



**Asrat Woldeyes Health Science Campus
School of Nursing and Midwifery
Department of Nursing**

Level of happiness and its associated factors among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town, north shewa, Ethiopia, 2023.

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Signed approval sheet by the board of examiner

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Abstract

Background: Happiness is an emotional state characterized by feelings of joy, satisfaction, contentment, and fulfillment. During pregnancy happiness gives the women a potential ability to cope any complications. It is also useful for a baby's health during perinatal period. Lower levels of happiness and well-being have been shown to increase mortality and the likelihood of developing chronic diseases. Hence these paper need to assess level of happiness and its associated factors among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town, north shewa, Ethiopia.

Objective: To assess the level of happiness and its associated factors among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town, north shewa, Ethiopia, 2023.

Method: Institution based Cross- sectional study design was conducted in Debre Berhan health facilities from April1-30, 2023. A simple random sampling technique was applied to select the health facilities. Systematic random sampling technique was used to select participants. The total sample size was 498 and collected from five health facilities. The Oxford Standard Happiness Questioner (OSHQ) was used to gather the data. Data were collected using a pretested interviewer-administered questionnaire which was adapted from previous related studies. The reliability score and its Cronbach's alpha are 0.841. Three data collectors and 1 supervisor were assigned. Data were collected after the women get their antenatal care. SPSS version 25 was utilized for the analysis. Binary logistic regression was used to analyses relationships between dependent and independent variables. To interpret the results, descriptive statistics, adjusted OR, and 95% CI were used.

Result: A total of 484 pregnant women were participated in this study. The prevalence of low level of happiness among pregnant women in this study was 49.4% (95% CI; 44.6-54.1). Women who have no formal education (unable to read and write) (AOR 4.035, CI 95%, 1.368-11.9), women who are unemployed (AOR 2.638, CI95%, 1.321-5.265) and receive strong social support (AOR 0.053, CI95%, 0.027-0.106) respectively were the most indicators for low level of happiness during pregnancy.

Conclusion: Almost half of the respondents have low level of happiness. Maternal educational level, occupation and social support were the most significant variables for low level of happiness. Increasing the level of maternal happiness during pregnancy by assessing and eliminating the factors that associate with it is our responsibility during antenatal care of follow-ups.

Keywords: happiness, pregnancy, women, level, associated factors.

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Abbreviation and/or Acronyms

ANC: - Antenatal Care

AAS:-Abuse Assessment Screen

CRH: Corticotrophin-Releasing Hormone

HPA: Hypothalamo–Pituitary–Adrenal

IPV: Intimate Partner Violence

IUGR: Intra Uterine Growth Restriction

LBW: Low Birth Weight

MDD: Major Depressive Disorder

OHQ: Oxford Happiness Question

OSSS: Oslo Social Support Scale

QOL: Quality Of Life

SGA: Small For Gestational Age

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Introduction

1.1 Background

Happiness is a psychological concept that includes many ideas and aspects of wellness. This is a crucial idea in the study of mental health. The most significant quality of life (QoL) indicator is considered to be happiness because, combined with physical and mental health, it demonstrates how people live and thrive. (1). Happiness is a feeling of joy, happiness, or well-being that involves both good emotions and a sense of fulfillment in one's life (2).

Happiness creates a positive attitudes on life, a healthy mental state, peaceful emotions, hope for the future, and better sleep (3). Independently, low levels of happiness are linked to a higher risk of depression in women (4). Studies on pregnant women have reported strong associations between mothers' level of happiness and prenatal care initiation or utilization as well as pregnancy outcomes, including low birth weight, intrauterine growth restriction, and infant death (5-7).

Happiness is conceptualized as an important outcome in its own right, distinct from the absence of depressive disorder, possibly with its own specific causal mechanisms(8). It has been demonstrated that lower levels of happiness and well-being are associated with increased mortality and greater risk of chronic illnesses(9). Given the social and economic impact of poor mental health worldwide, and growing recognition of the importance of happiness or "well-being", the value of prevention and early intervention is highly emphasized(10, 11).

It is common to see emotions like happiness, disgust, anger, anxiety, fear, and depression throughout pregnancy. Any stage of pregnancy may result in diverse physiological and psychological reactions. Physical changes, including dealing with morning sickness, breast discomfort, physical changes, sexuality, food and exercise, etc., become prominent in the first trimester; the second trimester is typically a joyous time for parents. A pregnant woman cope with the prospect of having a baby while concentrating on the health of the unborn child.(12).

Happiness during pregnancy is linked to a lower pain level and a higher pain tolerance. According to a study's findings, 57% of moms experienced high levels of happiness during their pregnancies, while none of the participants reported experiencing poor levels of pleasure. (13).

Beginning in the third trimester, mother gradually takes on parental responsibility for the child and develops sensitivity out of fear of losing her child. And as the end of pregnancy draws near, labor anxiety starts to set in. She will be concerned about whether the baby will be healthy and whether the birth will go well. Even thinking of going through labor pains can make pregnant women anxious. They want to start having a healthy baby right away(12).

1.2 Statements of the problem

Pregnant women continue to experience a worldwide problem with low levels of happiness. Few publications have revealed that 59.5% of black Colombians, 42.7% of Asians, and 31.5% of Iranians had low levels of happiness, despite the fact that no additional studies have been discovered worldwide(13). The impact of maternal stress not only on mothers but also affects birth outcomes, including low birth weight (LBW), preterm, small for gestational age (SGA), and intra uterine growth restriction (IUGR) (14).

Individual, societal, and economic characteristics, as well as elements like literacy, can both directly and indirectly affect how happy a person feels, according to research from Oklahoma, USA(15).

In Iran 11.3% of pregnant women reported feeling unhappy. They claim that the first three months of pregnancy are when people feel the least happy because of conditions associated to pregnancy, such as nausea, vomiting, and worry. Mood swings affect the connection to the baby not just during pregnancy but also during the postpartum and breastfeeding periods because negative emotions like sadness, disappointment, and anxiety have a substantial impact on mother and fetal relations (16).

Unhappiness might result in unpleasant experiences and a poor pregnancy. Through its effect on the mother's sense of deserving, it could additionally decrease the maternal-fetal attachment. Inappropriate reactions to pregnancy and subsequent stresses can have a harmful impact on both the mother and her fetus as a result of such bad experiences, which manifest as irritability and anxiety.(17).

Positive side effects were more common in happy pregnant women than in critical thinkers. Pregnancy abnormalities, birth, and newborn status were all factors in the first trimester's related anxiety. Both the second and third trimesters' experiences with life stress were similarly linked to the same measurement of anomalies. Stress from daily life and anxiety were both discovered to play crucial roles at various points in the development of defects in pregnancy.(18). Previous studies on prenatal anxiety came to the conclusion that pregnancy-specific anxiety rather than general worry are the true predictors of poor labor outcomes. (19).

During pregnancy, there are significant physical and psychological changes. These modifications may have an impact on both maternal and newborn health (including

monitoring during pregnancy, pregnancy outcomes, and postpartum health for mothers, and the infant's psychomotor development) as well as the quality of life for pregnant women. (20).

