of laboratory service.

Satisfied: In overall satisfaction, patients are said to be satisfied when the result of their mean score is above or equal to the mean score.

Dissatisfied: In overall satisfaction patients are said to be dissatisfied when the result of their mean score is less than the mean score.

4.8. Sample size determination and sampling procedure

4.8.1. Sample size determination

The sample size was calculated using a single population proportion formula for estimating a single population proportion for a cross-sectional study. The proportion of patients' satisfaction is 77% from the previous study conducted in Jimma with 95% confidence level and with a margin of error of 5% and 10% non-respondent rate, sample size will be

$$n = \frac{(z\alpha/2)^2 p(1-p)}{d^2},$$

$$n = \frac{(1.96)^2 0.77(1 - 0.77)}{(0.05)^2}$$

$$n = 272$$

Expected non respondent rate = 10%

Thus

$$n = 272 + (10\% \text{ of } 272) = 299$$

Where n=required sample size, z= critical value for normal distribution at 95 % confidence level (1.96), d= 0.05(5% margin of error), P=0.77(Proportion of laboratory service satisfaction) and an estimated nonresponse rate of 10%.

4.8.2. Sampling Technique

Convenience sampling technique was used to include study participants available during the data collection period.

4.9. Data collection procedure

4.9.1. Socio-demographic characteristics

Data was collected from patients by conducting face-to-face interviews at the exit of the laboratory. The translated Patients' Satisfaction Questionnaire in 'Amharic' was used to guide the researcher. Standardized 5-point Likert scales ranging from very dissatisfied to very satisfied (1 to 5 points) were used to measure satisfaction status for all items. The standard questionnaire was pre-tested before the collection of entire data patients who receive service from the laboratory were interviewed in WCSH. These patients were not included in the sample size. Sample Size and Sampling Procedure the sample size was estimated based on assumption of 5% margin of error, and a 95% confidence level. The initial sample size was 272 however, considering 10% non-response rate the final sample size was 299.

Data was collected using a pre-tested and structured interviewer-administered questionnaire. The questionnaire were prepared in English and translated to Amharic, then back to English to check for its consistency. The questionnaire consists of satisfaction indicators, socio-demographic characteristics of the patients and different laboratory services such as waiting time (turnaround time), availability of requested laboratory tests, the convenience of service hours, and type of laboratory visit, privacy, respect, courtesy, and confidentiality. Beside their socio-demographic characteristics, the study participant were asked to rate each aspect of the laboratory service on a five-point liker scale (1= Very Dissatisfied, 2= Dissatisfied, 3= Neutral, 4= Satisfied, 5= Very satisfied). An exit interview of patients was carried out.

4.9.2. Data management and Quality Assurance

All questionnaires for the study was returned daily to us for data cleaning, data editing and data entry. The questionnaire was originally be prepared in English and its final version will be translated into Amharic, and then back-translated to English to check its consistency. Moreover,

the pre-test of the questionnaire was carried out on 5% of total sample size and each data collector had an opportunity to be acquainted with the interview technique. Furthermore, intensive supervision was done by research advisors throughout the data collection period. The researcher was collect the completed questionnaire and check each for inconsistencies, error, and omissions. Double entry of the questionnaire was carried out to minimize entry errors.

4.9.3. Data processing and analysis

Quantitative data was entered, cleaned, coded, and data analysis was made using SPSS for windows version 21 & Epi information. Associations of the variables were computed using the chi-square and were interpreted based on the finding of the response. Interpretation at $P < 0.05$ using 95% confidence intervals was done for statistical significance.

Normality was checked for continuous variables using histogram. Socio-demographic and economic, factors were treated as categorical variables and were presented as frequencies and percentage. A Chi-square test were applied to test the association between explanatory variable and outcome variable furthermore, Both bivariate and multivariable logistic regression analyses were employed to identify the candidate variables and contributing factors of patient satisfaction respectively. Bivariate logistic regression analysis was used to identify the candidate variable between one explanatory variable and outcome variable at p values ≤ 0.25 . Multivariate logistic regression analysis was performed to predict factors which effect of patient satisfaction for the candidate variable, which had association during bivariate logistic regression. Those variable with a p-value less than 0.05 AOR at 95% confidence interval was considered statistically significant factors.

4.10. Ethical consideration

Before any attempt to collect data, approval to conduct the study was obtained from Wolkite University College of Medicine and Health Science, Each participant (patient) was notified about the purpose of the study, the right to refuse to participate in the study, and the anonymity and confidentiality of the information gathered. They were assured that they penalized for not participating if they wish not to participate and that their responses to the question were had no effect on their care.

The study protocol was submitted to the department of Medical Laboratory Sciences (MLS) and Ethical Committee (IRB) of the Wolkite University College of Medicine and Health Sciences before the data collection starts. The data collection was undertaken solely on the patients' willingness to respond for the interview.

4.11. Dissemination of the result

After completion, the finding of the study was submitted and presented to Wolkite University College of Medicine and Health Science, Department of Medical Laboratory Science. A copy of the research finding will be submitted to Worabe comprehensive specialized Hospital. It will also be presented in scientific conference and published in journals.

CHAPTER FIVE

RESULT

5.1. Sociodemographic characteristics of the participants

A total of 299 patients were enrolled in the study. The mean age of study participant was 34.79 \pm 10.439 ((mean \pm SD). Besides, (33.8%) of the participants were within the age group range of 29-40 years, More than half (56.2%) of the study participants were male and out of 299 participants (67.2%) of the participants were married. Regarding educational status of study participant the majority 129(43.1%) are under secondary school and (7.4%) are only read and write.

