

KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN REGARDING OBSTETRICS
ULTRASOUND AT SAINT PAUL'S HOSPITAL AND MILLENNIUM MEDICAL COLLEGE
(SPHMMC) DEPARTMENT OF OBSTETRICS AND GYNECOLOGY



A Thesis Submitted to St Paul's Hospital and Millennium Medical College, Department of Obstetrics and Gynecology in Partial Fulfillment for the Requirement for Specialty Certificate in Obstetrics and Gynecology.

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TITLE KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN REGARDING OBSTETRICS
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(SPHMMC).

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ABSTRACT

Background: Ultrasound examination forms an integral part of antenatal care both in high-risk and normal pregnancies. Ultrasound is the source of reassurance about the well-being of her baby and also a source of connecting with her baby in the antenatal period for many pregnant mothers. Fear regarding its safety and doubts about its necessity is also prevalent among pregnant women. The purpose of this study is to assess the knowledge of antenatal mothers regarding the uses of ultrasound during pregnancy and also to assess their attitude towards ultrasound among pregnant women on ANC follow-up at SPHMMC.

Methods: Hospital-based cross-sectional study was conducted from the 1st of September to November 2021, among 291 pregnant women who were on ANC follow-up at SPHMMC. Study instrument and measurement of study variables were adapted and modified from previously published studies. Data were collected using pre-tested and interviewer-administered structured questioners. Data quality was controlled by training data collectors and supervisors and checking each data for completeness and consistency during and after actual data collection. Filled data was coded and entered into SPSS version 25 for analysis. Descriptive statistics using univariate analysis was applied to determine the distribution of study variables.

Results: knowledge and attitude regarding the use of USG during pregnancy were found to be good among the participants, 50.5% of them assumed determination of sex in utero as an indication for ultrasound. 81.1% of them considered ultrasound as safe and 92.1% considered it essential. 47.7% of pregnant women considered that sex determination was permissible by law. Most of them obtained information regarding ultrasound from health providers and the role of media was negligible. **Conclusions:** Knowledge regarding the uses of USG during pregnancy and attitude towards ultrasound was good but there is a lack of information flow from the health care provider to the client concerning the result of an ultrasound scan. Improvement in this area is needed to improve antenatal care.

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List of abbreviations

ANC: Antenatal care

CDC: Centre for Disease Control and Prevention

USG: ultrasonography

PNDAT: prenatal diagnosis and test

MCH: Maternal and Child Heal

SPHMMC: Saint Paul's Hospital and Millennium Medical College

SPSS: Statistical package for social sciences

WHO: World Health Organization

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CHAPTER - ONE: INTRODUCTION

1.1 Introduction

Ultrasound has become an important investigation during pregnancy all over the world. The World Health Organization (WHO) recommends one ultrasound scan before 24 weeks of gestation for all pregnant women mainly to estimate gestational age, determine the placental location and single or multiple pregnancies, improve detection of fetal anomalies, and enhance the pregnancy experience. (Enakpene et al., 2009)

Ultrasound has played a basic role in antenatal care since the 1970 's as a non-invasive method of prenatal evaluation and has become an integral part of antenatal care in countries with developed health services. Routine ultrasound scanning is defined as a screening procedure performed on low-risk individuals, i.e., pregnant women without a clinical indication for an ultrasound (Chaichanalap & Hanprasertpong, 2021). There was justification by A Cochrane Review the reason use of ultrasound in first-trimester pregnancy as it shows better gestational age assessment, earlier detection of multiple pregnancies, and detection of unsuspected fetal anomalies (Neilson, 2000)

In the modern era, ultrasound availability and awareness do not grow together, although the availability of ultrasound continuously increasing for many expectant parents in India, ultrasound is only a tool for sex determination, despite the media coverage, the knowledge regarding the PNDT act among antenatal women in studies from Rajasthan and Mumbai was found to be only 52.4% and 34.3% of their study population. (Krishnamoorthy, Kasinathan, & gynecology, 2016)

Pregnancy is associated with increased stress and anxiety. The antenatal scan has been shown to have psychological sequelae, from providing reassurance about fetal wellbeing to shattering hopes of a normal pregnancy. It is therefore reasonable to assume that this intervention, which aims to exclude fetal anomalies, may affect maternal anxiety (Boyle, Crespigny, & Savulescu, 2003). Scans that fail to obtain the necessary information may increase pressure women may think that there is an abnormality with the fetus which has caused the scan to fail. It was not fully developed. We had to go back in two weeks to be checked. I was pretty worried. It would have been shattering without my husband." Some are unhappy about how the scan was performed; some get bad news and then regret it (Getz & Kirkengen, 2003).