The majority of studies conducted in this field are about fears, anxiety, distress, and discomforts during child delivery, and there is little evidence regarding happiness/unhappiness during pregnancy using happiness measurement standardized questionnaire. Therefore, this study will assess the level of happiness and its associated factors among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town north show.

1.3 Significance of the study

The study was to assess the level of happiness and its associated factors among pregnant women who attended antenatal care follow-up. So the findings will help primarily benefit pregnant women and the fetus through good health impact and by improving medical practitioners' knowledge and understanding of the elements that influence pregnant women's happiness. As well as if the mother and fetus is in a good health then there is less burden for health service giver, it will be also used as an input for planning and strategies in antenatal care services.

And also health care providers, academic staffs, and other stakeholders will benefit from the information provided by this study.

2. Literature review

2.1 Overview of happiness

Different studies conducted worldwide showed that there were predictor variable with the level of maternal happiness. Unintended pregnancy, reported intimate partner violence, being in the third trimester, maternal age and income were significantly associated (16, 21).

2.2 Socio demographic factors

An Iranian study found that maternal age mainly contributed to the level happiness during pregnancy. However, other factors such as cultural norms and ideas about the appropriate age of marriage and pregnancy could change the significance of age in predicting the groups with the highest risk for low level of satisfaction in pregnancy (22).

Extrovert personality, stable personality, high family wealth, and an improved marital connection were found to be the four predictive indicators for happiness in pregnant women in a study conducted in Thailand.(23) .

According to a study done in the United Arab Emirates, women who received more social support, were more educated prior to getting pregnant, or had planned their pregnancies were more likely to report better happiness scores. Women who were worried about giving birth reported less enjoyment overall. Happiness was not substantially correlated with maternal age or employment (2).

An urban lifestyle, fear of labor, abuse by an intimate partner, and poor relationships with one's parents and in-laws have all been identified to be signs of pregnancy depression, according to a study conducted in south India(24).

2.3 Obstetric factor

When obstetric characteristics of the pregnant women were compared to their scores on the Oxford Happiness Questionnaire, it was discovered that having a planned pregnancy, not having any stillbirths, and getting pregnant for the first time all increased happiness. The difference was also discovered to be statistically significant (12).

According to a research done in Iran, only 18.3% of women stated that they were happy. Order of pregnancy, planned pregnancy, abortion, fetal death, history of comorbid conditions, and assistance from husband or parents all significantly correlated with happiness(16) .

A study done in the Turkish city of Erzurum found a strong correlation between a woman's desire to get pregnant and how happy she feels while carrying the child. Pregnancy happiness is influenced by pregnancy desire. Comparing the experiences of pregnant women who were extremely happy, somewhat happy, and not at all happy with their pregnancies(25).

A Washington, DC, study found that women who were unhappy with their pregnancies were more likely to have multiple pregnancies, more live births, or children under the age of two. Those who were glad about their pregnancy than those who were only mildly, moderately, or extremely happy or unhappy had previously suffered from a pregnancy issue or pregnancy loss. Normally, unhappy women's opinions of this pregnancy were less positive.(7).

A study conducted in the Midwestern United States found that pregnancy-related feelings can prevent women from receiving early and ongoing prenatal care. Women are less likely to begin early prenatal care and visit the doctor regularly when they are pregnant unintentionally or at an inappropriate period(26).

According to a study from Iran's Mashhad University, happiness and fear of childbirth (FOC) are significantly correlated. Women who were happier had lower FOC. Additionally, the happier women chose vaginal delivery. (27).The level of fear and anxiety felt by pregnant women is closely correlated with the order of their pregnancies or previous births (28).

A study IRAN, pregnant women who attend childbirth education sessions, spent less time in the hospital and are more satisfied with their delivery experiences. (29) .

Norwegian study showed that children may have persistent good impacts on happiness. However, while mothers happiness was found to be directly and significantly increased by their firstborn kid, having more kids had an adverse effects(30).

2.4 Behavioral Factors

Although the study in Egypt stated that many women with postpartum depression reported experiencing symptoms throughout pregnancy, it also revealed that prenatal sadness is a significant predictor of postnatal depression. Antidepressants, psychotherapy, exercise, and alternative therapies are all interventions for prenatal depression. Exercise has been shown to reduce the symptoms of major depressive disorder (MDD), and it is typically the first suggested lifestyle change to lower morbidity and mortality (31).

Studies in Tehran, Iran have shown that listening to music has an impact on happiness and general health. Women who listen to music improve their view and evaluate their history and present. People become optimistic about the future because being expressive encourages them to enjoy life and their interactions with others(32).

According to a study conducted in Bulgaria, the revolutionary model's load for wellness exercises has a positive impact on cardiorespiratory function and encourages pregnant women to maintain a healthy lifestyle (33) .

2.4 Psychosocial factors

A Washington, DC study found that a woman's degree of pregnancy happiness was also strongly correlated with the quality of her relationships and the depth of emotional support. Unhappy women were more likely than other women to be single, to have had two or more sexual partners in the previous year, and to not be dating anybody right now. Furthermore, unhappy women were less content with the psychological assistance they received(7).

Study in Iran showed that the psychological experience of pregnancy causes several psychological changes in women. Without sufficient assistance from family or the medical committee, fears increase and lead to anxiety and sadness.(29).

A study in UAE revealed that, expecting mothers who felt more social support were twice as likely to report being happier than those who did not. (2) .

A Boston study found that victims of violence were more likely to have a history of depression and suicide attempts, to be experiencing depressive symptoms right now, to be less happy about their present pregnancies, and to be receiving less emotional support from others for the current pregnancy.(34).

In a finding from Poland, single moms were found to have higher rates of psychological distress or depression than married mothers, as well as lower levels of self-efficacy and self-esteem, as well as lower levels of hope and happiness(35) .

In south Gondar about (26.3%) of mothers were married by the enforcement of their family and around (38.6%) of the pregnant women had encountered intimate partner violence (21).

3. Conceptual frame work

This conceptual framework developed by reviewing the previous studies. The variables that this study was focus on level of happiness among pregnant mother, socio demographic, obstetric history, and behavioral and psychosocial factors (16, 21-23).

