WOLKITE UNIVERSITY

COLLEGE OF MEDICINE AND HEALTH SCIENCE

PRACTICE OF BREAST SELF-EXAMINATION AND ASSOCIATED FACTORS AMONG WOMEN AGED ABOVE 20 ATTENDING WOLKITE UNIVERSITY SPECIALIZED TEACHING HOSPITAL WOLKITE, ETHIOPIA.

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RUHAMA ASCHALEW (MEDICAL INTERN)

A RESEARCH THESIS TO BE SUBMITTED TO WOLKITE UNIVERSITY,COLLEGE OF MEDICINE AND HEALTH SCIENCE,DEPARTMENT OF PUBLIC HEALTH FOR THE PARTIAL FULLFILMENT OF THE REQUIREMENT IN UNDERGRADUATE PROGRAM.

AUGEST ,2022

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ACKNOWLEDGEMENT

First of all we would like to thank almighty GOD for giving us strength and health till now. Then would like to thank Wolkite University College of Medicine and Health Science for giving us this opportunity to develop the skill and help us get a glimpse of the colossal world of research. Particularly our sincere and deeper gratitude goes to our advisor Ms, Tigist, for her valuable guidance.

We would also like to thank our study participants for giving us information about their personal issue. This research would not have been carried out without them.

ACRONYMS AND ABBREVIATIONS

ACS	According to American Cancer Society
BC	Breast cancer
BSE	Breast Self- examination
G.C	Gregorian Calendar
HCWs	Health Care Workers
OR	Operation room
OPD	Outpatient department
WUSTH	Wolkite university specialized teaching hospital
SPSS	Statistical Packages for Social Sciences
SSA	Sub-Saharan African
SNNPR	Southern nations nationalities and people's region

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Abstract

Background: Breast cancer is the top cancer in women, and it is a global health problem. It may be a manageable disease, just in case of early diagnosis with sufficient treatment protocols like advanced surgical intervention, chemotherapy and radiation therapies. Breast self-examination is a screening technique that involves examining ones' breasts for lumps distortions or swelling. Despite the high prevalence of reproductive organ malignancies across the country, there are no coordinated preventive education, or treatment initiatives. Therefore, in our situation, BSE is the most viable method for early identification of breast cancer.

Objectives: To assess practice of breast self-examination and associated factors among women aged above 20 attending Wolkite University Specialized Teaching Hospital (WUSTH) Wolkite,Gurage zone Ethiopia, 2022.

Methods: Institution based quantitative cross-sectional study design was carried out at WUSTH. With this study 275 sample were drawn by using random sampling technique, the data was collected using interviewer administered questionnaire, and then entered into SPSS version 23 for analysis. Descriptive statistics, frequency, percentage, mean and standard deviations were used. Binary logistic regression was computed to see association between dependent and independent variables. Association is considered statistically significant with p-value<0.05 at 95% confidence interval.

Result: Two hundred seventy-five respondents (275) participated in the study giving 100% of response rate. The 39.3% of study subjects were in the age interval of 20-29. About 34.5% of study participants had good knowledge about BSE, 46.2% of participants had a positive attitude towards Breast Self- Examination), and 21.1% of study subjects had practiced BSE. Age in years; the age category of 40-49 years [AOR=0.061; 95%CI: 0.005, 0.769], primary education level [AOR=25.053;95%CI:3.168,198.108],secondary education[AOR=11.761;95%CI:2.780,49.754],tertiaryeducation[AOR=6.819;95%CI:1.466,31.712],knowledge towards BSE [AOR=0,036; 95%CI: 0.009, 0.143], and attitude towards BSE [AOR=0.047;95%CI:0.009,0.238] were significantly associated with the practice of BSE.

Conclusion: The study showed inadequate knowledge, unfavorable attitude and low practice (21.1%) toward BSE. Age in years, educational status, attitude towards BSE, and knowledge of participants towards BSE have association with breast self- examination practice.

Recommendation: Breast self-examination should be promoted by improving awareness and providing special health education for woman that had low educational level.

Key words; breast, breast self- examination, breast cancer, knowledge, screening.

1.INTRODUCTION

1.1 Background of the study

Today, cancer is one of the most serious diseases threatening human life, and therefore global burnout is gradually growing [1]. Breast cancer (BC) is the top cancer in women, and it is a global health problem. It is the most common cancer amongst women, and leading cause of cancer-related deaths in developing world. [1,2]. BC is characterized by the uncontrolled growth of abnormal cells in the milk producing glands of the breast or in the passages that deliver milk to the nipples.[3]

BC may be manageable disease, just in case of early diagnosis with sufficient treatment protocols like advanced surgical intervention, chemotherapy and radiation therapies. But the main focus is early detection through screening [4]. Screening and early detection of disease is the cornerstone for disease prevention and the three netting techniques presently recommended by the American Cancer Society are clinical breast examination, mammography, and Breast Self- examination (BSE)[5].

BSE is a screening technique that involves examining ones' breasts for lumps, distortions or swelling [6].BSE is a simple, very low cost, noninvasive with no special material/tool requirements; and it is an effective diagnostic method for breast cancer which only takes five minutes to apply [7].But the practice of BSE is low and varies in different countries. Several reasons like lack of time, lack of self-confidence in their ability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment associated with manipulation of the breast have been cited as reasons for not practicing BSE [8].

Hence, this study was to assess practice of breast self-examination and associated factors among women aged above 20 attending WUSTH, Wolkite Ethiopia.

1.2 Statement of the problem

Breast cancer is one of the rapidly increasing cancers among women and a significant cause of cancer-related morbidity and mortality in globe [9]. Breast cancer is a common public health issue that is the leading cause of cancer-related death worldwide [10]. Breast cancer affected 2.3 million women globally in 2020, with 685 000 fatalities. Breast cancer had been diagnosed in 7.8 million women in the previous five years as of the end of 2020, making it the most common ancer in the world [11].

Breast cancer is expected to overtake lung cancer as the leading cause of cancer incidence in females in 2020, with 2,261,419 new cases [12]. According to American Cancer Society (ACS) more than 3.8 million United States women with a history of breast cancer were alive on January 1, 2019. ACS's fact sheet indicates approximately 1 in 8 women (13%) will be diagnosed with invasive breast cancer in their lifetime and 1 in 39 women (3%) will die from breast cancer [5].

Female breast cancer has surpassed lung cancer as the most commonly diagnosed cancer, with an estimated 2.3 million new cases (11.7%)Breast cancer is the most frequent type of cancer among Asian women and the second greatest cause of cancer-related deaths, accounting for 39% of all breast cancers diagnosed globally [13].In recent years, some Asian countries have seen large increases in breast cancer incidence, with incidence rates increasing by 3% to 4% per year in China (Shanghai), Singapore, and Thailand [14].