Table 1: Socio-Demographic characteristics of Hospital laboratory service users at worabe comprehensive specialized hospital, worabe, Ethiopia, August, 2023

Variables	Categories	Frequency (n=299) (%)
Age	18-28	98(32.8)
	29-40	101(33.8)
	41-49	75(25.1)
	>50	25(8.4)
Mean age+SD(yr.)	34.79+10.439	
Sex	Male	168(56.2)
	Female	131(43.8)
Level of education	Only read and write	22(7.4)
	Primary (1-8)	70(23.4)
	Secondary (9-12)	129(43.1)
	College and above	78(26.1)
Marital status	Single ¹	99(33.1)
	Married	200(66.9)
Monthly income	1000-2500	119(39.8)

	2500-3500	80(26.8)
	>3500	100(33.4)

Single 1; includes divorced, separated and, widowed/widower

5.2. Patients' satisfaction level with laboratory service

The overall patient satisfaction on laboratory service was determined by taking mean score and above for 18 variables that were utilized to reflect satisfaction (displayed in Table 2). Accordingly, of 299 respondents, just over half (50.17%) of them were satisfied and the rest were dissatisfied (49.83) with general clinical laboratory service provided at Worabe comprehensive specialized Hospitals (Figure 2).

In Likert scale, the overall mean rate of satisfaction of patients by laboratory services in Worabe comprehensive specialized hospital was 3.49. The mean rate of satisfaction for different aspects of laboratory service stranged from 2.87 to 4.22. The lowest mean rating of satisfaction was given for information given before specimen collection outside laboratory room and test results received on time as told with mean ratings of 2.87 and 3.02, respectively. Highest mean rating of satisfaction was obtained for cleanliness of the hospital (4.22) and laboratory personnel's professional appearance (neatness, professional dressing) (4.21).

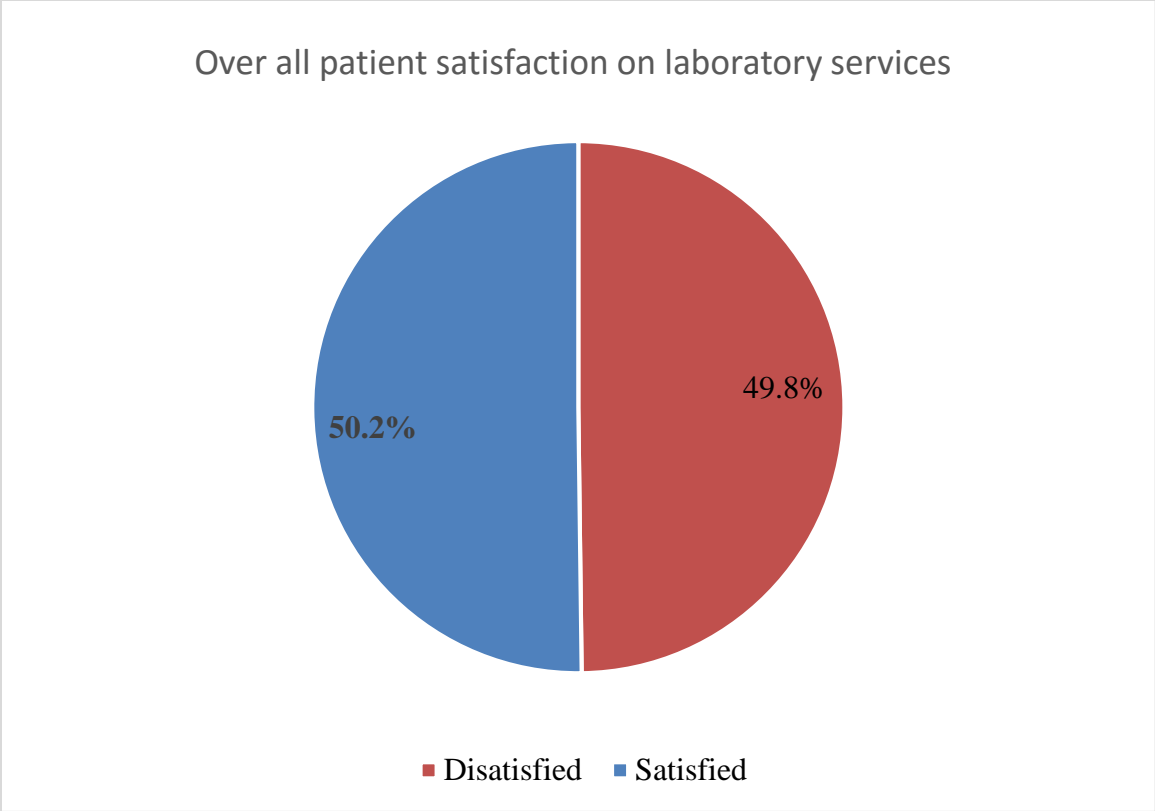


Figure 2: Overall patient satisfaction towards clinical laboratory services at Addis Ababa Hospital laboratories under Addis Ababa City Administration from May-August, 2023.