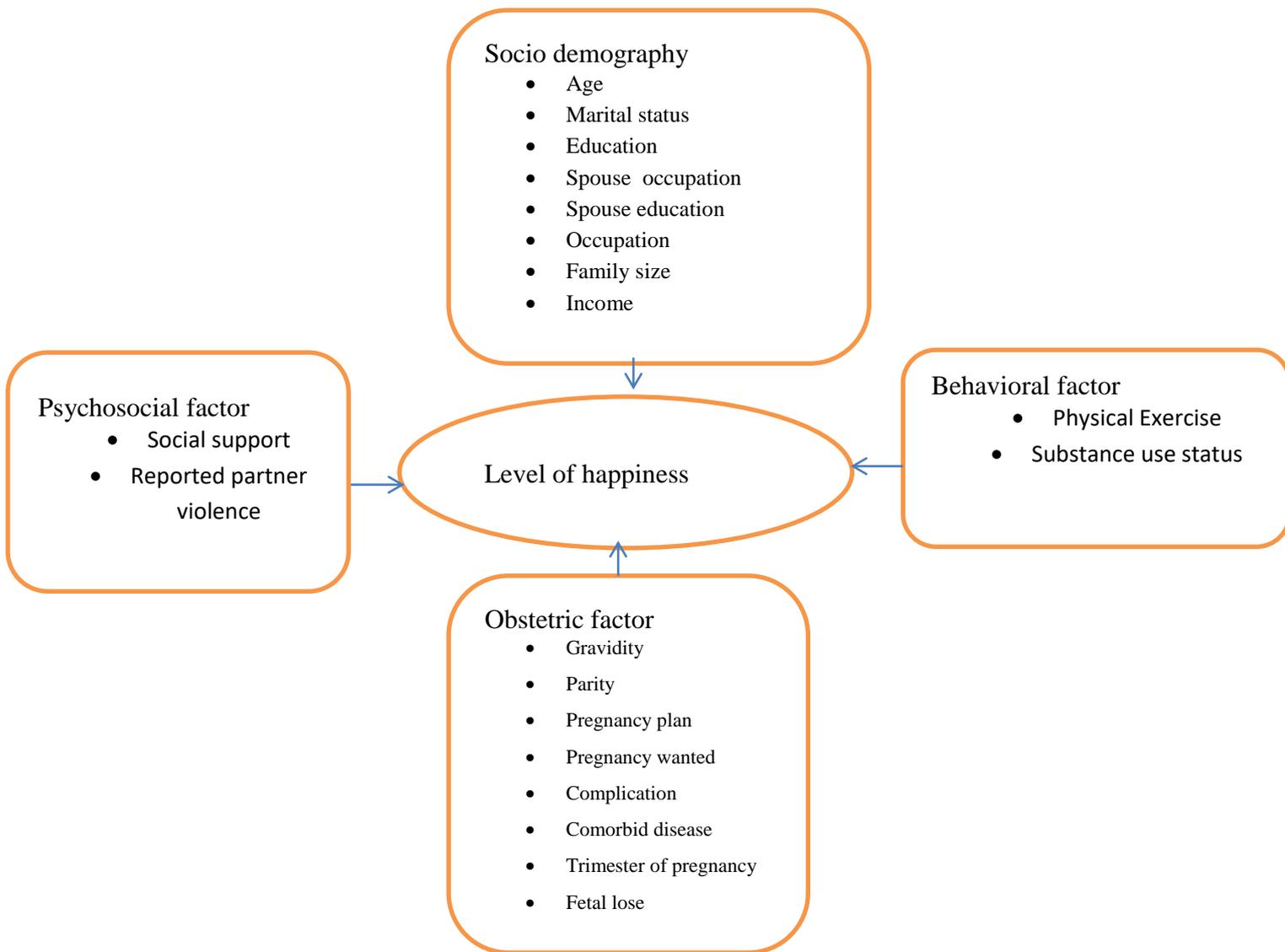


Figure 1: conceptual framework on Level of happiness and its associated factors among pregnant women who attended antenatal care follow-up in public health institutions of Debre Berhan town North Shewa, Ethiopia, 2023

4. Objective

4.1 General objective

- To assess the level of happiness and its associated factors among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town north shewa, Ethiopia, 2023.

4.2 Specific objective

- To determine the level of happiness among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town north shewa, Ethiopia, 2023.
- To identify factors associated with level of happiness among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town north shewa, Ethiopia, 2023.

5. Methodology

5.1 Study area

Debre Berhan is located 130 km northeast of Addis Ababa. The town is divided into 5 sub-cities that have a total area of 142.71 km² with an average of 2840m above sea level. According to the information obtained from the district health office, in 2015/16, the total population size of the district is put as 202,226 out of which 106,388 are women and around 6815 are pregnant. There are 2 governmental hospitals and six health centers.

5.2 Study design and period

Institution based cross-sectional study was conducted from April 1-30, 2023 in selected health facilities in Debre Berhan, Ethiopia.

5.3 Source Population

All pregnant women who are attending antenatal care in Debre Berhan health facilities.

5.4 Study population

All randomly selected pregnant women who came to antenatal care during the study period in selected health facilities.

5.5 Inclusion and Exclusion criteria

Inclusion criteria

All pregnant women who are attending antenatal care in selected health facilities during study period.

Exclusion criteria

Pregnant women who could not answer the intended questions because of severe illness and who diagnosed mental health problems.

5.6 Sample size determination

Intimate partner violence, unintended pregnancy and third trimester pregnancy were considered in order to calculate the required sample size. To calculate sample size all the above exposure variables were considered and unintended pregnancy was chosen as an independent variable since it gives maximum sample size as compared to other exposure variables. The sample size was determined using a formula for one population proportions and calculated by Epi info version 7.2.5 statistical software package by considering that the

percent of controls were 17.1% (main exposure variable), which is estimated from another study, 95% CI, 80% power of the study and ratio 1:1 with 1.94 AOR. Accordingly, by adding 10% non-response rate a total sample size of 498 was planned to be involved in the study.

Table 1: Sample size calculation to assess level of happiness and its associated factor among pregnant women who are attending antenatal care follow up in Debre Berhan , north shoa Ethiopia 2023

Variables	proportion outcome	AOR	sample size	by adding 10%
Intimate partner violence	29.3%	2.42	192	212
Unintended pregnancy	17.1%	1.94	452	498
Third trimester pregnancy	55.2%	1.89	362	399

5.7 Sampling technique

Simple random sampling lottery method was used to select public health institution and the study was conducted at selected public health institution in Debre Berhan town. Systematic random sampling technique was used to select pregnant women. The study subject (pregnant women) was selected from antenatal care (ANC) registration book. The total number of pregnant women at ANC was estimated from registration book. The average number of pregnant women in Debre Berhan comprehensive specialized hospital, Keyit health center, Debre Berhan health center, Tebase health center and chacha health center is 270,195 a total of 1000 mothers in 15 days. The number of pregnant women to be included in study from each health institution was calculated using the Proportionate to size (PS) allocation technique as follows; $n_i = (n/N) N_i$, where

n_i =sample size of each health institutions

n =total sample size

N_i =population of each health institutions

N = total population of five health institutions

So based on the above formula sample size from each health institutions is calculated as;

$$\text{Debre Berhan comprehensive specialized hospital} = \left(\frac{498}{1000}\right) * 300 = 150$$

$$\text{Keyit health center} = \left(\frac{498}{1000}\right) * 128 = 64$$

$$\text{Debre Berhan health center} = \left(\frac{498}{1000}\right) * 270 = 134$$

$$\text{Chacha health center} = \left(\frac{498}{1000}\right) * 200 = 100$$

$$\text{Tebase health center} = \left(\frac{498}{1000}\right) * 100 = 50$$

Totally gives the sample size=498

To get the individual sample units Systematic random sampling technique was used with