Africa now has the highest age-standardized breast cancer death rate in the world, with the sub-Saharan African (SSA) sub-region having the highest incidence rates [15]. In comparison to high-income nations, SSA women with breast cancer are younger because of treatment choices are limited, most women present with severe disease and have a poor prognosis and early detection measures such as mammography and breast inspection are underutilized, which contributes to diagnosis at a late stage [16].

Evidence from four sub-Saharan African countries indicates the prevalence of breast cancer screening was 12.9%, ranging from 5.2% in Ivory Coast to 23.1% in Namibia [17]. In Ethiopia, breast cancer incidence is rising and become the foremost common cancer-causing high rates of morbidity and mortality. The incidence of breast cancer accounts for 15,244 (22.6%) of all cancer cases and 8,159 (17 %) of cancer deaths per year and it had an age-standardized incidence

rate of 40.6 per 100,000 females. In Africa including Ethiopia, the health care system cannot handle care and treatment for the expanding incidence rates of advanced breast cancer due to inappropriate treatment strategies in place and economic barriers.So focusing on early detection strategies is important. [10]

Of the screening modalities mammography cannot be routinely used in resource limited areas like Ethiopia due to limited health service facilities, lack of trained professionals and mostly due to expensiveness. Clinical breast examination (CBE) is also dependent on professional's skill and requires health facility visit. So, BSE remains recommended modality for early detection of abnormalities. [18]

Despite the high prevalence of reproductive organ malignancies across the country, there are no coordinated preventive education, or treatment initiatives [18]. Therefore, in our situation, BSE is the most viable method for early identification of breast cancer.

1.3 Significance of the study

The issue of Breast self-examination among Ethiopian women is essential for the prevention of advanced breast cancer-related disorders. This research was proposed to aid in the development and implementation of appropriate health promotion programs to lower the incidence and prevalence of breast cancer, as well as the difficulties that arise with it. This study showed how risk and protective factors interact to predict practice of breast self-examination.

The findings of this study will also assist health workers in better understanding BSE practice, allowing them to develop and implement targeted health education for the community at large or any women who visit health facilities, thereby increasing women's knowledge and practice of BSE and promoting early detection.

In addition, the findings of the study will provide guidance to policymakers, health-care administrators, unit heads, health-care workers, and other decision-makers on breast self-examination related issues, with the goal of addressing the need for a better intervention and plan to address the problem. Other researchers may be able to use it as well.

2.LITERATURE REVIEW

2.1 Overview of Breast Self-Examination

Breasts play a crucial role in establishing the female body's unique functions. One should have a basic understanding of what is and is not normal for breasts. Breast self-examination is one practice that can help you get more comfortable with your breasts' size, shape, and texture [19].Monthly breast self-exams can help females detect changes that may be signs of infection or breast cancer (such as breast lumps or spots that feel different). When breast cancer is detected early, the chances for survival are much better [20]. Breast self-examination is a widely established approach for detecting breast cancer early. It can detect 40% of breast lesions, which is critical for effective therapy [21].

2.2 Knowledge of breast self-examination

Systematic review of awareness among Indian women in community conducted demonstrates that knowledge of BSE varied from very poor (2%) to good (69.8%) in the community setting.

A descriptive cross-sectional study carried out among 97 female nurse students from nursing department of Allied Medical Science Faculty of Arab American University/Jenin reveals that 15.5% of the respondents had good overall knowledge towards BSE and the major source of information about BSE (57.6 %) was mass media in the study [7].

A cross-sectional study conducted among 1036 female workers in Vietnam indicates that the 22.7% of participants showed sufficient knowledge on BSE; 15.2% performed monthly BSE; and 7.7% completely performed all 5 steps of BSE. This study finding shows that the prevalence of insufficient BSE knowledge was higher among participants with low level of education [23].

An evidence of facility based cross sectional study from Adwa North, Ethiopia demonstrates that 55.5% had adequate knowledge towards BSE and the rest 45.5% had inadequate knowledge towards BSE [18].

2.3 Attitudes towards breast self-examination

A cross sectional study conducted in Adwa town indicates that less than half (46.3%) of the respondents had good attitude towards BSE [31]. A cross sectional study conducted in Debre Tabortown; North West Ethiopia illustrates that 77.4% of the female workers had positive attitude [24].

This study finding reveals that, almost 68% of the respondents were found to have poor attitude (<30) toward BSE(25). Similar cross-sectional study conducted in India indicates that 93.3% of respondents felt it was necessary to do BSE and 87.5% have done BSE before [8].

A cross-sectional descriptive study carried out at King Saud University in Riyadh, Saudi Arabia, illustrates that among the participants, 64.01% of participants had a positive attitude toward BSE [26].

2.4 Practices of breast self-examination

A systematic review and meta-analysis conducted on BSE practice and determinants among women in Ethiopia demonstrates that the pooled prevalence of breast self-examination practice in Ethiopia was (36.72%). Accordingly, the highest practice of breast self-examination was observed in Gambela, 61.5% followed by Amhara region,40.5% and Addis Ababa 42.52%. whereas the lowest practice was observed in Harari region.[18]

A cross sectional study done at Adwa town, Northern Ethiopia indicates that 6.5% of study participants had ever practice breast self-examination, and only 6.25% of them practice breast self-examination regularly. Being a government employee, having good perceived confidence to do BSE, and having perceived good susceptibility to develop breast cancer, were significantly associated with BSE practice [31]. A similar study done in Debre Tabor town demonstrates that 32.5% of female health care workers had ever practiced breast self- examination [24].

A cross sectional study carried out in West GojamZone,Northwest Ethiopia found that 37% of HWs had ever practiced BSE and 14.4% practiced it regularly. The three main reasons for not doing regular BSE were no breast problem (53.2%), not knowing the technique of BSE (30.6%), and not knowing the importance of BSE (21.4%) [32].

2.5 Associated factors of breast self-examination

2.5.1 Sociodemographic characteristics

An evidence of facility based cross-sectional study from Dire Dawa town shows females with higher education status and high clinical experience was significantly associated with BSE practice [29].Evidence from hospital based descriptive cross-sectional study conducted in among female nurses of Hawassa University comprehensive and specialized hospital indicates that educational status of the nurses was significantly associated with BSE practice [33]. The institutional based cross-sectional study conducted in West Shoa Zone, Western Ethiopia indicates the educational levels were predictors of breast self-examination [30].

An institutional based cross-sectional study done in Dire Dawa found that those with age less than 49 are more likely to practice BSE compared to age groups above 49 [18].This study also showed that those with low income are less likely to practice BSE than those with high income.

2.5.2 Family history of breast cancer

An evidence of systematic review and meta-analysis from Gondar indicates that family history of breast cancer was significantly associated with breast self-examination practice among healthcare workers [27].

An evidence of facility based cross-sectional study from Dire Dawa town shows females with personal history of breast problems showed significant association with BSE [29].

A cross sectional study conducted South west Ethiopia indicates that the professionals who have personal history of breast cancer were significantly associated with good practice of breast self-examination(AOR = 3.95, 95% CI: 1.52-6.33)(6).A cross sectional study performed in Western Ethiopia illustrates that the professionals who had personal history ofbreast cancer were 5 times more likely to perform BSE [28].