Table 2: Rate of patients' satisfaction determined by mean score of responses to different satisfaction questions by patients of worabe comprehensive specialized hospital, worabe, Ethiopia, August, 2023

Variable	Very dissatisfied		Dissatisfied		Moderate		Satisfied		Very satisfied		Mean +SD
	NO	%	NO	%	NO	%	NO	%	NO	%	
Location of the laboratory in the hospital	17	5.7	27	9.0	9	3.0	163	54.5	83	27.8	3.90+1.083
Cleanliness of the hospital	4	1.3	8	2.7	4	1.3	186	62.2	97	32.4	4.22+0.721
Cleanness and comfort of waiting area	7	2.3	18	6.0	4	1.3	179	59.9	91	30.4	4.10+0.873
Adequacy of sitting arrangement in waiting area	13	4.3	47	15.7	11	3.7	155	51.8	73	24.4	3.76+1.117
Availability of laboratory staff on working hours	13	4.3	43	14.4	5	1.7	160	53.5	78	26.1	3.83+1.104
Welcoming approach or friendliness of Staff	21	7.0	32	10.7	10	3.3	163	54.5	73	24.4	3.79+1.39
Laboratory personnel's professional appearance (neatness, professional dressing)	3	1.0	11	3.7	12	4.0	167	55.9	106	35.5	4.21+0.768
Respect and courtesy of the staff	16	5.4	50	16.7	6	2.0	132	44.1	95	31.8	3.80+1.206
Cleanliness of the blood drawing area	2	0.7	13	4.3	4	1.3	172	57.5	108	36.1	4.24+0.743
Ability of person drawing blood to put client at ease	5	1.7	33	11.0	10	3.3	165	55.2	86	28.8	3.98+0.957

Information given before specimen collection outside the laboratory room	54	18.1	98	32.8	12	4.0	104	34.8	31	10.4	2.87+1.342
Latrine accessibility and availability	28	9.4	34	11.4	45	15.1	129	43.1	63	21.1	3.55+1.210
Latrine cleanness and comfort	30	10.0	25	8.4	47	15.7	124	41.5	73	24.4	3.62+1.224
Completeness of information on how and when to receive laboratory results	28	9.4	70	23.4	8	2.7	149	49.8	44	14.7	3.37+1.250
Ability of the laboratory personnel to answer Questions	24	8.0	57	19.1	7	2.3	175	58.5	36	12.0	3.47+1.165
Maintaining privacy and confidentiality	9	3.0	9	3.0	73	24.4	126	42.1	82	27.4	3.88+0.948
The cost of laboratory service	13	4.3	31	10.4	102	34.1	116	38.8	37	12.4	3.44+0.983
Test results received on time as told	42	14.0	81	27.1	36	12.0	105	35.1	35	11.7	3.03+1.287

5.3 Factors affecting the level of patients' satisfaction towards clinical laboratory services

Several socio demographic and general services related factors such as:-age of respondent, sex, educational status of respondent, income of the respondent, marital status were tested using binary logistic regression for the presence of association with laboratory service satisfaction.

Variables like age of respondent, sex of respondent, and marital status found to be significantly associated with patient satisfaction on clinical laboratory services. (Table-3)

Table 3: Chi-square analysis for predictors of patients' satisfaction towards clinical laboratory service in worabe comprehensive specialized hospital, Ethiopia, 2023 (n = 299)

Variables	Categories	Satisfaction level		Chi-square(p-value)
		Satisfied No (%)	Dissatisfied No (%)	
Age	18-28	53 (35.3)	46 (30.9)	8.498(0.037)*
	29-40	44 (29.3)	57 (38.3)	
	41-49	35 (23.3)	40 (26.8)	
	>50	6(4.0)	18 (12.0)	
Sex	Male	75 (50.0)	93 (62.4)	4.681(0.030)*
	Female	75 (50.0)	56 (37.6)	
Level of education	Only read and write	15 (10.0)	7 (4.7)	3.193(0.363)
	Primary (1-8)	33 (22.0)	37 (24.8)	
	Secondary (9-12)	64 (42.7)	65 (43.6)	
	College and above	38 (25.3)	40 (26.8)	
Marital status	Single	41 (27.3)	58 (38.9)	4.536(0.033)*
	Married	109 (72.7)	91 (61.1)	
Monthly income	1000-2500	61 (40.7)	58 (38.9)	3.832(0.147)
	2500-3500	34 (22.8)	46(30.7)	

	>3500	43(28.7)	57(58.3)	
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N.B -P-value <0.05 and * indicates those with significant association

These factors were further analyzed using multiple logistic regression using enter stepwise elimination method. The result of multivariable logistic regression analysis showed that females are 1.623 times satisfied than male (AOR=1.623, 95%CI: 1.020-2.581). From patients receiving laboratory service married patients are 3.3 times more likely satisfied than single (AOR=1.653, 95%CI: 1.012-2.701).

However, other factors such as level of education, age, and monthly income were not significantly associated with patient satisfaction towards clinical laboratory service (Table 3)

Table 4: Predictors of satisfaction towards clinical laboratory service in Worabe comprehensive hospital, Ethiopia, 2023 (n = 299)

Variables	Categories	Satisfaction level		COR (95% CI)	P- value	AOR (95% CI)	P-value
		Satisfied N ₀ (%)	Dissatisfied N ₀ (%)				
Age	18-28	53 (35.3)	46 (30.9)	1		1	
	29-40	44 (29.3)	57 (38.3)	0.670(0.3 84-1.170)	0.159*	0.614(0.34 7-1.089)	0.095
	41-49	35 (23.3)	40 (26.8)	0.759(0.4 16-1.386)	0.370	0.669(0.36 1-1.242)	0.203
	>50	6(4.0)	18 (12.0)	2.604(0.9 53-7.112)	0.062*	2.334(0.83 7-6.506)	0.105
Sex	Male	75 (50.0)	93 (62.4)	1		1	
	Female	75 (50.0)	56 (37.6)	1.661(1.0 48-2.633)	0.031*	1.623(1.02 0-2.581)	0.041**
Level of education	Only read and write	15 (10.0)	7 (4.7)	1		1	
	Primary (1-8)	33 (22.0)	37 (24.8)	2.256(0.8 29-6.138)	0.111*	0.379(0.13 2-1.086)	0.071