$$K = (N/n) \text{ which is } \left(\frac{1000}{498}\right) = 2.008$$

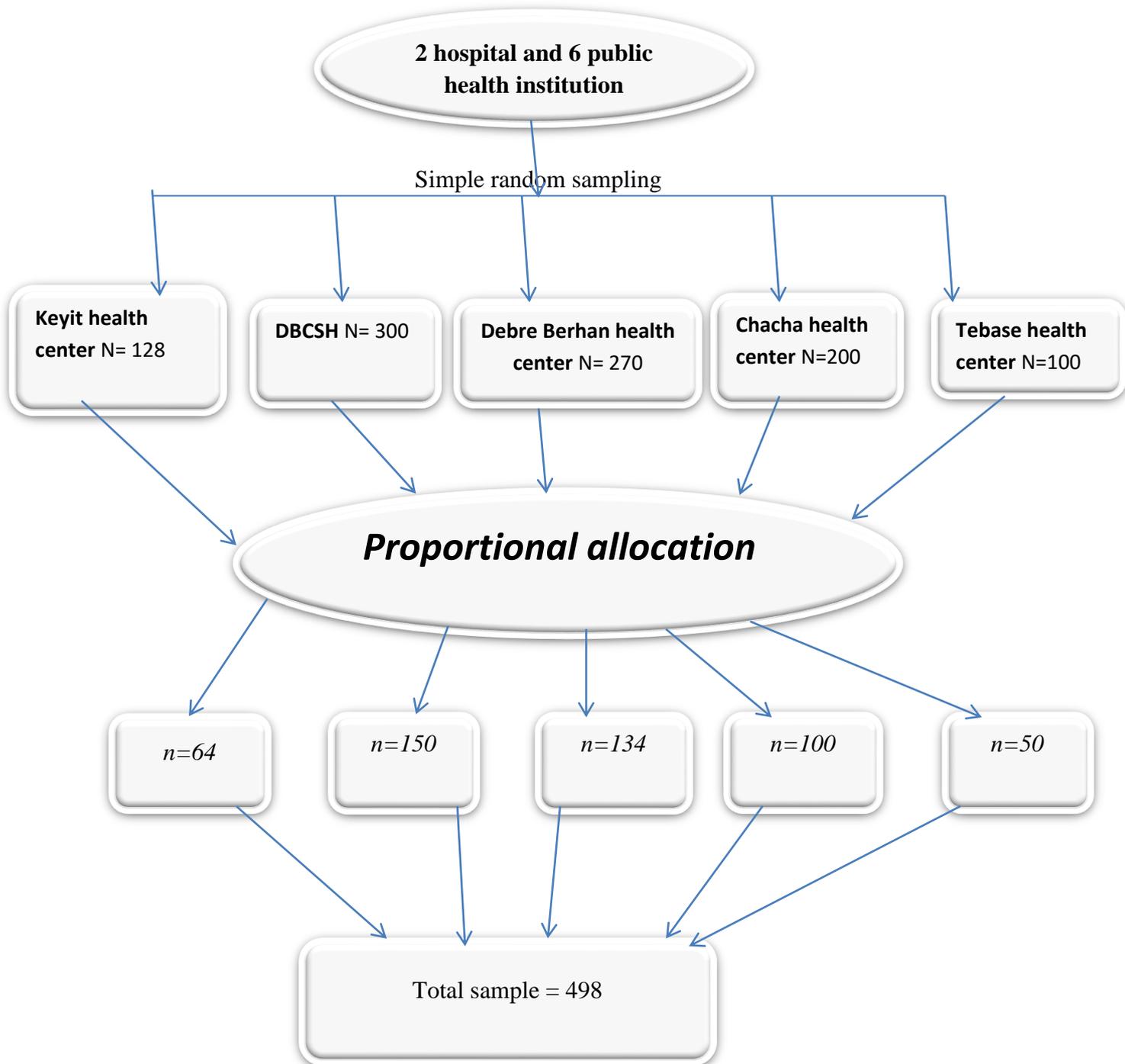


Figure 2: Schematic representation of sampling procedure on Level of happiness and its associated factors among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town, north shewa, Ethiopia, 2023.

5.8 Data collection methods

Data was collected using a pretested interviewer-administered questionnaire which was adapted from previous related studies. By using Oxford standardized happiness questioner and other developed tools; it contains socio-demographic characteristics, obstetric history, behavioral factors, and psychological factors. The OHQ consists of 29 statements, each of which can be agreed or disagreed with using a uniform 6 point Likert scale. 12 of the 29 statements had negative presentations, which we took into account by applying reverse scoring. The respondents predicted to receive a score between one and six for each statement. For the OSSS, the total score runs from 3 to 14, with high values signifying great levels of social support and low values signifying weak levels. Intimated partner violence question lists for psychosocial abuse to measure items such as insulting the woman, belittlement in front of others, teasing on purpose, and threat to hurt her or someone she care about. Sexual violence whether the husbands/partners physically forced to have sexual intercourse when the women did not want to or had sexual intercourse when she did not want to because she was afraid of what partner might do, and/or forced to do something sexual that she found humiliating or out of their norms. The questioner was translated in to Amharic language to easy the interview. Then data was collected by interviewer- administered questionnaire in selected government health center at Debre Berhan for eligible pregnant women. The actual data collection was carried out from April 1-30, 2023 by three BSC Midwives, and one MSC Nurse for supervision was selected to supervise and organize during data collection for each selected governmental health centers. To ensure the quality of data, one day training was given for all data collectors and supervisor's .The Questionnaire was pre-tested one week before the actual data collection time. Pre-test was done in5% of the sample size (25 participants) in Hakim Gizawe Hospital. After the pre-test some modification on questioner was done. The modification was done on arrangement, consequence, and same questions are merged. The investigator and supervisors were closely followed the day-to-day data collection process and ensured the completeness and consistency of the questionnaire administered each day. The investigator and supervisor were supervising the data collectors randomly while interviewing the mothers. The collected data was reviewed and checked for completeness before data entry.

5.9 Variables of the study

5.9.1 Dependent variable

Level of happiness

5.9.2 Independent variables

Socio demographic factors

- Age
- Marital status
- Occupation
- Education
- Family size
- Spouse occupation
- Spouse education
- Income

Obstetric factors

- Gravidity
- Parity
- Pregnancy plan
- Complication during this pregnancy
- Comorbid disease
- Trimester of the pregnancy
- History of fetal loss

Psychosocial factors

- Social support
- Reported partner violence

Behavioral factors

- Substance use history
- Exercise

5.10 Operational definitions

Low level happiness: -the total sum of 29 responses divided by 29 and if a woman scores <4 said to be low level of happiness (36).

High level happiness: - the total sum of 29 responses divided by 29 and if a woman scores ≥ 4 said to be high level of happiness (36).

Intimae partner violence:- If any questions on are answered affirmatively, the AAS is considered positive for abuse (37).

The OSSS sum score of; 3-8 poor social support,9-11 moderate social support,12-14 strong social support(38).