The study was conducted at a district hospital in Botswana and It was a qualitative study assessing rural women" s experience of fetal ultrasound, they showed that the setting, procedure, and communication with patients impacted how they felt about the procedure have had the scan and a small proportion choose not to be scanned at all (Getz & Kirkengen, 2003) When pregnant women don't realize the importance of obstetric The ignorance of the appropriate time for scanning leads to delay. Therefore, the early detection of the fetal abnormality will not happen, the treatment is become difficult or impossible and often forces us to abortion. At the same time, we can avoid early obstetric ultrasonography scanning (Usman, Idris, Abdulaziz, & Abdulhakim, 2020) patients should be informed about who is performing the scan, its purpose, and what occurs during the procedure. Adherence to these basic guidelines has been shown to positively affect both the knowledge level and expectations of pregnant women regarding the use of ultrasound (Garcia et al., 2002)

Being a widely available technology, doubts regarding its safety and usefulness is still persistent in antenatal mothers. This study evaluates the knowledge of antenatal mothers regarding the uses of ultrasound during pregnancy and also assess their attitude towards ultrasound

1.1 Statement of the problem

A high percentage of maternal mortality in the developing world, particularly in Ethiopia, may be due to poor utilization of obstetric scans to prevent complications of pregnancy. This study provides bases for public health intervention to reduce maternal and perinatal morbidity and mortality. The lack of literature in the Ethiopian situation in exploring this issue warrants a broad understanding of the topic.

The US usage contributes immensely to safe motherhood that will significantly reduce maternal, neonatal, and prenatal mortality. They may also want to or do have ultrasonography for various reasons. These include for fetal abnormalities to see that all was normal for their reassurance and assessing fetal growth. Others include checking for Fetal viability, fetal sex determination, checking for the number of fetuses, determination of gestational age, and placental localization. The majority of pregnant women have insufficient knowledge regarding the use of ultrasound during pregnancy, with a high degree of misinformation regarding patient expectations.

It is essential to assess each pregnant woman's knowledge and expectations relative to the social values of her own country.

1.2 Significance of the study

This study will attempt to clarify women's expectations before the routine ultrasound examination in our clinical setup. The study will then evaluate women's experiences after the scan. Ultrasound examination will give service providers information about how best to prepare women for this vital part of clinical practice. This information may include informed consent and education and counseling of and by health care workers. The evaluation following the scan may also indicate a need for debriefing or post-test counseling. The post-test assessments may inform healthcare professionals of how patients experience the ultrasound scan examination and whether we can enhance this experience for the women.

CHAPTER TWO: METHODS

2.1 Study Area and Period

The study was conducted among selected pregnant women on antenatal care follow-up at SPHMMC, Addis Ababa, Ethiopia from the 1st of October to December 30, 2021. SPHMMC is a tertiary Hospital serving as a referral center from all over the country and located in Addis Ababa, Gullele sub-city which has an altitude of 2,400meters (22) above sea level. The obstetrics and Gynecology department is one of the major departments which provide general as well as sub-specialty services. The department is staffed with clinical health professionals and supportive non-clinical staff.

2.2 Study Design

2.3 Eligible Participants

All pregnant women on ANC follow-up at SPHMMC who were willing to participate in the study were available during the data collection period.

2.4 SAMPLE SIZE AND SAMPLING TECHNIQUE

A consecutive convenient sampling method was applied to identify and include all the study participants. Based on the finding we consecutively recruited the study subjects until the total sample size was achieved. Code was given on the back of the client chart to avoid repeated enrollment subsequent visits. The required sample size was determined using the single population proportion formula:

$$n = \frac{Z^2 pq}{e^2}$$

Z^2 = is the Standardized normal distribution curve value for the 95% CI, 1.96

e = is the desired level of precision, 0.05.

p = estimated proportion of knowledge of pregnant women regarding obstetrics
ultrasound 78 %(Uganda)

q = is $1-p=0.22$

n = is the sample size of the study

Since the study specifically addressing the knowledge of participants (Prevalence) was 78% the sample size was calculated to be 264. With a 10% non-response rate added to get desired sample size of 290.