	Secondary (9-12)	64 (42.7)	65 (43.6)	0.939(0.492-1.791)	0.848	0.447(0.165-1.210)	0.113
	College and above	38 (25.3)	40 (26.8)	1.036(0.591-1.819)	0.901	0.479(0.169-1.359)	0.167
Marital status	Single	41 (27.3)	58 (38.9)	1		1	
	Married	109 (72.7)	91 (61.1)	1.694(1.041-2.758)	0.034*	1.653(1.012-2.701)	0.045**
Monthly income	1000-2500	61 (40.7)	58 (38.9)	1		1	
	2500-3500	34 (22.8)	46(30.7)	1.286(0.727-2.276)	0.387	1.318(0741-2.344)	0.526
	>3500	43(28.7)	57(58.3)	0.717(0.420-1.224)	0.223*	1.628(0.866-3.063)	0.192

Key * = candidate variables at $p \leq 0.25$ in bivariate logistic regression, ** predictor variables in multivariate logistic regression at $p < 0.05$ and 1 refers to reference group.

6. Discussion

Clinical laboratories have a range of customers like patients, physicians, public health agencies, and the community. Assessing patients' satisfaction level may help us in providing an opportunity to know patients' concerns about services that might be needed and take remedial action for the problem identified. This study tried to assess the level of patient satisfaction and possible associated factors with laboratory service at WCSH.

The results of this study revealed the overall satisfaction level of patients with clinical laboratory services rendered at WCSH in Worabe city was 50.2% (95% CI: 44.1-55.2). This was similar with the findings of Amhara North West Ethiopia 52.6% which assesses satisfaction on the quality of malaria diagnostic service(24) and study conducted in Debre Markos Referral Hospital (48.3%)(25). But the current finding was slightly lower than a report from Tikur Anbessa hospital in Addis Ababa (59.7%)(26). However, our finding was lower as compared with the reports from ART clinics in Addis Ababa(85.5%) and three selected hospitals in Eastern Ethiopia(87.6%)(27). This satisfaction level variation could be due to the introduction of social desirability bias

by patients. Patients might not be ready to tell their dissatisfaction status freely as the interviews were carried out within the hospitals. Moreover, this variation might further be due to WCSH is relatively newly established hospital, therefore service provision at each service delivery points of the laboratory may not meet the expectation of the clients. When comparing satisfaction rates obtained using the same technique of 5 Likert scale, the overall mean rate of satisfaction of patients in Worabe Comprehensive Specialized Hospital laboratory was 3.7. In our study test results received on time as told 3.02(+1.287), information given before specimen collection outside laboratory room 2.87(+1.342), were the lowest rating.

In the current study cleanness of waiting area of the laboratory, adequacy of sitting arrangement in waiting area, cleanliness of the blood drawing area were rated the highest whereas the study from the Tikur Anbessa Specialized hospital identified patients were highly satisfied with cost of the laboratory service (4.12±1.08) while cleanliness of latrine has been a shared problem(26), which needs attention by hospital administrators, this differences with other could be explained by variations in the types of services assessed for patient satisfaction.

The lowest and highest range of mean satisfaction score observed in the current study was higher compared to a study conducted at Nekemte Hospital, western Ethiopia which ranges from 2.15 to 3.82(28). However mean satisfaction score in this study was lower compared with Study conducted at selected governmental hospital in eastern Ethiopia (29). Apparently this finding revealed a similar result with Tikur Anbesa Specialized Hospital for highest satisfaction score with a mean rating values ranged from 3.05 (±1.12) to 4.12 (±1.08) out of a possible five (26). This variation might be due to the relatively good availability of clinical laboratory services in terms of many test menus in those facilities, and socio-economic status differences.

The other studies, conducted in Addis Ababa and southern Ethiopia, were only about patient satisfaction with antiretroviral therapy (ART) monitoring laboratory services, which was a vertical program which has a due attention by government and support from different donors. Whereas in this study patients seeking for clinical chemistry, hematology, parasitology and urine analysis tests were included.

Satisfaction of patients is one of the outcome measures for health care services and it serves as a useful quality improvement tool, required by most clinical laboratories. Thus, identifying factors associated with satisfaction will help health service managers to design appropriate

intervention. The current study found out that, statistically significant associations were found. The result of multivariable logistic regression analysis showed that females were 1.827 times satisfied than male (AOR=1.827, 95% CI: 1.137-2.935). From patients receiving laboratory service patients with age above 50 years 3.3 times more likely satisfied as compared with the other age category (AOR=3.3, 95% CI: 1.144-9.657) and also patients who were using laboratory service the divorced patient 0.256 times more satisfied as compared with those single, married and widowed (AOR=0.256, 95% CI: 0.071-0.925). These findings further support the idea of Tanzanian study on patient's dissatisfaction with both the public and private laboratory services (30).

In contrary, socio-demographic characteristics, such as age group, sex, marital status and occupation of the respondents did not have any independent statistically significant association with overall satisfaction of patients towards clinical laboratory services. The findings of the current study are consistent with those of study conducted in Nekemte, Tikur Anbesa specialized Hospital and Eastern Ethiopia (31) documented similar findings.