A hospital based descriptive cross-sectional study conducted inamong female nurses ofHawassa University comprehensive and specialized hospital indicates that family history of breast cancer was significantly associated with BSEpractice [33].

2.5.3 Knowledge and attitude

A systematic review and meta-analysis done on BSE practice and associate factor among female health care workers in Ethiopia illustrates that good knowledge and positive attitude were significantly associated with breast self-examination practice among healthcare workers[27].

An evidence of descriptive cross sectional from Turkey shows that the HW who practiced BSE had significantly higher level of knowledge (P = 0.001) than those who had not(1)**.** The quantitative descriptive cross–sectional study conducted in Nigeria indicates significant positive relationship exist between knowledge and practice of BSE among women (r=0.242, P=0.001)(34).

An institution based cross sectional study done among women attending family planning service in Modjo town showed that women who were knowledgeable about BSE were 4.32 times more likely to practice BSE than their counterparts [39].

An evidence of cross-sectional study done in Western Ethiopia demonstrates that those professionals knowledgeable on BSE were 4 times more likely to examine their breast than those who were not knowledgeable. This evidence also shows that those who had positive attitude toward BSE were four times more likely to perform BSE than who had negative attitude [28]. A facility based cross sectional study conducted in Dire Dawa indicates that Female HCWs with positive attitude and good knowledge were significantly associated with BSE practice [29].

A cross-sectional study done in Addis Ababa indicates that knowledge of BSE was significant predictors of BSE practice [35].This is consistent with the studies conducted in Debre Tabor, Debre Berhanuniversity,among women attending public facilities and urban health extension workers in Addis Abeba and university of Gonder [3,24,35,40].

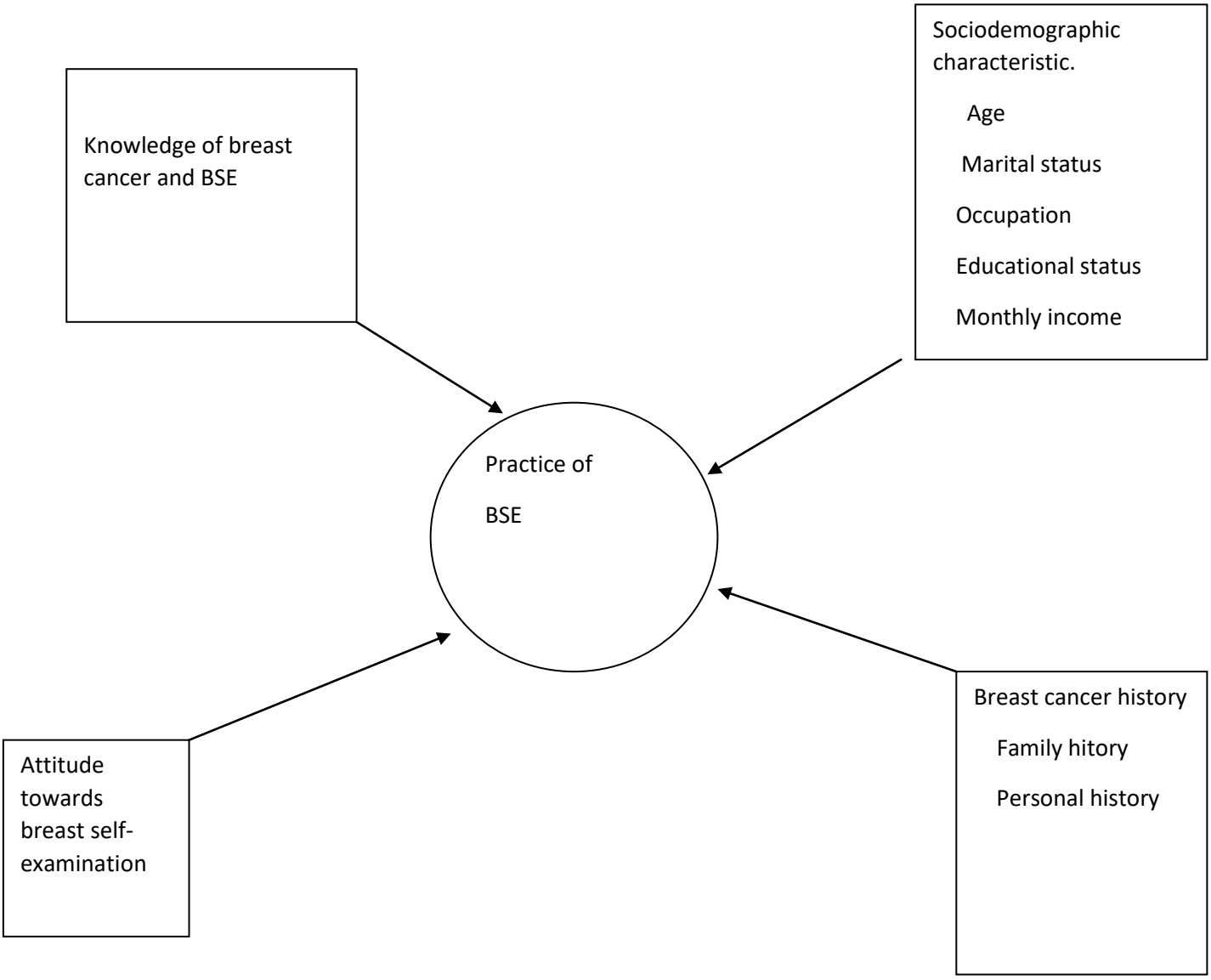

figure 1 1:Conceptual framework of practice of breast self-examination and associated factors among women age >20 attending WUSTH Wolkite,2022

3.OBJECTIVES OF THE STUDY

3.1 General Objective

To assess practice of breast self-examination and associated factors among women age >20 attending WUSTH,Wolkite,Gurage Zone,Ethiopia,2022.

3.2Specific Objectives

- To determine the prevalence of practice of breast self-examination among women age>20 attending WUSTH,Wolkite,Gurage Zone,Ethiopia,2022.
- To identify associated factors with practice of breast self-examination among women age >20 attending WUSTH,Wolkite,Gurage Zone,Ethiopia,2022.

4.METHODS AND MATERIALS

4.1 Study Area and Period

This study was conducted in WUSTH which is located in Gurage zone,SNNPR (southern nations nationalities and people's region), Ethiopia from August 22 to August 26 2022 GC. It is located 170 km far from the central city Addis Ababa. Gurage Zone is one of the zone which belongs to SNNPR, Ethiopia. The total population of this zone is 1,727,522 among this 846,486 are men and 881,076 are women; with an area of 5,893.40 square kilometers, & it has a population density of 217.13. [41].

Wolkite is the administrative center of the Gurage zone. Wolkite town is a town and separate woreda in southern western Ethiopia, this town has a total population of 92,517.[41]

The catchment population of WUSTH is expected to be 800,000 people according to the hospital administration.[41]

The hospital has four major department: Medicine, Surgery, Pediatrics and gynaecology and obstetrics and others.