5.11 Data processes and analysis

Data cleaning and cross-checking was done before analyzing and coding, entering and cleaning data using EPI INFO windows -version7 statistical software; and analyzing using SPSS version-25. Both descriptive and analytical statistical methods were utilized. Only Variables in binary screening found at p-value less than 0.25 was consider into multivariate logistic regression. Logistic regression analysis was applied to describe the functional independent predictors. Odds ratio (OR) with 95% confidence interval (CI) determined to assess the strength of association between independent and dependent variables. For all statistical significant tests p-value < 0.05 will be used as a cut-off point.

5.12 Ethical consideration

The study was conducted after ethical clearance was obtained from the Institutional Review Board (IRB) of Debre Berhan University, Asrat Woldeyes Health Sciences Campus. An ethical clearance letter was submitted to North Shoa's health administration and management body and was permitted to conduct the research. The objectives of the study were clarified to the North Shoa health administrative body and an additional supportive letter from the Debre Berhan health administration was disseminated to the study health facilities. For participants written consent was used.

5.13 Dissemination plan

The findings of this study will be presented to Asrat Woldeyes health science campus, department of Nursing. Furthermore, after presenting it, it will be disseminated to Debre Berhan University, the study area district health sectors, and various levels of stakeholders who are interested in or concerned about the research findings in the town via soft and hard copy. To further disseminate the information, the findings will be attempted to be published in a journal.

6. Result

6.1 Socio-Demographic characteristics of the respondent

Among 498 interviews, 484(97%) were respond the questioner. The mean score of pregnant women age were found to be 28.6 ± 4.6 . Most of women were married 475(98.1%).

Table 2: socio demographic characteristics of the respondents level of happiness among pregnant women of north shoa Debre Berhan Ethiopia, 2023, (n=484)

Variables	Categories	Frequency	Percentage
Age	20-25	154	31.8
	26-30	168	34.7
	31-36	146	30.2
	≥ 37	16	3.3
Marital status	single	3	0.6
	married	475	98.1
	divorced	6	1.2
Educational status	Uneducated	32	6.6
	Elementary	114	23.6
	Secondary	121	25.0
	college and above	217	44.8
Occupation	Employed	227	46.9
	un employed	97	20.0
	Self -employed	160	33.1
Spouses educational status	Uneducated	33	6.8
	Elementary	53	11.0
	Secondary	124	25.6
	college and above	274	56.6
family size	1-3	264	54.5
	4-6	204	42.1
	≥ 7	16	3.3
Income	<5000	103	21.3
	5000-10000	205	42.4
	>10000	176	36.4

6.2 Obstetric and medical history of the mother

Most of the women (65.3%) were multipara. Almost more than half Four hundred forty-seven women (92.4%) have planned pregnancy. Two hundred seventy one (56%) were on their 2nd trimester of pregnancy. Eighteen (3.7%) had complication during this pregnancy, and the common complication was HEG. Forty two (8.7%) have comorbid disease, the common is respiratory disease. From the respondent 287(59.3%) of women have 3 and less than children. Only 32(6.6%) from 484 pregnant women had history of fetal loss.

Table 3: obstetric and medical history of the respondents level of happiness among pregnant women of north shoa Debre Berhan Ethiopia, 2023, (n=484)

Variables		Frequency	Percent
Gravidity	<=3	287	59.3
	4-5	187	38.6
	>=6	10	2.1
Parity	0	161	33.3
	1-4	316	65.3
	>=5	7	1.4
month of pregnancy	<=3	42	8.7
	4-6	271	56.0
	>=7	171	35.3
Pregnancy plan	Yes	447	92.4
	No	37	7.6
Complication during this pregnancy	Yes	18	3.7
	No	466	96.3
History of Fetal loss	Yes	32	6.6
	No	452	93.4
Comorbid disease	Yes	42	8.7
	No	442	91.3
If yes which one?	HTN	6	1.2
	DM	2	0.4
	HIV/AIDS	2	0.4
	HEART	6	1.2
	DISEASE	11	2.3
	respiratory	15	3.1
	disease		

6.3 Behavioral factors

Most of the respondent 221(45.6%) had experience of alcohol use. Two hundred forty eight (48.7%) had a history of physical exercise.

Table 4: behavioral factors of the respondents level of happiness among pregnant women of north shoa Debre Berhan Ethiopia, 2023, (n=484)

Variables		Frequency	Percent
Tobacco or cigarettes use	Yes	1	0.4
	No	483	99.6
Alcohol use	Yes	221	45.6
	No	263	54.3
Physical exercise	Yes	218	45.0
	No	266	55.0

6.4 psycho social factors

Of all study participant 132(27.3%) have poor social support, 198(40.9%) have moderate social support and the rest 154(31.8%) have strong. From 484 participants 28(5.8%) reported intimate partner violence.

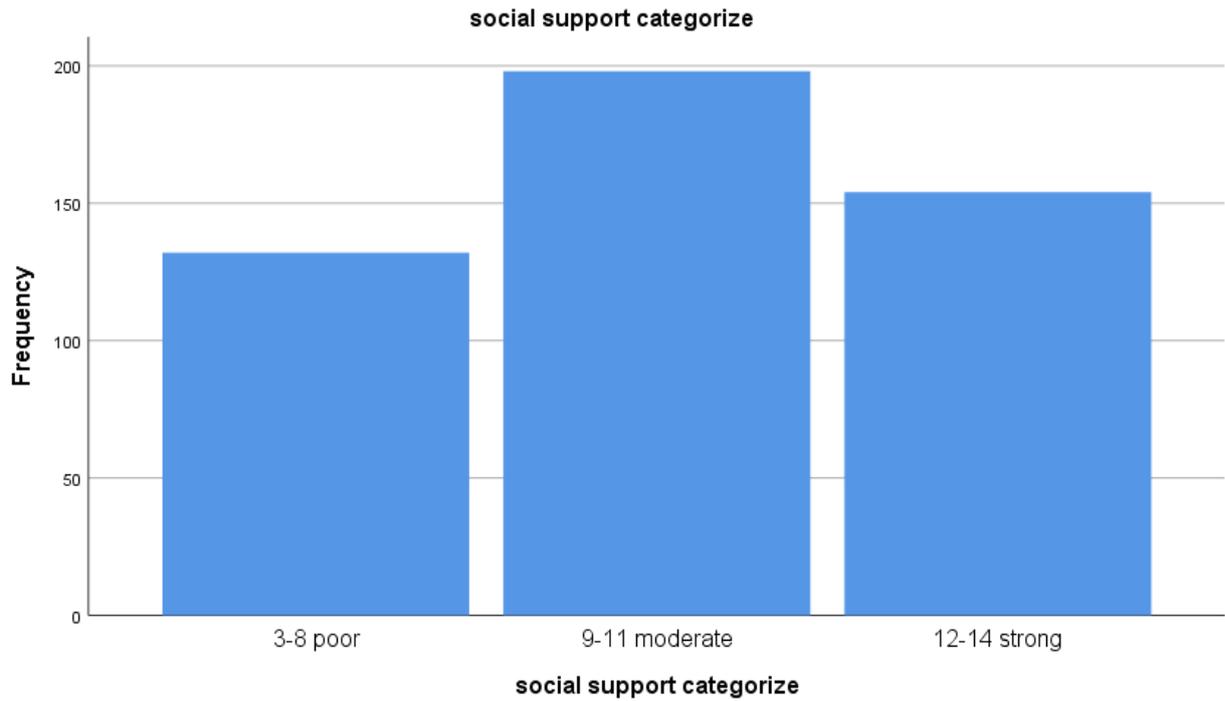


Figure 3: psycho social factors of the respondent's level of happiness among pregnant women of north shoa Debre Berhan Ethiopia, 2023, (n=484)

In this finding the prevalence of low level of happiness among pregnant women is 49.4%.