The finding that patients attaining secondary school compared to those who can read and write only were less likely to be satisfied with the laboratory service calls for giving more attention to quality improvement as educated patients are relatively aware of quality. A study from Tanzania have attested this observation where patients with higher education were more likely to be dissatisfied with laboratory services like privacy, waiting time, and result notification (30). On the contrary, Mindaye T and Taye B (27) reported that respondents' educational status was not statistically associated with the overall satisfaction. A possible explanation for this might be that the period of the study and the previous study focuses only on ART patients.

7. Conclusion and recommendation

7.1 Conclusion

There were differences in the levels of satisfaction of patients among the clinical laboratory services in the study hospital. Assessing patient satisfaction is effective and important ways for evaluating health services including clinical laboratory services. In this study the overall level of patients' satisfaction with laboratory service in Worabe comprehensive specialized Hospital was not satisfactory. There was a lower satisfaction rate observed with time spent waiting to get the

laboratory result and information given before specimen collection outside laboratory room. More over cleanliness of the blood drawing area, cleanness and comfort of waiting area and cleanliness of the hospital, have high patient satisfaction. Therefore; hospital administration and the laboratory department of each Hospitals should strive more to enhance patients' satisfaction.

7.2. Recommendation

The hospital administration and laboratory department in Worabe Comprehensive Specialized Hospital should work on the enhancement of laboratory services with laboratory units in designing laboratory infrastructure. A concerted effort to improve the patient satisfaction Furthermore, additional resources need to be directed to laboratory services in these hospitals. Strengthen their effort to improve patient satisfaction. Proper service availability and readiness plan should be prepared and implemented to satisfy patients towards the laboratory services rendered at Worabe Comprehensive Specialized Hospital. Patient waiting time (waiting time to give laboratory specimen, waiting time to get laboratory results, waiting time to get service) should be reduced.

Based on the finding, dissatisfaction of patients towards the time spent waiting to get the laboratory result, information given before specimen collection outside laboratory room, cleanness of latrine in the laboratory could be a possible factor for the lower rate of patients' satisfaction towards clinical laboratory services. Therefore, the hospital administration and responsible body should work together in improving the rate of patients' satisfaction towards the laboratory services.

Periodic assessment of patient satisfaction should be viewed as an important issue in health care organizations and further studies on the subject of patient satisfaction should be carried out to provide feedback for continuous quality improvement.

Finally, patient satisfaction should be viewed as an important issue in health care organizations and further studies on the subject of patient satisfaction are recommended. These studies can uncover details associated with patient satisfaction in hospitals and other health care organizations and lead to improved overall medical care of patients in Ethiopia.

8. Strength and Limitation

8.1 strength

In this study, relatively high number of indicators were employed to determine the overall patient satisfaction toward clinical laboratory services (it has 18 indicators).

8.2 Limitation

- ❖ The study was not supported by qualitative method.
- ❖ Face -to- face interview of respondents at the hospital might have exposed the study for social desirability bias.

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Annexes

Annex 1 Participant information sheet

Date of interview: _____ Questionnaires Number _____

1. Study title:

Assessment of satisfaction towards clinical laboratory services and association factor among patients attending Worabe Comprehensive Specialized Hospital, worabe, Ethiopia.

2. Invitation paragraph:

You have been invited to take part in this research study. Before you decide whether to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Ask question if there is anything that is not clear or if you would like more information.

3. The purpose of the study

We are investigating patient satisfaction to improve the services provided by Worabe Comprehensive Specialized Hospital laboratory and would be interested to find out about your experience.

4. Why you have been chosen?

You are invited to participate in this study as a customer of the hospital laboratory. We want to understand the laboratory service quality by interviewing patient on service satisfaction. In this study a total of 398 laboratory services patients will participate.

5. Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do, you were given this information sheet to keep and be asked to sign consent form. You are free to withdraw at any time, without giving a reason. A decision not to take part or to withdraw at any time, will not affect the service that you are getting from the laboratory.

6. What will happen to me if I take part?

Your role in the study:

If you agree to participate, I will ask you some questions about the visit you have had and would be very grateful if you could spend some time answering these questions. If you take part in the research will asked to give your consent for the information you provide to be used for the study.

7. What are the possible benefits of taking part and incentives?

You will not be provided any incentive to take part in this research. However, your honest answers to those questions will help us better understand quality of laboratory service in this hospital for developing strategies and organizing future laboratory service.

8. What are the possible disadvantages and risks of taking this part?

There is no risk in participating in this research, but the interview will take about 30 minutes of your personal time.

9. Will my taking part in the study is kept confidential?

The information that we collect from this research project were kept confidential. Information about you that were collected from the study was stored in a file, which will not have your name on it, but a code number assigned to it. The data were kept separately in a protected data management file and it will not be revealed to anyone except the principal investigator. Your personal information will not be disclosed even during the reporting of the findings. Reports were written and disclosed anonymously.

10. What will happen to the results of the study?

Data from this study will be analyzed and submitted to Wolkite University but your identity will not be revealed. Data will also be published in scientific journals & also presented at seminars at national meetings. No information containing your name was disclosed.

11. Who is organizing and funding the project?

The cost of this research project is covered by Principal investigators.

12. How to give my consent?

If you have interest to take part in this research the PI or the delegated person will provide you the consent form which you can sign if you agree to participate.

You were given a copy of the information sheet and a signed consent form to keep

Thank you in advance for taking part in this study!!!

Study coordinator/Principal investigator

Names

.....

Phone

No

.....

.....

Annex II informed consent form

Informed consent form (English Version)

Please read this form and sign it once the above named or their designated representative has explained fully the aims and the procedures of the study to you.