2.5 Variables

2.5.1 Independent Variables

Socio-demographic information of the participants

2.5.2 Dependent Variables

Knowledge, Attitude toward ultrasound during pregnancy

2.6 Data Collection Tools and Procedure

The questionnaire was an adaptation and modification of the study instruments developed in a study on Ghana residents' KAP towards ultrasound. The original questionnaire was prepared in English, and then translated into Amharic which was used for data collection, and re-translated back to English to check for any inconsistencies. The questionnaire consisted of three main parts: 1) Socio-demographics, which surveyed participants' age, marital status, religion, place of residence, educational status, occupation, and average monthly household income; 2) Knowledge about ultrasound; 3) Attitudes toward the ultrasound.

For knowledge questions, 9 items were prepared with answer options of true, false, or I don't know. A score of 1 was given for 'true' and 0 for false or I don't know answers. Then all the scores were computed to classify each participant's level of knowledge as having adequate knowledge if scored $\geq 6/9$ ($\geq 75\%$) and inadequate knowledge if scored $< 3/4$ ($< 75\%$).

For attitude questions, 4 items were prepared with answer options of strongly agree, agree, neutral disagree, or strongly disagree. A score of 5, 4, 3, 2 and 1 was given respectively.

The scores were computed to classify the participants as having a good attitude if scored $\geq 3/4$ ($\geq 75\%$) and poor attitude if scored $< 3/4$ ($< 75\%$).

2.7 Data Quality Assurance

The questionnaire was prepared in English translated to Amharic and re-translated back to English to check for validity. The tool was pre-tested on 21 respondents who were not included in the final study: to ascertain respondents' understanding of the items asked and the appropriateness of responses & time required for the interview. Data collectors and supervisors were trained on study objectives, data collection tools, and ethical issues. The process of data collection was supervised by the principal investigator and the trained supervisors for consistency and completeness.

2.8 Data Processing and Analysis

The completed questionnaires were checked for completeness, coded, and manually entered to SPSS version 25, and explored using descriptive frequencies to clean data and prepare for analysis. Descriptive statistics using univariate analysis was applied to describe the distribution of the study variables. The assumption of logistic regressions was checked. Then, bivariate logistic regression analysis was done to see the independent effect of predictors on the dependent variable of the level of practice of preventive measures, and predictors with a P-value of < 0.2 were entered in the multivariable logistic regression analysis model to identify final predictors after controlling other independent variables. Adjusted odds ratio and 95% CI were calculated and $P \leq 0.05$ was considered statistically significant. Finally, the result was described in text form and summarized and presented in tables.

2.9 Operational definitions

Knowledge: is the awareness of pregnant women about ultrasound. To measure it, 8 items were prepared. Participants who scored $\geq 6/8$ ($\geq 75\%$) were classified as having adequate knowledge, whereas those who scored less than $< 6/8$ ($< 75\%$) as having inadequate knowledge.

Attitude; is the way pregnant women think and behave toward the ultrasound. It was measured by 4 items. Those who scored $\geq 3/4$ ($\geq 75\%$) were categorized as having a good attitude, whereas those who scored $< 3/4$ ($< 75\%$) were categorized as having a poor attitude.

2.10 Result Dissemination plan

This research proposal will be presented and submitted to the Department of Gynecology and Obstetrics, St Paul's Hospital Millennium Medical College. The study findings will be communicated and submitted to the college's scientific communities and concerned body. After approval, the study findings and recommendations will be shared by preparing a workshop forum and panel discussions with concerned stakeholders. Hard copies and soft copies will be disseminated to all stakeholders. Finally, the publication in the scientific journal will be considered.

2.11 Ethical Considerations

Written ethical assurance was received from the institutional review board of SPHMMC before data collection started. Study aims and objectives were clearly explained at the beginning and respondents who agreed to participate in the study were kindly asked to be interviewed. The interview was undertaken after the respondents completed their ANC examination in a separate area from the other participants. All the information was kept confidential and used only for research purposes. Health education about coronavirus infection was given briefly for every participant at the end of the interview.