6.5 Factors associated with low level of happiness

Based on bivariate logistic regression model eight variables were associated with low level of happiness at $p < 0.25$. Which is educational status, occupation, spouse educational status, gravidity, parity, history of fetal loss, month of pregnancy and social support. From those which associate in bivariate logistic regression only four were associated significantly in multivariate logistic regression. Educational level, occupation, and social support are associated significantly.

Women who have no formal education were 4 times more likely to have low level of happiness as compared to women who have collage and above educational status with (AOR 4.035, 95%CI ; 1.368-11.9). With regard to those elementary school educational status women, the likelihood of having low level of happiness was 2 times (AOR 2.488, 95%CI, 1.172-5.279) as compared to those who have collage and above educational status. The odds of experiencing low level of happiness during pregnancy that secondary school educational status were 5.88 times higher as compared to those who have collage and above educational status (AOR 5.881, 95%CI, 2.788-12.404).

There's a 2.638 fold increase chance of Mother who have unemployed to have low level of happiness as compared to mother who are employed with (AOR 2.638, 95%CI, 1.321-5.265).

Social support is one of the indicators for low level of happiness. Women who receive strong social support 94.7% less likely to expose to low level of happiness as compared to women who receive poor social support with (AOR 0.053, 95%CI, 0.027-0.106). And women who receive moderate social support 65.2% less likely to expose to low level of happiness as compared to women who receive strong social support with (AOR 0.348, 95%CI, 0.195-0.621).

In this study the level of happiness was determined and its associated factors. To determine the level of happiness there was a 29-item OHQ for 484 participants. After the interview, their responses were entered into Epi data and exported to SPSS, then transformed into variables – mean. Their mean was obtained. Then they were recoded into low level and high level. So 49.4% were low level of happiness and 50.4% were high level of happiness. The associated variables were selected through Analysis- Regression – Binary logistic, one by one all variables were done. After getting those eight variables in binary, they were added in multiple logistic regression, so those three were associated with level of happiness.

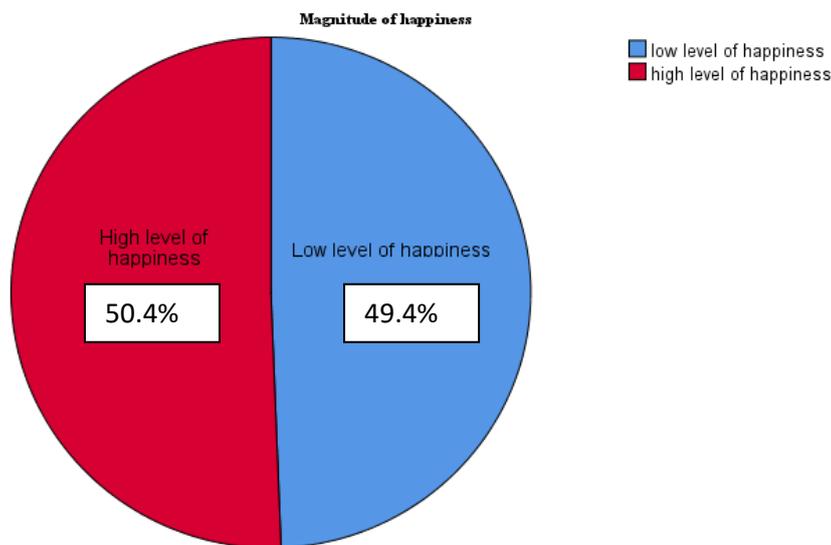


Figure 4: Magnitude of level of happiness among pregnant women of north shoa Debre Berhan Ethiopia, 2023, (n=484)

Table 5: Factors Associated with Level of Happiness among pregnant women of north shoa Debre Berhan Ethiopia, 2023, (n=484)

Variables	Level of happiness		COR	P-value	AOR	P-value
	Low	High				
Education						
Un educated	23	9	5.6(2.461-12.74)	0.000	4.035(1.368-11.9)	0.011
Elementary	66	48	3.013(1.884-4.819)	0.000	2.488(1.172-5.27)	0.018
Secondary	82	39	4.607(2.859-7.424)	0.000	5.881(2.78-12.40)	0.000
Collage and above	68	149	1		1	
Occupation						
Un employed	110	117	1.120(0.747-1.681)	0.583	2.638(1.321-5.265)	0.006
Self employed	56	41	1.628(0.978-2.708)	0.061	1.837(0.954-3.534)	0.069
Employed	73	87	1		1	
Spouse education						
Un educated	19	14	2.218(1.067-4.613)	0.033	0.280(0.076-1.026)	0.065
Elementary	32	21	2.491(1.364-4.568)	0.003	0.707(0.264-1.891)	0.490
Secondary	84	40	3.433(2.192-5.376)	0.000	1.181(0.578-2.413)	0.648
Collage and above	104	170	1		1	
Gravidity						
<3	108	179	1.408(0.357-5.559)	0.625	3.117(0.517-18.88)	0.215
4-5	128	59	0.198(1.264-12.26)	0.022	5.428(0.941-31.29)	0.158
>=6	3	7	1		1	
Parity						
0	47	114	0.550(0.242-1.251)	0.154	0.795(0.233-2.718)	0.715
1-4	180	115	2.087(0.953-4.527)	0.066	2.532(0.853-7.52)	0.094
>5	12	16	1		1	
Month of pregnancy						
<3	18	24	0.644(0.326-1.075)	0.205	0.694(0.269-1.791)	0.451
4-6	129	142	0.780(0.532-1.145)	0.205	0.822(0.489-1.38)	0.458
>7	92	79	1		1	
Fetal loss						
No	215	237	0.302(0.133-0.687)	0.004	1.994(0.736-5.403)	0.175
Yes	24	8	1			
Social support						
Poor	101	31	1		1	
Moderate	113	85	0.408(0.250-0.667)	0.000	0.348(0.195-0.621)	0.000*
Strong	25	129	0.059(0.033-0.107)	0.000	0.053(0.027-0.106)	0.000

7. Discussion

This study was conducted with the aim of assessing the level of happiness and its associated factor among pregnant women attending antenatal care follow up in Debre Berhan. In the multivariate analysis, educational status, occupation and social support were found to have statistically significant on low level of happiness.

The prevalence of low level of happiness among study participants was found to be 49.4%. This finding is in contrast with a similar study conducted in south Gondar 24% (39) and relatively comparative with study in Asia 42.3%(7) and lower as compared to the study conducted in Iran(22) and Poland (40) which was 68.5% and 57.3% respectively. The difference in my results and those of others could be attributed to the particular methodology I used to classify happiness in my research. There are two categories: "low level of happiness" and "high level of happiness." From a cultural standpoint, the respect and assistance of the pregnant woman's family may have an effect on her mental well-being and happiness.