The hospital, apart from giving daily medical service and referral center, it also uses as a teaching center for students coming from government and private institutions.

4.2 Study design

Institution based cross-sectional study design was carried out in WUSTH.

4.3Sources Population

All female clients of age above 20 years who attended outpatient department (OPD) WUSTH during the study period.

4.4Study population

All the sampled female clients who attended OPD at WUSH during the study period and fulfilled the inclusion criteria.

4.5 Inclusion and Exclusion Criteria

All female clients aged above 20 years and agreed to consent was included in the study. All female clients who was seriously ill was excluded from the study.

4.6 Sample size determination

Sample size for the study was determined by using single population proportion formula with considering 20.5% breast self-examination practice from a study conducted in in Modjo, Southwest Ethiopia, 2021 with the assumption of 95% confidence interval (CI), 5% margin of error, and 10% nonresponse rate.[39].

$$n = \frac{\left(Z\alpha_{/2}\right)^2 \mathrm{P}(1-\mathrm{P})}{d^2}$$

n: Sample size

Z: Desired 95% confidence, Z=1.96(from normal distribution table).

P: Practice of Breast Self-Examination among female clients above age 20 years.

d: Margin of error (0.05).

$n = \frac{(1.96)^2 * 0.205 * (0.795)}{(0.05)^2} \approx 250$

Adding a 10% (25) for non-response rate, the total number sample estimated was $250 + 25 = 275$.

4.7 Sampling technique

Systematic sampling method was employed to get sample from female clients aged above 20 years in WUSTH by systemic random sampling method based on total number of female clients visited the hospital OPD in last 6 month which is 6200.and sampling interval was calculated by dividing the average 5 day flow of clients to the sample size, so sample was collected every other client at each OPDs.

4.8Study variables

- **Dependent Variable**
    - Practice of Breast Self-Examination.
- **Independent Variables**

Socio-demographic characteristics(age,occupationalstatus,marital status, educational status, monthly income).

- Breast cancer history: Family and personal history of breast cancer.
- Knowledge on breast self-examination.
- Attitude towards breast self-examination.

4.9 Operational Definition and its measurements

Breast self-examination: is feeling or examining one's own breast todevelop self-awareness about own breast of women following family planning. Breast self-examination is performed monthly one week-two week after cessation of menstrual flows [38].

Knowledge: Knowledge is information or awareness related to breast self-examination that an individual has and participant answering mean score and above from 10 knowledge assessing items is termed as good knowledge where as those answering below those value termed as poor knowledge [38]. The knowledge of breast cancer and breast self-examination was assessed by using multiple questions. Each correct answer was given as score of 1 and a wrong response a score of 0.

Attitude: Attitude is perception of an individual toward breast self-examination and participant answering mean score and above from 13 attitude assessing items is positive attitude where as those answering below these values negative attitude [38].

Regarding the attitude towards BSE, the measurement was conducted by using composite variable.The belief and feelings were assessed through Likert's scale rating system. The question of Likert's scale that will range from strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. The scoring system was used with respect to study participants was as follows; strongly agree will score as 5, agree 4, neutral 3, disagree 2, strongly disagree 1. The responses were summed up and a total score was obtained from each respondent. The distribution of a score was checked whether it is normally distributed or not to use mean to dichotomize it. Then, those score above the mean was assigned as positive attitude and below the mean was considered a negative attitude towards breast self-examination for breast cancer

Practice. was assessed by asking each respondent whether she had any experience of breast self-examination. Good practice refers to those who checked or perform BSE at least once per

month a week after each menses. Poor practice refers to those who practice other than the correct time in the cycle. [42]

4.10 Data collection tools and procedure

The data was gathered using a structured interviewer administered questionnaire that includes socio-demographic information as well as breast self-examination practices. The tool was created after studying relevant literature reviewed and was written in English and translated to Amharic language.Data collectors (three medical interns) collected the data.

4.11 Data Quality Assurance

Before starting to collect the real data from the respondents, data collection tools were checked to ensure data quality. Before leaving the actual data collection site, the investigator monitored the data collection and review the data for completeness, correctness, and consistency.

4.12Data processing and analysis

Throughout the data collection process, the consistency and completeness of the data was reviewed. Each questionnaire was given a code with a unique identification for each questioner, which was then typed into a computer using SPSS software version 23. Running frequencies and cross tabulation data was used to check for missing values and outliers. Each independent variable was cross tabulated using bivariate analysis for the dependent variable practice of breast self-examination. Binary logistic regression was used to examine the association between each independent variable and breast self-examination practice. Then multivariable analysis was done. The adjusted odds ratio (AOR) and 95 percent confidence interval (CI) was used as indicators to measure the strength, direction, and significance of the association. Factors having a p-value of less than 0.05 was considered as statistically significant in all analyses.

4.13 Ethical Consideration

Wolkite university department of public health approved the study, and a support letter was sent to WUSTH. After describing the study's goal, each participant gave their consent. Participants' right to identity and confidentiality was respected. The volunteers were not harmed in any way during study period.

4.14 Dissemination and Utilization of Findings

The study's findings will be presented and copies of reports will be provided to Wolkite university department of public health and to WUSTH .we will consider to provided for guraghe zone health berou and othes like for ministries of health and NGos .

5.Results

5.1. Socio-demographic characteristics among BSE

In this study,275 study subjects were involved, with a response rate of 100%. 39.3% of study participants were in the age interval of 20-29 years old.31.3% of study subjects had more than secondary education as their educational status. More than half (64.4%) of the study participants were married in their marital status. Concerning the occupation of the participants, 38.9% of them were house wife. More than half (50.9%) of study subjects had earned monthly income of <5000 ETB.

Table 1: Socio- characteristics of women aged above 20 attending WUSTH, Wolkite,2022

Variables	Categories	Frequency	Percent
Age in years	20-29	108	39.3
	30-39	81	29.5
	40-49	46	16.7
	>49	40	14.5
	Total	275	100
Educational status	No formal education	63	22.9
	Primary education	69	25.1
	Secondary education	57	20.7
	Tertiary education	86	31.3
	Total	275	100
Marital status	Single	83	30.2
	Married	177	64.4
	Divorced	5	1.8
	Widowed	10	3.6
Profession	Student	34	12.4
	Housewife	107	38.9
	Government employee	59	21.5
	Self employed	69	25.1
	Private employed	6	2.2
Monthly income in Birr	No income	32	11.6
	<5000	140	50.9
	5000-10000	82	29.8
	>10000	20	7.3

5.2 Family and Personal History of Breast cancer

As demonstrated in Table 2, nineteen (6.9%) of the study participants had a family history of breast cancer. Of these who had the history, 36.8% of participants' aunts and 26.3% of participants' sisters had a history of breast cancer. Three (1.1%) of study subjects had a personal history of breast cancer.