CHAPTER THREE: RESULTS

3.1 Socio-demographic Characteristics of Respondents

Two hundred ninety-one (291) respondents were participated and gave a response rate of 100 % of the 291 respondents, 275 (94.5 %) were married with a median age of 27 years. Most of the respondents live in urban areas of 273 (93.8 %) and had an average monthly income of 2000 ETB. Aside from this almost half of the respondents have attended primary and secondary school (50.8%) and were house servants (35.7 %). (See Table 1)

Table 1; Sociodemographic characteristics of study participants (n=291)

Variable		Number	Percent
Age group	20 and less	31	10.7
	21-30	190	65.3
	31 and above	70	24.1
Marital status	single	1	0.3
	married	275	94.5
	divorced	14	4.8
	widowed	0	0
Place of residence	urban	273	93.8
	rural	18	6.2
Educational status	illiterate	37	12.7
	primary school	88	30.2
	secondary school	60	20.6
	Technical/vocational	24	8.2
	degree or above	82	28.2
Occupation	house servant	104	35.7
	student	9	3.1%
	government employee	58	19.9

	Private employee	30	10.3
	Daily labor	32	11.0
	merchant	40	13.7
	unemployed	17	5.8
	private employee	28	9.6%
Income (ETB)	2000 and less	146	50.2
	2001-3500	86	29.6
	3501-5000	20	6.9
	5001-1000	29	10.0
	10001 and above	10	3.4

3.2 Knowledge of Study Participants About ultrasound

The total mean score for knowledge questions was 7/8 and 86.6 % of the respondents had adequate knowledge about ultrasound. Respondents stated correctly the main function of ultrasound (62.5%) (See Tables 2 & 3)

Table 2; Frequency distribution of participants level knowledge about ultrasound (n=291)

Variable	yes		no	
	N	%	N	%
To find a fetal position	251	86.3%	40	13.7%
To find the expected date of delivery	225	77.3%	66	22.7%
To determine the sex of the baby	250	85.9%	41	14.1%
To determine the position of the baby	242	83.2%	49	16.8%
To assess the growth of the baby	255	87.6%	36	12.4%
To confirm the pregnancy	256	88.0%	35	12%
To confirm the presence of multiple pregnancies	265	91.1%	26	8.9%
To confirm the well-being of pregnancies	266	91.4%	25	8.6%

3 Attitude of Participants Towards ultrasound

The total mean score of the participant's attitude towards ultrasound questions was 3/4 and 75% of the participants have a good attitude towards ultrasound. Almost all of the respondents agree that ultrasound is very useful during pregnancy. During antenatal care, ultrasound has many functions. (97.4%). (See Tables 3)

Table 3; Frequency distribution of attitude pregnant mother toward ultrasound(n=291)

		N	Percent
	Good attitude	221	75
	Poor attitude	70	25
	Total	291	100.0

The majority of pregnant women get information about u/s from doctors 157(54.0%) see table 4 below

Table 4; Frequency distribution of participants' source of information aboutultrasound (n=291)

	Frequency	Percent
Family & friend	29	10.0
nurses	99	34.0
media	6	2.1
doctors	157	54.0
Total	291	100.0

The majority of pregnant mothers consider having more than four-time ultrasounds scan during this pregnancy 180(61.9)

Table 5 Number of USG considered as ideal during pregnancy

	Frequency	Percent
1	11	3.8
2	17	5.8
3	35	12.0
4	47	16.2
>4	180	61.9
Total	291	100.0

Almost all pregnant mothers consider sex selection by ultrasound not permissible by the law of our country and about half of the mothers want to know the sex of their fetus during an ultrasound examination.

Table 6 sex determination is not permissible by law during U/s examination

	Frequency	Percent
allowed	8	97
Not allowed	283	3
Total	291	100.0

Table 7. No of preg. The mother wanted to know the sex of the fetus during the ultrasound examination

	Frequency	Percent	Valid Percent	Cumulative Percent
wanted	147	50.5	50.5	50.5
Not wanted	144	49.5	49.5	100.0
Total	291	100.0	100.0	

Table 8; Frequency distribution of participant's levels of knowledge and attitude (n=291)

Variable		Number	Percent
Knowledge level	Adequate	252	86.6%
	Inadequate	39	13.4%
Attitude level	Good	139	52.2%
	Poor	152	47.8%

CHAPTER FOUR: DISCUSSION

In this study, almost all of the participants had adequate knowledge (86.6%) and a good attitude (75%) towards obstetric ultrasound. this finding is similar to the study done {Abduljabbar, 2020 #24} {Maniragena, 2021 #25} which is a comparable result regarding knowledge toward the ultrasound. The possible reason may be that most pregnant mothers come from Addis and around which have better access to information about ultrasound. there was no difference in knowledge score regarding the educational level and occupation of mothers. The result shows that $\frac{3}{4}$ of women believe obstetric sonography is safe. This study demonstrates that the main source of information for pregnant ultrasound was doctors and nurses about 88%. This observation contrast with a previous study which found that health professional provide little information to women during their pregnancy {Munim, 2004 #2}

The mean number of the scans was 4 times in the current pregnancy. This is higher than the study done in turkey {Abduljabbar, 2020 #24} most was performed at the request of doctors and nurses. About 37% of pregnant mothers didn't have the result explained to them by the sonographer or evaluated doctors. About 92% of study clients agree that ultrasound is an essential investigation during pregnancy and 84% of them believe ultrasound examination is safe during pregnancy.