Among socio-demographic characteristic of the respondent educational level was found to be associated with low level of happiness. Those women with no formal education were 4 times (AOR 4.035, 95%CI=1.368-11.9) more likely to experience low level of happiness than those women who have collage and above educational level. This finding is supported by the study conducted in UAE and Iran (2, 17, 41) among the good emotions, happiness is one that should be prioritized in educational institutions, according to the majority of specialists. Education and happiness are closely related, as well. Decreased educational level of the women may affect their exposure on healthcare seeking behavior and also diminish their skill of communication with health care professionals. The similarity of the findings might be due to similarity of the questions (OHQ)

In this study occupation is one of effective factor for happiness. Women who are not employed were 2 times (AOR 2.638, 95%CI, 1.321-5.265) more likely to have low level of happiness compared to those who are employed. This finding is also supported by other studies carried out in India, Brazil and German (28, 42, 43). It demonstrated that working women were happy. Higher income levels are associated with happier lives and more health-promoting behaviors. As a predictor variable, occupation had a positive impact on self-

esteem scores, supporting the general pattern that a woman who takes on more tasks in search of financial stability and satisfaction at work has higher confidence in oneself.

Women who get strong social support were 94.7% less likely to experience low level of happiness as compared to those poor social support with (AOR=0.053,95%CI, 0.027-0.106). this study findings supported by study conducted in China and Poland (40, 44), Strong social support received by women is related to high level of happiness(43) and the received social support experienced by women helps to adapt and fulfill the social role and determines the women's happiness in the Antenatal period. Also receiving moderate social support were one of significant variable. Women who receive moderate social support were 65.2% less likely to experience low level of happiness during pregnancy with (AOR=0.348, 95%CI, 0.195-0.621) compared to those who get poor social support during pregnancy. It also shows that social support during pregnancy may reduce the likelihood of depression, which might enhance subjective well-being and pregnancy outcomes. Strong social support contributes to the strengthening of the affective relationship and improvement of self-esteem, which positively reflects the quality of life of pregnant women. Pregnant women's happiness is significantly affected by the husband's lack of social support, which is then followed by family and friends(44).

8. Conclusion

Based on this study 49.4% of participant have low level of happiness. This research aimed to identify level of happiness among pregnant women. Based on cross sectional analysis of happiness level, it can be concluded that the predictors were maternal educational level, occupation and poor social support. Happiness should be promoted in society to help people deal with adverse effects like stress and despair. Since happiness is a variable quality, methods of educational intervention can be used to raise it

9. Recommendation

For policy maker

- It is better to incorporate health education and counseling on how to manage pregnancy related physiological changes and how to resolve unnecessary worries for those women who had no formal education and for those women with unplanned pregnancy
- Encourage and assist women in being independent and financially independent.

For health professional's

- By identification of the predictors of happiness, obstetricians and midwives can improve the happiness level of pregnant women by providing information and eliminating unnecessary worries.

For women's affair office: -

- Better to develop mother support group to improve women social support status for who had poor social support.
- Educate the community to give better support for the mother during pregnancy

For Researchers: -

- Conduct further investigation using qualitative research methodology at the community level.
- Better to conduct the outcome of low level of happiness on the fetus and the mother.

10. Strength and Limitation

Strength

The oxford happiness questioner, a validated and widely used measure of happiness that has been utilized by a variety of researchers, served as the basis for the questionnaires used in this study.

Limitation

There was no more literature available to compare the findings with. The questionnaire (OHQ) is challenging for respondents to understand and consumed additional time. The time allowed for result analysis was extremely limited.

Due to a lack of relevant literature on related or same issues internationally, especially in Africa, it was challenging to compare our study to other investigations

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12. Annex

12.1 Annex I Information sheet

Title of the research project:-Level of happiness and its associated factors among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town North shewa Ethiopia, 2023.

Name of the investigator:-Mihret Bogale (BSc)

Name of the organization:-Debre Berhan university, Asrat Woldeyes health science campus.

Name of the sponsor: - Wachemo University Nigst Eleni Mohamed memorial comprehensive specialized hospital.

Introduction: - This information sheet is prepared for DBRH, Debre Berhan health center, Tebase health center, chacha health center and Keyit health center obstetrics and gynecology coordinating office. The aim of the form is to make the above-concerned office clear about the purpose of research, data collection procedures and get permission to conduct the research.

Purpose of the Research Project: To assess the level of happiness and its associated factors among pregnant women who are attending antenatal care follow-up in public health institutions of Debre Berhan town north shewa, Ethiopia, 2023.

Procedure: in order to achieve the above objective, information which is necessary for the study will be interviewed from pregnant women who are attending in health facilities.

Risk and /or Discomfort: Since the study will be conducted by taking necessary information from pregnant women who are attending in health facility, it will not cause any harm on pregnant women. The name or any other identifying information will not record on the questionnaire and all information is taken from interview will kept confidential. The information saved for the study purpose only.

Benefits: The research have no direct benefit for one who interviewed in this research. But the indirect benefit of the research for the participant and other clients in the program is clear. This is because if program planners are preparing predicted plan there is a benefit for

pregnant women in the program of getting appropriate care and services. In all, the research work has a principal direct benefit for health care planners, providers and managers.

Confidentiality: To reassure confidentiality the data will be collected without the name of the clients and the information collected from this research project will be kept confidential and stored in a file cabinet. In addition, it will not be shown to anyone except the investigator and it has been kept in a key and locked system with computer password.

Person to contact: the research project will be reviewed and approved by the institutional review board of Debre Berhan University, Asrat Woldeyes health science campus. If you have any question you can contact any of the following individuals (investigator and Advisors) and you may ask at any time you want.

Mihret Bogale (BSc)

Elyas Admasu

Cell phone: - +2519-13667753

E-mail:- mihretbogale68@gmail.com

12.2 Annex II Consent form

Dear Respondent, I am undertaking a study on “On the assessment of level of happiness and its associated factors among pregnant women who attended antenatal care follow-up in public health institutions of Debre Berhan town North shewa Ethiopia, 2023.” as one of the prerequisites for fulfilling the grant of a Master’s of Science in Maternity and Reproductive Health. So we are asked you to interview some questions. While we would be pleased to have you participate we respect your right to decline. If you decide not to participate this is not affect your relationship with the researcher or quality of service received.

If you do decide to take part you will be asked to sign a consent form here.

Sign:- _____

Thanks!