I voluntarily agree to take part in this study.

I confirm that I have been given a full explanation by the above named and that I have read and understood the information sheet given to me which is attached.

I have given the opportunity to ask questions and discuss the study with the investigator or their deputies on all aspects of the study and I have understood the advice and information given as a result.

I authorize the investigator to disclose the results of my participation in the study, but not my name.

I understand that I am free to withdraw from the study at anytime

I understand that information recorded during the study will kept confidential.

Name: _____ Date: _____ Signature

I confirm that I have fully explained the purpose of the study and what is involved
The participant is unable to sign. As a witness, I confirm that all the information abc study was given and the participant consented to taking part.

Name of Impartial Witness (if required).... Date..... Signa

to:

.....

....

I have given the above named copy of this form together with the information sheet.

Signature: Name:

Contact Address: _____&mobile

ቀን _____

ቁጥር _____

- የጥናቱ መጠሪያ
በላቦራቶሪ አገልግሎት ዙሪያ የታካሚዎችን እርካታ መዳሰስ
- በጥናቱ እንዲሳተፉ ስለመጋበዝ
በዚህ ጥናት ላይ እንዲሳተፉ እንጋብዘዎታለን ነገርን በጥናቱ ከመሳተፍዎ በፊት የጥናቱ አላማና አስፈላጊነትን በቅድሚያ መረዳት ያስፈልገዎታል። እባክዎ ጊዜ ወስደው የሚከተለውን መረጃ ያንብቡ። ማንኛውም ጥያቄ ወይም ግልፅ ያልሆነ ነገር ካለ መጠየቅ ይችላሉ።
- የጥናቱ ዓላማ
እኔ አሁን የማጠናወድ የደንበኞችን እርካታ በ(□□□) ሆስፒታል ላቦራቶሪ ላይ ሲሆን አላማውም በሆስፒታሉ ላቦራቶሪ የሚሰጠውን አገልግሎት ለማሻሻል የሚረዳ ይሆናል። የዚህም ጥናት ዉጤት ስለሆስፒታሉ ላቦራቶሪ የደንበኞችን እርካታ የተሻለ እውቀት እንዲገኝ በሚደርገው ጥረት ጉልህ ድርሻ ይኖረዋል።
- እርስዎ ለምን በዚህ ጥናት እንዲሳተፉ ተመረጡ?
እርስዎ በዚህ ጥናት ላይ እንዲሳተፉ የተመረጡት ምክንያት የሆስፒታሉ ላቦራቶሪ ተጠቃሚ በመሆንዎና በጥናቱ ሊካተቱ የሚችሉት የላቦራቶሪ አገልግሎት ተጠቃሚ ብቻ በመሆናችሁ ነው። በዚህ ጥናት 299 የሚሆኑ የላቦራቶሪ አገልግሎት ተጠቃሚ ይሳተፋሉ።
- በዚህ ጥናት ላይ ለመሳተፍ የግድ ያስፈልጋል?
በጥናቱ ላይ ለመሳተፍ የግድ አያስፈልግም፤ በፍላጎት ላይ ብቻ የተመሠረተ ነው። በጥናቱ ላይ ለመሳተፍ ከወሰኑ ይህ መረጃና መስማማትዎን የሚገልጽ ቅጽ ይሰጠዎታል። መረጃውን ካነበቡና የሚጠይቁት ጥያቄ ካለም በመጠየቅ በሚገባ ከተረዱ በኋላ መስማማትዎን ይገልጻሉ። ከጥናቱ በፈለጉት ጊዜና ሰዓት ያለምንም ቅድመ-ሁኔታ ማቋረጥ ይችላሉ። እራስዎን ከጥናቱ በማግለልዎ ምክንያት የላቦራቶሪ አገልግሎት ከማግኘት አያግድዎም። እንደማንኛውም ታካሚ አስፈላጊውን አገልግሎት ያገኛሉ።
- በጥናቱ ላይ ከተሳተፍኩ ከእኔ ምን ይፈለጋል?
በጥናቱ ላይ ለመሳተፍ ከተስማሙ ጠያቂው እርስዎ እንዲመልሱ የሚጠበቁ ጥያቄዎችን ይጠይቅዎታል። በጥናቱ ላይ ለመሳተፍ ከወሰኑ የሚሰጡት መረጃ ለጥናቱ አላማ እንዲውል የስምምነት ቅጹን በመፈረም ያረጋግጣሉ። እዚህ ጥናት ላይ ባይሳተፉም ቢሳተፉም በህጉ መሰረት አገልግሎቱን ያገኛሉ።
- በጥናቱ ላይ ቢሳተፉ ጥቅማጥቅም ያገኛሉን?

በዚህ ጥናት ላይ በመሳተፍዎ የተለዩ ጥቅም በግል አያገኙም። ነገርግን በግልጽነትና በሀቀኝነት የሚሰጡን መረጃ የላቦራቶሪ አገልግሎትን ጥራት ለማሻሻል በሚደረገው ሂደት ላይ ጉልህ አስተዋጽዖ ያበረክታል። እንዲሁም የእርስዎ በጥናቱ መሳተፍ ስለላቦራቶሪው አገልግሎት ያለውን ጥሩ ግንዛቤ እንዲኖረንና ጥራቱን ለማሻሻል መረጃ በመስጠት ይጠቅመናል።

➤ በጥናቱ ላይ በመሳተፍ የሚደርስብኝ ጉዳት አለ?