In this study, women didn't want to know fetal gender at prenatal ultrasonography. 144 respondents asked for and were told the sex of their fetus, knowing the sex of fetus has been documented as one of the major motivations for which women go antenatal care in another study, the finding is lower to the result, et al. in 2010 and Boston study.

About half of the respondents know that sex determination is not permissive by law.

Limitations

This study was institution-based; thus, it may not explain the level of knowledge and attitude at the community level.

Social desirability and selection bias may also affect the result by preventing the participants from giving truthful information.

Conclusions

Knowledge regarding the uses of USG during pregnancy and attitude towards ultrasound was good but there is a lack of information flow from the health care provider to the client concerning the result of an ultrasound scan. Improvement in this area is needed to improve antenatal care.

Assurance of the principal investigator

The undersigned agrees to accept responsibility for the research proposal's scientific, ethical, and technical conduct and for provision of required progress reports as per terms and conditions of the St Paul's Hospital and Millennium Medical College in effect at the time of grant is forwarded as the result of this application.

Name of the Resident: Admasu lemessa (MD, OBGYN Resident)

Date: _____ Signature _____

Approval of advisor

Name of Advisor _____

Date _____ signature _____

Annex – 1 Reference

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Annexes

Annexe – 2: Consent form

Hello. My name is Dr. Admasu Lemessa; I am conducting a study on the assessment of the knowledge, attitude toward obstetric ultrasound partial fulfillment of the requirement for a specialty certificate in Obstetrics and Gynecology. You have been selected by chance among other participants. I would like to ask you to help me by filling out this self-administered questionnaire. Participation in this survey is voluntary, and you can choose not to take part. All information you will give will be confidential and will be used to make a general report. No names will be included in the report, and there will be no way to identify you as one of the people who gave information. Respondent agreed to participate in the study: Tick one

☐ **Yes** ☐ **NO**

Annex- 3: Questionnaire

I) Socio-demographic Characteristics

1. Age in year _____

2. Marital status

1. Single
2. Married
3. Divorced
4. Widowed

2. Educational status

1. Illiterate
2. Elementary
3. Graduate

3. Monthly income (ETB)

- a. < than 2000 birr
- b. 2000 – 3500 birr

3. Place of residence

1. Urban
2. Rural

4. occupation

- a. housewife
- b. student
- c. government employee
- d. Private sector
- e. merchant
- f. farmer
- g. other(specify

- c. 3500-- 5000
- d. 5000-10000

e. more than 10000 birr

parity primigravid multigravida

Table 2: Knowledge of pregnant women regarding uses of ultrasound.

Use of ultrasound	Yes	No
To detect a defect in the baby		
To find a fetal position		
To find the expected date of delivery		
To determine the sex of the baby		
To determine the sex of the baby		
To assess the growth of the baby		
To confirm the pregnancy		
To confirm the presence of multiple pregnancies		
To confirm the well-being of pregnancies		

Table 3: Attitude towards ultrasound during pregnancy

Attitude	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Ultrasound is safe during pregnancy					
Ultrasound is essential investigation during pregnancy					
I felt comfortable during the ultrasound examination					
I was given detail of my baby by the doctor Who performed the scan					

Table 4: Source of information and awareness of PNDT

Information resources

1. Family and Friends 2. Nurses 3. Media (press, TV, radio) 4. Doctors

The doctor who performs the scan gave you information about the baby

- Yes, I was given details, and it was clear to me
- Yes, I was given details, but it was not clear to me
- No, I wasn't given details