Table 2: Family and personal history of breast cancer among women aged above 20 attending WUSTH, Wolkite,2022

Variables	Categories	Frequency	Percent
family history of breast cancer	Yes	19	6.9
	No	256	93.1
Family those who have history of breast cancer	Mothers	4	21
	Sister	5	26.3
	Aunt	7	36.8
	Grandmother	3	15.9
	Total	19	100.00
Personal history of breast cancer	Yes	3	1.1
	No	272	98.9

5.3 Knowledge about breast cancer and self-examination

Concerning knowledge, ten knowledge related items were used for assessing knowledge about BSE. About 95 (34.5%) scored mean value and above were considered knowledgeable on BSE and 180(65.5%) had poor knowledge.

Participants that have ever heard about BSE were 110 (40%). Their predominant source of information were mass media. (Table3)

Table 3: Knowledge about breast cancer and breast self-examination among women aged above 20 attending WUSTH, Wolkite,2022.

Variables	Categories	Frequency	Percent
Did you hear about breast self-examination	Yes	110	40
	No	165	60
Mass media/ TV, Radio and from magazine/	Yes	75	27.3
	No	200	72.7
Friends/relatives	Yes	15	5.5
	No	260	95.5
Health personnel	Yes	45	16.4
	No	230	83.6
From Others	Yes	5	1.8
	No	270	98.2
Do you know methods of breast cancer screening?	Yes	62	22.5
	No		
Breast cancer is inherited	Yes	79	28.7
	No	74	26.9
	I don't know	122	44.4
When should a girl begin breast self-examination	Age > 20 years	90	32.7
	Age < 20 years	71	25.8
	I do not know	122	41.5
Frequency of BSE should be performed	Monthly	105	38.2
	Every 3 month	106	38.5
	Other	64	23.3
Time to perform BSE	Few days before menses	56	20.4
	5-7 days after menses	99	36
	Anytime during menses	22	8
	I don't know	98	35.7
Body position to perform BSE	Standing in front of the mirror	131	47.6
	Lying down	64	23.3
	I don't know	66	24
	Other	14	5
Benefits of BSE	To become familiar with how your breast, look and feel	15	5.5
	To identify changes, you see of feel in your breasts	228	82.9
	I don't know	32	11.6
Technique to perform BSE	Inspecting the breast in front of the mirror	31	10.8
	Palpating using the finger pads in circular motion	151	52.8
	Squeezing the tip of the nipple for discharge	11	3.8
	I don't know	93	32.5

5.4Attitude towards breast self-examination

In this study, more than one-fourth (47.6%) of study participants agreed with the statement that they were worried a lot about getting breast cancer, and 107 (38.9%) of participants were disagreed about whether the chance of getting breast cancer was high.134 (48.7%) of study participants were agreed about breast cancer making their heartbeat faster and 111 (40.4%) of participants agreed to be afraid to think about breast cancer.

122 (44.4) of respondents were agreed with the idea that breast cancer would threaten a relationship with a boyfriend or husband, and 128 (46.5%) of participants agreed with the item when they did breast self-examination, they felt good about themselves. 112 (40.7) of the study participants agreed with the item that if they complete breast self-examination, it will help them to find lumps that might be cancer in the future.

Concerning the item of doing breast self- examination would be embarrassing and Doing breast self- examination would take too much time, 156 (56.7%) and 179(65.1%) of study participants were in both disagreed, respectively. 137 (49.8%) of study participants were disagreed with the statement of they able to find lump if they perform breast self-examination (Table 4).

Table 4; Attitude towards breast self-examination among women aged above 20 attending WUSTH, Wolkite,2022

Variables	Categories	Frequency	Percent
I worry a lot about getting breast cancer	Strongly Disagree	8	2.9
	Disagree	76	27.6
	Neutral	24	8.7
	Agree	131	47.6
	Strongly agree	36	13.1
My chance of getting breast cancer is high	Strongly Disagree	51	18.5
	Disagree	107	38.9
	Neutral	67	24.4
	Agree	46	16.7
	Strongly agree	4	1.5
When I think about breast cancer my heartbeat faster	Strongly Disagree	5	1.8
	Disagree	49	17.8
	Neutral	70	25.5
	Agree	134	48.7
	Strongly agree	17	6.2
I am afraid to think about breast cancer	Strongly Disagree	10	3.6
	Disagree	61	22.2
	Neutral	71	25.8
	Agree	111	40.4
	Strongly agree	22	8
Breast cancer would threaten a relationship with boyfriend or husband	Strongly Disagree	10	3.6
	Disagree	122	44.4
	Neutral	72	26.2
	Agree	64	23.3
	Strongly agree	7	2.5
When I do breast self- examination, I feel good about myself	Strongly Disagree	7	2.5
	Disagree	42	15.3
	Neutral	79	28.7
	Agree	128	46.5
	Strongly agree	19	6.9

As demonstrated in figure 2, less than half (46.2%) of women aged above 20 attending WUSTH who participated in the study had a positive attitude towards breast self-examination.

figure 1 2: Level of attitude among women aged above 20 attending WUSTH, Wolkite,2022

5.5 Practice of breast self-examination

As shown in Table 5, less than quarter 58 (21.1%) of participants had practiced BSE. 31(53.4%) of them had good practice and 27(46.5%) of them had poor practice. Half (50%) of study participants had performed breast self-examination for early detection and treatment, and 46 (79.3%) of study participants practiced breast self-examination once a month. Thirty-seven (63.8%) of study subjects performed breast self-examination 5-7 days after menses and 353 (92%) of participants never had breast examination by a doctor. 217(78.9) of participants had not practiced BSE and the main reason was lack of knowledge to perform BSE accounts for 57.8%.

Table 5: Practice of breast self-examination among women aged above 20 attending WUSTH, Wolkite,2022

Items	Responses	Frequency	Percent
Did you ever perform breast self-examination	Yes	58	21.1
	No	217	78.9
Why do you perform breast self-examination	Had breast problem	5	8.6
	Fear of breast cancer from family	16	27.6
	For early detection and treatment	29	50
	Fear of developing breast cancer	8	13.8
How often do you practice breast self-examination	Once in a week	7	12.1
	Once in a month	46	79.3
	Once in 6 month	4	6.9
	Once in a year	1	1.7
When do you perform breast self-examination	5-7 days after menses	37	63.8
	2-3 days before menses	15	5.5
	Any time during the month	6	2.2
If you don't practice breast self-examination, what are the main reasons	I do not have breast problem	14	6.4
	I do not have breast symptoms	75	34.4
	I do not know how to perform breast self-examination	126	57.8
	I do not think it is important	3	1.4
Have you ever had breast examination by a doctor	Yes	22	8
	No	253	92

5.6 Factors Associated with BSE practice among study participants

In this study, few variables, such as age,education status, personal and family history, attitude, and knowledge variables, were selected for multivariable analysis using binary logistic regression with a p-value less than 0.25.