ጥናቱ ላይ በመሳተፍዎ የሚደርስብዎ ምንም አይነት ጉዳት የለም። ነገርግን ቃለ ምልልሱን በሚያደርጉበት ወቅት 30 ደቂቃ የሚያህል የግልጊዜዎን ለጥናቱ ያበረክታል።

➤ በዚህ ጥናት መሳተፍ በሚስጥር ይያዛልን?

አዎን ለዚህ ጥናት የሚሰበሰበው መረጃና የመረጃ ውጤት በሚስጥር ይያዛል። ስለእርስዎ የሚገልጽ ማንኛውም ነገር በጥናቱም ሆነ በውጤቱ ላይ አይጻፍም። ውጤት ሲገለጽ ስም አልባ ይሆናል። ለእያንዳንዱ መጠይቅ ልዩ መለያ ቁጥር ወይም ምልክት ይሰጠዋል። የትኛው ቁጥር የማን እንደሆነ ዋና ተመራማሪዎች ብቻ ያውቃሉ። የጥናቱ ውጤት የሚፃፈውና የሚገለጸው የጥናቱ ተሳታፊዎችን ስም በማያካትት ይሆናል።

➤ የጥናቱ ውጤት?

የጥናቱ ውጤት በሳይንሳዊ መፅሔት ላይ ይታተማል እንዲሁም የጥናቱ ውጤት በተለያዩ ስብሰባዎች ላይ ይቀርባል። ነገርግን የእርስዎ ማንነት በምንም መልኩ አይገለፅም።

➤ የጥናቱን ወጪ የሚደግፈው?

የጥናቱ ወጪ የሚደገፈው በዋና ተመራማሪዎች ነው።

➤ ፈቃደኝነቴን ለመግለፅ?

ጥናቱ ላይ የመሳተፍ ፍላጎት ካለዎት ከጥናቱ ዋና አስተባባሪ ወይም ከተወከለው ሰው የስምምነት ቅፅ በመውሰድ ፊርማዎችን በማሰፈር ስምምነትን ማረጋገጥ ይችላሉ።

Consent form Amharic Version

ተሳታፊ የሚፈረሙት የስምምነት ቅጽ

- ❖ የጥናቱን አላማና ሂደት በዝርዝር ከተረዱ በኋላ የሚከተለውን ቅጽ በጥንቃቄ ይፈረማሉ።
- ❖ የጥናቱ ተሳታፊ እንደሆንን በሙሉ ፈቃድ ወስኛለሁ
- ❖ ከዚህ ጋር የተያያዘውን የመግለጫ ቅጽ በትክክል አንብቤ ተረድቻለሁ።በእኔ ላይም ስለሚደረግ ማንኛውም ጥናት ተገንዝቤአለሁ።በተጨማሪም አስፈላጊውን ገለጻና ማብራሪያ ከላይ በተጠቀሱት ሰው ተደርጎልኛል።
- ❖ ጥያቄ የመጠየቅ ሙብት የመወያየት እድል ከላይ ከተጠቀሱት አጥኚዎች ወይም ከነሱ ተወካይ ጋር ተሰጥቶኝ በጥናቱ ላይ በቂ ምክርና ውይይት አድርጌያለሁ።
- ❖ በተመራማሪዎቹ የጥናቱን ውጤት ይፋ እንዲያደርጉ እፈቅዳለሁ።ነገርግን ስም መጠቀስ የለበትም።
- ❖ ተመራማሪዎቹ በጤናዬ ላይ ያለን ችግር እንዲነግሩኝ ፈቅጄላቸኝኋለሁ።
- ❖ በማንኛውም ጊዜ ከጥናቱ እራሴን ማግለል እንደምችል አውቄያለሁ።
- ❖ ከእኔ የሚሰበሰበው ማንኛውም መረጃ በጥንቃቄና ሚስጥራዊነቱ በተጠበቀ ቦታ እንደሚቀመጥ አውቄያለሁ።

ስም _____ ፊርማ _____ ቀን _____

➤ ይህ በጥናቱ የሚሳተፈው ሰው መፈረም ስለማይችል ከላይ የተዘረዘሩት መረጃዎች ለተሳታፊው የተሰጡና ተሳታፊውም ለመሳተፍ መስማማቱን ገለልተኛ ታዛቢ በመሆን አረጋግጣለሁ።

የገለልተኛ ታዛቢ _____ ፊርማ _____ ቀን _____ ስለጥናቱ ዝርዝር መረጃ ስለመስጠቱ አረጋግጣለሁ

የመተማመኛ ቅጹን ከስምምነት ቅጽ ጋር አያይዤ ሰጥቻለሁ

ስም _____ ፊርማ _____

Annex III Questionnaire

English Questionnaires PART I. DEMOGRAPHIC VARIABLES

No	Questions	Coding Categories	Response
1	Age	18-28	
		29-40	
		41-49	
		>50	
2	Sex	Male	
		Female	
3	Level of education	Only read and write	
		Primary (1-8)	
		Secondary (9-12)	
		College and above	
4	Marital status	Single	
		Married	
5	Monthly income	1000-2500	
		2500-3500	
		>3500	

PART II. Patient interview on clinical laboratory services satisfaction

No	Measurement parameters	5	4	3	2	1
1	Location of the laboratory in the hospital					
2	Cleanliness of the hospital					
3	Cleanness and comfort of waiting area					
4	Adequacy of sitting arrangement in waiting area					
5	Availability of laboratory staff on working hours					
6	Welcoming approach or friendliness of staff					
7	Laboratory personnel's professional appearances(neatness ,professional dressing					
8	Respect and courtesy of the staff					
9	Cleanliness of the blood drawing area					
10	Ability of person drawing blood to put client at ease					
11	Information given before specimen collection outside the laboratory room					
12	Latrine accessibility and availability					
13	Latrine cleanness and comfort					