The number of USG you consider is ideal during pregnancy

a.1 b.2 c.3 d.4 e.>4

Do you think sex determination is permissible by law yes no

ተ.ቁ		
1	ዕድሜዎ ስንት ነው?	_____ ዓመት
2	የቀለም ትምህርት ተምረዋል?	አዎ..... የለም፤አልተማርኩም.....
3	ያጠናቀቁት ከፍተኛ የትምህርት ደረጃ ስንት ነው?	አንደኛ ደረጃ (ከ 1-8 ኛ ክፍል). ሁለተኛ ደረጃ(ከ 9-12 ኛ ክፍል) ቴክኒክና ሙያ ሰርተፊኬት ከፍተኛ ትምህርት (ኮሌጅ/ዩኒቨርሲቲ)
4	የሥራ ሁኔታ?	ተማሪ..... ሥራ የሌላት..... የቤት እመቤት..... የቤት ሠራተኛ..... የቀን ሠራተኛ..... ነጋዴ..... የመንግስት ሠራተኛ..... የግል ሥራ ተቀጣሪ..... ..
5	የወር ገቢ አለዎት?	አ_____ የለኝም. _____ _____

6	ጠቅላላ ወርሃዊ ገቢዎ ስንት ነው?	_____ ብር
7	እርግዝናዉ ስንተኛሽ ነዉ?	1. የመጀመሪያ 2. ከዚህ በፊት አርግዜ አዉቃለሁ
8	የት ነዉ ሚኖሩት?	1. ከተማ 2. ገጠር
9	የጋብቻ ሁኔታዎ እንዴት ነዉ?	ያለገባ _____ ያገባ _____ አግብቶ የፈታ _____ የሞተባት _____

10. አልትራሳዉንድ ከዚህ በታች ተዘረዘሩ ችግሮችን ለመለየት ያግዛል ብለዉ ያስባሉ? 1. አዎ 2.አይደለም

የአልትራ ሳዉንድ ጥቅሞች	አዎ	አይደለም
የጽንሱን አፈጣጠር ችግር ይለያል ወይ		
የጽንሱን አቀማመጥ ያሳያል ወይ		
ህጻኑ የሚወለድበትን ቀን ያሳዉቃል ወይ		
የጽንሱን ጾታ ያሳያል ወይ		
የጽንሱን አካላዊ እድገት ያሳያል ወይ		
ዕርግዝና መኖር እና አለመኖሩን ያረጋግጣል ወይ		
እርግዝናዉ አንድ ወይም ከዚያ በላ መሆን እና አለመሆኑን ያሳያል ወይ		
ጤነኛ እርግዝና መኖር እና አለመኖሩን ይነግራል ወይ		

11. አልትራ ሳውንድ ለመታየት ያሳስባል ወይ? አዎ _____ አይደለም _____

አመለካከት	በጣም እስማማለሁ	እስማማለሁ	እርግጠኛ አይደለሁም	አልስማማም	በጣም አልስማማም
አልትራ ሳውንድ በ እርግዝና ጊዜ ችግር የለውም ብለኝ ታስቢያለኝ					
በእርግዝና ጊዜ አልትራሳውንድ መሰረታዊ ምርመራ ነው ብለኝ ታስቢያለኝ					
በአልትራ ሳውንድ ምርመራ ወቅት ምቹት ይሰማሻል ወይ					
የጽንሱን አጠቃላይ ሁኔታ አልትራ ሳውንድ የሰራልኝ ሀኪም ነግሮሻል ወይ					

12. የአልትራ ሳውንድ ምርመራን በተመለከተ መረጃ ያገኘሽኋል ከማን ነው?

1. ከቤተሰብ እና ጎደኛ
2. ከነርሶች 3. ሜዲያ(መግለጫ, ቴሌቪዝን, ራዲዮ) 4. ሀኪሞች

13. አልትራ ሳውንዱን ሰራው ሀኪም ስለ ጽንሱ ሁኔታ መረጃ ሰጥቶዎታል

- አዎ፣ በጥልቀት እና ግልጽ በሆነ መለኮ
- አዎ, በጥልቀት ተሰጥቶኛል ግን አልገባኝም
- አይ ፣ በጥልቀት አልተነገረኝም

14. ስንት ጊዜ አልትራሳውንድ መነሳት አስፈላጊ ነው ብለው ይገምታሉ

- a.1 b.2 c. 3 d. 4 e. >4

15. አልትራ ሳውንድ ስተነሽ የጽንሱን ጾታ ማወቅ ትፈልጊ ነበር ? እፍልጋልሁ-----አልፈልግም-----

በአለትራ ሳውንድ ጾታን መምረጥ በህግ ይፈቀዳል ብለኝ

ተገምቻለኝ ? እገምታለሁ-----፤ አ ልገምትም-----