In the final binary logistic regression analysis, age, educational status, knowledge and attitude towards BSE were significantly linked with BSE practice. Participants in the age range of 40-49 were 6.1% more likely to practice BSE [AOR=0.061;95%CI:0.005,0.769]. Participants that had primary educational status are 25 times likely to practiced BSE as compared to who had no formal education. [AOR=25.053;95%CI:3.168,198.108]. Similarly, those who had secondary education level 11.7 times [AOR=11.761; 95%CI: 2.780,49.754] more likely to practice BSE as compared to no formal education.

Those with tertiary educational level 6.9 times [AOR=6.819;95%CI; 1.466,31.712] more likely to practice BSE as compared to no formal education.

Participants who had good knowledge were 3.6% more likely to practice BSE as compared to those who had poor knowledge [AOR=0.036; 95%CI:0.009, 0.143].

Participants who had positive attitude were4.7% more likely to practice BSE as compared to those who had negative attitude [AOR=0.047;95%CI: 0.009, 0.238].

Table 6:Bivariate and multivariable logistic regression analysis of variables among women aged above 20 attending WUSTH, Wolkite,2022

Variables	Categories	COR (95%CI)	AOR (95%CI)	P-value
Age	20-29	1.00		
	30-39	0.326(0.071, 1.496)	1.372(0.131, 14.426)	0.792
	40-49	0.089(0.02, 0.398)	0.061(0.005, 0.769)	**0.031**
	>49	0.167(0.035, 0.809)	0.216(0.016,2.97)	0.252
Education	No formal education	1.00		
	Primary education	40.392(9.271, 175.9)	25.05(3.168, 198.1)	0002
	Secondary education	21.52(.7.19, 64.4)	11.761(2.78, 49.754)	0.001
	Tertiary education	23.838(6.9, 82.25)	6.819(1.466, 31.712)	0.014
family History	Yes	0.164(0.62, 0.429)	2.124(0.353, 12.761)	0.41
	No	1.00		
Attitude	Negative	1.00		
	Positive	0.27(0.008, 0.90)	0.047(0.009, 0.238)	0.000
Knowledge	Poor	1.00		
	Good	0.023(0.009, 0.6)	sni0.036(0.009, 0.143)	**0.000**

6. DISCUSSION

The purpose of this study was to assess practice of breast self-examination and associated factors among female clients of age above 20 years who attended out-patient department in WUSTH. The study finding demonstrates that 34.5% of study participants were knowledgeable about the breast cancer and self-examination. This study finding consistent with study result of Arab American University/Jenin that reveals 15.5% of the respondents had good overall knowledge towards BSE [7] and an evidence from Vietnam also indicates that the 22.7% of participants showed sufficient knowledge on BSE [23]. Our study finding also consistent with the study finding in Ethiopia that has been done in Adwa that illustrates that 55.5% of female health care workers had adequate knowledge towards [18].

In contrary to our study finding, an evidence of systematic review of Indian's illustrates that 69% of good knowledge [22]. The discrepancy may arise due to socio demographic, cultural issue and study setting.

In this study, 46.2% of the study participants who took part in the survey had a positive attitude about breast self-examination. This study finding agrees with a study done in Adwatown, indicates that less than half (46.3%) of the respondents had good attitude towards BSE [31]. However, our study finding is inconsistent with study finding of Saudi Arabia's that depicts 64.01% of participants had a positive attitude towards BSE [26]. This difference may arise because of socio-economic and study area.

Our study finding indicates 21.1% of the participants had practiced BSE. In line with this study, an evidence of systematic review and meta-analysis in Ethiopia that demonstrates the pooled prevalence of breast self-examination practice among women in Ethiopia is 36.72%.[27].

Our study finding also consistent in Debre Tabor shows 32.5% of them had good BSE practice[24],and West Gojjam Zone(37%)(32).

The study finding shows that age, educational status, attitude towards BSE,and knowledge of participants towards BSE were all associated to BSE practice.

When compared to participants with poor knowledge, participants with good knowledge were 3.6% more likely to perform BSE. This study finding agrees with a study conducted in Palestine which shows the main barriers to BSE practices was participants had lack of knowledge about BSE(42). Similarly, study finding from Debre Tabor and Jimma demonstrate that knowledge about breast self-examination is significantly associated with breast self -examination practice(24,40).

7.CONCLUSION

The study showed inadequate knowledge, unfavorable attitude and low practice (21.1%) towards BSE. Age in years, educational status, attitude towards BSE, and knowledge of participants towards BSE have association with breast self- examination practice.

Strength and limitation of the study

Strength

The probability sampling method used increases representativeness of study population.

Since limited studies were conducted in this area at national and regional level, it provides information for further studies.

Limitation

The cross-sectional design used has limited the degree of cause and effect associations among variables of interest.

The self-reported information's are subjected to bias since the study raised personal issue.

There was no international standardized questionnaire found on breast self-examination practice that may limit comparing the findings of this study with other studies.

Lack of qualitative aspect in the study

The study being carried out in health facilities where study participants have better health seeking behavior.

8.RECOMMENDATION

Based on the findings of this study, the following recommendations were forwarded to concerned bodies:

To WUSTH

Increasing information access to women about risk factors, sign and symptoms and methods of screening of breast cancer starting from giving morning Education.

To health care provider in the Hospital

To provide clinical breast exams as part of routine care in mother to child health service.

To educate woman about procedure and benefit of BSE.

To mass media

Increase information access about BSE, and benefits of early detection of breast cancer.

To researchers

To carry out researches on community level.

To cover the qualitative aspect the issue.

To ministry of health

Develop strategies for early detection of breast cancer, by promoting BSE and other screening methods.

Provide effective trainings for health professionals to enhance more practice of BSE.

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ANNEXES

I. Information sheet

Questioners prepared to assess practice of self-breast examination and to identify factors associated with it among women aged above 20 attending WUSTH.

Good morning /Good afternoon, I am……. working as data collector in this study that assess practice of self-breast examination among women aged above 20 attending WUSTH. Dear respondents here are lists of questioners with different sections, which are designed for research work to be conducted in partial fulfillment of Degree of Doctor of medicine by Dr.SaraYitbarak(MI) , Dr. Oumer Mohammed (MI), and Dr. RuhamaAschalew(MI)

from department of medicine, wolkite university. I am going to ask you some very personal questions that some people find it difficult to answer. Your responses are completely confidential. Your name will not be written on these questionnaires, will never be used in connection with any of the information you provided. You don't have to answer any question that you do not want to answer, and you may decide not to participate in the study any time you want. However, your honest response to these questions will help us to better understand on practice of self-breast examination. We would greatly appreciate your help in responding to these questions. It will take about 10 minutes and there is no benefit or payment that you get for your participation in this study. But your honest & genuine response to each question will play a major role in the attainment of the objective of the study.

Therefore, we thank you in advance and greatly appreciate your helping.Do you understand all that has been said so far?