14	Completeness of information on how and when to receive laboratory results					
15	Ability of the laboratory personnel to answer questions					
16	Maintaining privacy and confidentiality					
17	The cost of laboratory service					
18	Test results received on time as told					

ክፍል1 የማህበረሰባዊጉዳይመረጃመጠየቂያፎርም

ቁጥር	ጥያቄ	በኮድ ምድቦች	ምላሾች
1	ዕድሜ	18-28	
		29-40	
		41-49	
		>50	
2	ጾታ	ወንድ	
		ሴት	
3	የትምህርት ደረጃ	ማንበብ እና መጻፍ ብቻ	
		1-8	
		ሁለተኛ ደረጃ (9-12)	
		ኮሌጅ እና ከዚያ በላይ	
4	የጋብቻ ሁኔታ	ያላገባ	
		ያገባ	
5	ወርሃዊ ገቢ	1000-2500	
		2500-3500	
		> 3500	

ጥያቄዎቹን ለመመለስ ላደረጉልን እገዛናጊዜዎን ሰጥተው ስለተባበሩን አናመሰግናለን

ክፍል II. በክሊኒካዊ የላቦራቶሪ አገልግሎቶች እርካታ ላይ የታካሚ ቃለ መጠይቅ

መለኪያዎች	5	4	3	2	1
1 በሆስፒታሉ ውስጥ ያለው የላቦራቶሪ ቦታ					
2 የሆስፒታሉ ንፅህና					
3 የመቆያ ቦታ ንፅህና እና ምችት					
4 በመጠበቂያ ቦታ ላይ የመቀመጫ አቀማመጥ በቂነት					
5 በሥራ ሰዓት የላብራቶሪ ሠራተኞች መገኘት					
6 የሰራተኞች አቀባበል ወይም ወዳጃዊነት					
7 የላብራቶሪ ባለሙያዎች ሙያዊ ገጽታ (ንጽሕና፣ ሙያዊ አለባበስ)					
8 ለታካሚ አክብሮት መስጠት					
9 የደም ናሙና መሰብሰቢያ ቦታ ንፅህና					
10 ደም የመሰብሰብ ችሎታ					
11 ከላቦራቶሪ ክፍል ውጭ ናሙና ከመሰብሰቡ በፊት የተሰጠ መረጃ					
12 የመጻዳጃ ቤት ተደራሽነት እና መገኘት					
13 የመጻዳጃ ቤት ንጽህና እና ምችት					
14 የላብራቶሪ ውጤቶችን እንዴት እና መቼ እንደሚቀበሉ መረጃ ሙሉነት					
15 የላብራቶሪ ባለሙያዎች ጥያቄዎችን ለመመለስ ችሎታ					
16 ግላዊነትን እና ሚስጥራዊነትን መጠበቅ					
17 የላብራቶሪ አገልግሎት ዋጋ					
18 የምርመራ ውጤቶች እንደተነገረው በሰዓቱ ተገኝተዋል					

Annex IV: Declaration Form

We, the undersigned, hereby declare that this research paper is our original work and has not been presented for an award of a degree in Wolkite University or any other university.

NAME OF STUDENTS:

1. Name: MELAKU ABEBE Signature: _____ Date of submission: 17 /12/2015
2. Name: NADIYA ZINAB Signature: _____ Date of submission: 17/12/2015
3. Name: SOLOMON ASHENAFI Signature: _____ Date of submission: 17/12/2015

APPROVAL OF THE ADVISORS

This research proposal will be approved by the advisors:

1. Name: Mr. ZUBER KELIL (BSC, MSC) Signature: _____ Date of submission:
17/12/2015
- 2 .Name: Mr. SEID ABRAR (BSC, MSC) Signature: _____ Date of submission:
17/12/2015

EXAMINORS

NAME _____ Signature: _____ DATE: __/__/__

NAME _____ Signature: _____ DATE: __/__/__

Wolkite University College of Medicine
& Health Sciences Research, Community
Services & University Industry Linkages
Office



በወሰደው የገንጠላት የህክምና ጤና ልዩ ገቢ ስላይ
ጥናተኛ ምርምር ሰነድ ለመጠቀም ለገንጠላት የገንጠላት
ሰነድ ለመስጠት ተሰጥቶ ሲሆን

ቁጥር/ቁጥር: BCSU/ILC/046/15

ቀን/ቀን: 14/09/15

To:

1. Solomon Ashenef
2. Nadiya Zinab
3. Melaku Abebe

Subject: Ethical approval of research protocol

The institutional review board (IRB) of Wolkite University College of Medicine and Health Science has reviewed your research project entitled *“Assessment of satisfaction towards clinical laboratory services and associated factors among patients attending Worebe Compressive Specialized Hospital”*

This is to notify that this research protocol as presented to the IRB meets the ethical and scientific standard. Hence, we are pleased to inform you that your protocol is ethically cleared.

We strongly recommended that any significant elevation from the methodological details indicated in the approved protocol must be communicated to the IRB before they are implemented.



With regards!

Kayyedi
ncw:u

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+25111- 330 - 2410 + 251983382494 RCS & UIL Coordinator Fax 011-330- 2415
+25111- 330 - 2364 Email: kmetebo@gmail.com

We appreciate if you would quote our reference letter number in case of any reply