II. Consent form

I heard the information sheet above clearly & understood the purpose, benefit and what is required from me if I take part in the study. I understood that all the information regarding me like name and all answers given by me must not be transferred to a third party. I also understand that I can decide whether or not to take part in the study or even withdraw from the study at any time. So, I am willing to participate in the study.

Yes ☐ No ☐

Signature/finger print of participant----------Date---------

Data collector Name----------sign----------Date----------

III. English questionnaire form

Section 1: Socio-demographic characteristics

S.No	Question	Response	Skip
101	How old are you? And your employment status?	1.20-29 2.30-39 3.40-49 4.>49	
102	What is your occupational status	1.student 2.housewife 3.government employee 4.self employed 5.private employed	
103	What is your educational status?	1.no formal education 2.primary education 3.secondary education 4.teritiary education	
104	What is your current marital status?	1.Single 2.Married 3.Divorced 4.Widowed	
105	Monthly average income	---------- ETB	

Section 2. Family and Personal History of Breast cancer

201	Do you have any family history of breast cancer?	1.Yes 2. No	If your answer is NO go to number 203
202	If yes for Q.201 who is affected? (multiple answer is possible)	1.Mother 2.Sister 3.Aunt 4.Grand mother 5.Other specify-------	
203	Do you have personal history of breast cancer?	1.Yes 2.No	

Section 3. Knowledge about breast cancer and self-examination

301	Did you ever hear about breast self-examination?	1.Yes 2.No	
302	If yes for Q.NO 305 where did you hear about breast self-examination? (multiple response is possible).	1.Mass media/ TV, Radio and from magazine/ 2. Friends/relatives	

		3.Health personnel 4.From Others----------	
303	Do you know methods of breast cancer screening?	1.Yes 2.No/don't know	
304	Breast cancer is inherited?	1.Yes 2.No 3.Idon't know	
305	When should a girl begin breast self-examination?	1.Age > 20 years 2.Age < 20 years 3.Idont know	
306	at what frequency of BSE should be performed?	1.monthly 2.every 3 month 3.other	
307	when is the time to perform BSE>	1.few days before mensus 2.2-3 days after mensus 3anytime during mensus 4.i don't know	
308	which body position is preferred to perform BSE?	1.standind infront of mirror 2.lying down 3.I don't know 4.other	
309	what is the benefit of BSE?	1.to become familiar with how your breasts normally look and feel 2.to identify changes you see or feel in your breasts	

		3.I don’t know	
310	what are the techniques to perform BSE?	1.inspecting the breast in front of the mirror 2.palpating using the finger pads in circular motion 3,squeezing the tip of the nipple for discharge 4.I don’t know	

Section 4. Attitude towards breast self-examination

S.No	Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agreeins(5)
401	I worry a lot about getting breast cancer					
402	My chance of getting breast cancer is high					
403	When I think about breast cancer my heartbeat faster					
404	I am afraid to think about breast cancer					

405	Breast cancer would threaten a relationship with boyfriend or husband					
406	When I do breast self-examination, I feel good about myself					
407	If practiced monthly Breast					
	Self-examination, I don't worry as much about breast cancer.					
408	If I complete breast self-examination, it will help me to find lump which might be cancer in the future					
409	Doing breast self-examination will make me worry about breast cancer					
410	Doing breast self-examination will be embarrassing to me					
411	Doing breast self-examination will take too much time					
412	I am able to find lump if I perform breast self-examination					

413	I am able to identify normal and abnormal breast tissue when I do breast self-examination.					

Section 5. Practice of breast self-examination

S.No	Question	Response	Skip pattern
501	Did you ever perform breast self-examination?	1.Yes 2.No	If NO go to Q. NO 505
502	Why do you perform breast self-examination?	1.Had breast problem 2.Fear of breast cancer from family 3.For early detection and treatment 4.Fear of developing breast cancer	
503	How often do you practice breast self-examination?	1. Once in a week 2.Once in a month 3.Once in 6 month 4.Once in a year	
504	When do you perform breast self-examination?	1. 5-7 days after menses 2. 2-3 days before menses 3. Any time during the month 4.Idon't know	
505	For Q. Number 501 If you don't practice breast self-examination, what are the main reasons?	1.Idon't have breast problem 2.I don't have breast symptoms 3.Idon't know how to perform breast self-examination 4.Idon't think it is important	

506	Have you ever had breast examination by a doctor?	1.Yes 2.No	

Annex 2

የአማረኛሰሪትጥያቄዎች

የይዘትቅጽ

ሰላምስሜ---------- የመጣሁትበወልቂጤከተማ/ወልቂጤዩንቨርሲቲእስፔሻላይዝድሆሲፒታል፡ በኢትዮጲያ 2022 ስለራስጡትምርመራእውቀትአመለካከትእናልምድየሚልስያሜበተሰጠውየጥናትዕርዕስመረጃለመሰብሰብነው ። ይህምየሚከናወነውበወልቂጤዩኒቨርሲቲየህክምናቅድመምረቃተመራቂሀኪሞችነው።

የጥናቱአላማ

በወልቂጤዩኒቨርስቲእስፔሻላይዝድሆስፒታልህክምናበሚከታተሉ ከ20 አመትበላይባሉሴቶችላይስልጡትናእራስመመርመርእውቀትአስተሳሰብእናልምድንለመገምገምነው ።

የጥናቱጥቅም

የጥናቱተሳታፊቀጥተኛጥቅምየለውም።

ሆኖምየዚህጥናትውጤቶችስለራስጡትምርመራጥሩዕውቀትእናልምምዶችንእንዲሁምመሰናክሎችንለመለየ ትይረዳሉ።

እናምችግሩንለመፍታትምቹየሆነየፕሮገረራምአቀራረብንከግመትበማስገባትግባትአስተዋጸያደርጋሉ።

የጥናቱውጤትለወልቂጤዩንቨርስቲጨምሮለሚመለከታቸውአካላትይተላለፋሉ።

የጥናቱአዳጋ

በዚህጥናትውስጥመሳተፍምንምአይነትአደጋወይምጉዳትየለውም።

የተሳታፊዎችመብት

በዚህጥናትውስጥያለመሳተፍምሆነየመሳተፍሙሉመብትአሎዎት።

ለሁሉምጥያቄዎችመልስሊሰጡይችላሉ፤ ወይምለማይፈልጓቸውጥያቄዎችላመልሱይችላሉ።

እናምበቃለመጠየቁምየፈለጉትንጊዜሊወስዱይችላሉ።

ለእርሶምግልጽያልሆነማንኛውምጥያቄመጠቅይችላሉ።

ሚስጥራዊነት

የተላለፈማንኛውምመረጃበሚስጥርየሚቀመጥሲሆንየሰዎችስምአይጻፍም።

ክፍልአንድ፡-አጠቃላይመረጃ

ተ.ቁ	መጠይቅ	ምላሽ	ማለፊያ
101	ዕድሜ	1/20-29 2/30-39 3/40-49 4/ 49 በላይ	
102	የስራሁኔታ	1/ተማሪ 2/የቤትዕመቤት 3/የመንግስትሰራተኛ 4/ የግልስራ 5/ የግልተቀጣሪ	
103	የትምህርትሁኔታ	1/ማንበብናመጻፍየማይችሉ 2/ የመጀመርያደረጃትምህርት 3/ ሁለተኛደረጃትምህርት	

		4/ ድፕሎማናከዚያበላይ	
104	የጋብቻሁኔታ	1/ ያለገባ 2/ ያገባ 3/ የተፋታ 4/ በሂምትየሌለ	
105	አማካኝየወርገቢ		

<u>ክፍልሁለት፡</u>ስለጡትካንሰርየቤተሰብእናየግልታሪክ

ተ.ቁ	መጠይቅ	ምላሽ	ማለፊያ
201	የጡትካንሰርበቤተሰብበኩልአሎት?	1/ አዎ 2/ የለኝም	የለኝምካሉወደጥያቄቁጥር 203 ሂዱ
202	ለጥያቄቁጥር 201 አዎከሆነመልሶ፤ማንነበርየተያዘው?	1/ እናት 2/ እህት 3/ አክስት 4/ አያት 5/ ሌላካለይጠቀስ	
203	ከዚህቀደምየጡትካንሰርህመምተገኘኝቶቦትያውቃል?	1/ አዎ 2/ አያውቅም	

<u>ክፍልሦስት፡</u>ስለጡትካንሰርእናስለጡትእራስንመመርመርዕውቀት

ተ.ቁ	መጠይቅ	ምላሽ	ማለፊ
301	ስለጡትእራስንመመርመርሰምተውያውቃሉ ?	1/ አዎ 2/ አላውቅም	
302	ለጥያቄቁጥር 301 አዎከሆነምላሾመረጃዉንያገኙትከየትነው ?(ከ1 በላይምላሽይቻላል)	1/ የመገናኛብዙሃን 2/ ጓደኛወይምዘመድ 3/ ከጤናባለሙያ 4/ሌላከለይጠቀስ	
303	ስለጡትካንሰርቅደመምርመራዘዴዎችያውቃሉ ?	1/ አዎ 2/ አላውቅም	
304	የጡትካንሰርበዘርየሚተላለፍነው ?	1/አዎ 2/ አይደለም 3/ አላውቅም	

305	አንዲትሴትየራሷንጡትመመርመርመጀመርያለባትመቼነው ?	1/ ከ20 ዐመትበኋላ 2/ ከ20 አመትበፊት 3/ አላውቅም	
306	የጡትዕራስንመመርመርልምድበየስንትጊዜውመደረግአለበት ?	1/ በየወሩ 2/ በየሦስትወሩ 3/ ሌላካለይጠቀስ	
307	አንዲትሴትየራሷንመመርመርያለባትመቼነው ?	1/ ከወርአበባጥቂትቀናትበፊት 2/ ከወርአበባ ከ2-3 ቀናትብኋላ 3/ በወርአበባወቅት 4/ አላውቅም	
308	የትኛዉየሰውነትአቀማመጥየራስንጡትለመመርመርይመረጣል ?	1/ከመስታወትፊትመቆም 2/ መተኛት 3/ አላውቅም 4/ ሌላካለይጠቀስ	
309	የራስጡትምርመራጠቀሜታውምንድንነው ?	1/ የጡቶችንእይታምንእንደሚመስልለማወቅ 2/ በጡቶቹየሚፈጠረውንለውጥለማወቅ 3/ አላውቅም	
310	የጡትእራስንመመርምራያዘዬዎችምንምንናቸው ?	1/ ከመሰታወትፊትጡቶችንመመልከት 2/ የጣትንጣፎችንበመጠቀምክብበክብበመዳሰስ 3/ የጡትጫፍንበመጫንየጡትፈሳሽንበማየት 4 አላውቅም	

ክፍልሶራት:የራስንጡትመመርመርላይያለአመለካከት

ተ.ቁ	መጠይቅ	በጽኑ አልስማማም (1)	አልስማማም (2)	ገለልተኛ(3)	እስማማለሁ(4)	በጽኑእስማመ ለሁ(5)
401	የጡትካንሰርስለመያዝበ ጣምእጨነቃለሁ					
402	የጡትካንሰርየመያዝዕድ ሌበጣምከፍተኛነው					

403	ስለጡትካንሰርሳስብበጣ ምይጨንቀኛል					
404	ስለጡትካንሰርማሰብእፈ ራለሁ					
405	የጡትካንሰርከባልጋርያ ለውንግንኙነትአደጋላይ ይጥላል					
406	የራሴንጡትስመረምርስ ለራሴጥሩስሜትይሰማኛ ል					
407	በየወሩየራሴንጡትብመ ረምርስለጡትካንሰርበዙ ምአልጨነቅም					
408	የራሴንጡትመመርመር ወደፊትካንሰርሊሆንየሚ ችልእባጭንበጊዜውእንዳ ገኝይረዳኛል					
409	የራስንጡትመመርመር ስለጡትካንሰርበጣምእን ድጨነቅያደርገኛል					
410	የራስንጡትመመርመር ያሳፍረኛል					
411	የራስንጡትመመርመር እረጅምጊዜይወስዳል					
412	የራሴንጡትብመረምር ጤናማእናጤናማያልሆነ ነገርመለየትእችላለሁ፡፡					
413	የራሴንጡትብመረምርየ ጡትእባጭየመለየትአቅ ምአለኝ					

<u>ክፍልአምስት</u>:ዳጡትእራስንየመመርመርልምድ

ተ.ቁ	መጠይቅ	ምላሽ
501	የራሶንጡትመርመረውያውቃሉ?	1/ አዎ 2/ አላውቅም
502	የራስጡትምርመራለምንያደረጋሉ ?	1/ የጡትችግርስለነበረብኝ 2/ በዘርእንዳይመጣብኝፈርቼ 3/ የጡትካንሰርንቀድሜለማወቅእናበጊዜህክምናለመጀመር 4/ የጡትካንሰርእዳይዘኝበመፍራት
503	በምንያህልጊዜልዩነትየራሶንጡትይመረምራሉ ?	1/ በሳምንትአንዴ 2/ በወርአንዴ

		3/በስድስትወርአንዴ 4/ በዓመትአንዴ
504	የራሶንጡትመችመችይመረምራሉ ?	1/ ከወርአበባ ከ5-7 ቀናትብኋላ 2/ ከወርአበባ ከ2-3 ቀናትበፊት 3/ በማንኛውምቀን 4/ አላውቅም
505	የራስጡትምርምራንየማያደርጉከሆነምክኒያቶችምንድንነው?	1/ የጡትችግርስለሌለብኝ 2/ የጡትህመምምልክቶችስሌለበኝ 3/ የራስጡትምርመራእዴትእንደሚሰራስለማላውቅ 4/ የራስጡትምርመራስለማይጠቅም
506	በዶክተርየጡትምርመራአድረገውያውቃሉ ?	1/ አዎ 2/ አላውቅም