12.3 Annex III questioner

Socio demographic data			
NO	Questions	Alternatives	
101	Age(in years)		
102	Marital status:	1.Married, 2.Single 3.Divorced 4.Widowed 4.College and above	
103	Educational status :	1.unable to read and write 2.Elementary 3.Secondary 4.College and above	
104	Occupation:	1.Employed 2.Unemployed	
105	Spouses educational status:	1.unable to read and write 2.Elementary 3.Secondary 4.College and above	
106	Spouses occupation	1.Employed 2.Unemployed	
107	Family size		
108	Income		
Obstetric factors			
NO	Questions	Alternatives	Skip
201	Gravidity		
202	Parity		
203	Pregnancy plan	1.Planned 2.Unplanned	
204	Complication during this pregnancy	1.Yes 2.No	If no skip to 206
205	If yes what type	1.HEG 2.Gestational diabetics 3.Gestational hypertension 4.APH 5. others	
206	Comorbid disease	1.Yes 2.No	If no skip to 208
207	If yes which one?	1.HTN 2.DM 3.HIV/AIDS 4.Heart disease 5. Respiratory disease 6. others	
208	Month of the pregnancy		
209	History of fetal lose		

Oxford standard questioner

Please select only one response that best suits among the likert-scale measurements of your attitude.

Strongly disagree (1), Moderately disagree (2), Slightly disagree (3), Slightly agree (4), Moderately agree (5), Strongly agree (6).

NO	Questions	Alternatives					
		6	5	4	3	2	1
301	I don't feel particularly pleased with the way I am.						
302	I am intensely interested in other people.						
303	I feel that life is very rewarding.						
304	I have very warm feelings towards almost everyone.						
305	I rarely wake up feeling rested.						
306	I am not particularly optimistic about the future.						
307	I find most things amusing.						
308	I am always committed and involved.						
309	Life is good.						
310	I do not think that the world is a good place.						
311	I laugh a lot.						
312	I am well satisfied about everything in my life.						
313	I don't think I look attractive.						
314	There is a gap between what I would like to do and what I have done.						
315	I am very happy.						
316	I find beauty in some things.						
317	I always have a cheerful effect on others.						
318	I can fit in (find time for) everything I want to.						
319	I feel that I am not especially in control of my life.						
320	I feel able to take anything on.						
321	I feel fully mentally alert.						
322	I often experience joy and elation.						
323	I don't find it easy to make decisions.						
324	I don't have a particular sense of meaning and purpose in my life.						
325	I feel I have a great deal of energy.						
326	I usually have a good influence on events.						
327	I don't have fun with other people.						
328	I don't feel particularly healthy.						
329	I don't have particularly happy memories of the past.						

4. Intimate partner violence if any yes for this questions consider as positive for abuse

No	Questions	Alternatives	Skip
401	Have you ever been emotionally or physically abused by your partner or someone important to you?	1.Yes 2.No	
402	Within the last year, have you been hit, slapped, kicked or otherwise physically hurt by someone?	Yes No	If no skip to 404
403	If yes, who?	1.Husband 2.Ex-Husband /Boyfriend	

		3.Stranger 4.Other 5. Multiple	
404	Since you've been pregnant, have you been slapped, kicked or otherwise physically hurt by Someone?	1.Yes 2.No	If no skip to 406
405	If yes, who?	1.Husband 2.Ex-Husband /Boyfriend 3.Stranger 4.Other 5.Multiple	
406	Within the last year, has anyone forced you to have sexual activities?	1.Yes 2.No	If no skip to 408
407	If yes, who?	1.Husband 2.Ex-Husband /Boyfriend 3.Stranger 4.Other 5.Multiple	
408	Are you afraid of your partner or anyone you listed above?	1.yes 2.No	
Social support question			
No	Questions	Alternatives	
409	How many people are so close to you that you can count on them if you have great personal problem?	1.None 2.1-2 3.3-5 4. 5+	
410	How much interest and concern do people show in what you do?	1.none 2.Little 3.Uncertain 4.Some 5.A lot	
411	How easy is it to get practical help from neighbors if you should need it?	1.Very difficult 2.Difficult 3.Possible 4.Easy 5.Very easy	

5. Behavioral factors

No	Questions	Alternatives	
501	Have you ever used any form of tobacco or cigarettes?	1.Yes 2.No	

502	If yes, How often do you smoke cigarette?	1.Everyday 2.Some days	
503	Have you ever consumed a drink that contains alcohol (such as tela, Areqe, Teji, Beer, wine) at least once?	1.Yes 2.No	
504	If yes How often do you drink alcohol?	1.Monthly or less 2.Two to four times a month 3.Two to three times a week 4.Four or more times a week 5.Daily	
505	Have you ever chewed chat?	1.Yes 2.No	
506	If yes How often do you chew?	1.Monthly or less 2.Two to four times a month 3.Two to three times a week 4.Four or more times a week 5.Daily	
507	Have you ever done physical exercise before Becoming pregnant?	1.Yes 2.No	
508	If the answer is yes, What types of antenatal exercises you heard or aware from the following?	1.Aerobics 2.Relaxation /Breathing 3.Pelvic Floor Exercises 4.Back Care Exercises 5.Ankle and toe exercise	

የመረጃ ወረቀት

የጥናት ፕሮጀክቱ ርዕስ:- በደብረ ብርሃን ከተማ ሰሜን ሸዋ ኢትዮጵያ የቅድመ ወሊድ ክትትል ክትትል በሚከታተሉ ነፍሰ ጡር እናቶች ላይ ያለው የደስታ ደረጃ እና ተያያዥ ምክንያቶች።

የምርመራ ስም:- ምህረተ ቦጋለ (BSc)

የድርጅቱ ስም:- ደብረ ብርሃን ዩኒቨርሲቲ አስራት ወልደየስ ጤና ሳይንስ ግቢ

የስፖንሰር አድራጊው ስም:- ዋቸሞ ዩኒቨርሲቲ ንግስት ኢሌኒ መሀመድ መታሰቢያ ኮምፕረህንሲቭ ስፔሻላይዝድ ሆስፒታል።

መግቢያ:- ይህ የመረጃ ወረቀት የተዘጋጀው ለADBRH፣ ለደብረ ብርሃን ጤና ጣቢያ፣ ለጠባሴ ጤና ጣቢያ፣ ለጫጫ ጤና ጣቢያ እና ለቀይት ጤና ጣቢያ የጽንሰና ማህጸን ሕክምና ማስተባበሪያ ጽ/ቤት ነው። የቅጹ ዓላማ ከላይ የተመለከተውን ጽህፈት ቤት ስለ የምርመራ ዓላማ፣ የመረጃ አሰባሰብ ሂደቶች ግልጽ ማድረግ እና ጥናቱን ለማካሄድ ፈቃድ ማግኘት ነው።

የምርመራ ፕሮጀክቱ ዓላማ:- በደብረ ብርሃን ከተማ ሰሜን ሸዋ፣ ኢትዮጵያ፣ 2023 የቅድመ ወሊድ ክትትል በሚከታተሉ ነፍሰ ጡር እናቶች ላይ ያለውን የደስታ ደረጃ እና ተያያዥ ምክንያቶችን ለመገምገም።

የአሰራር ሂደት:- ከላይ የተጠቀሰውን አላማ ለማሳካት ለጥናቱ አስፈላጊ የሆኑ መረጃዎች በጤና ተቋማት ውስጥ ከሚገኙ ነፍሰ ጡር እናቶች ጋር ቃለ መጠይቅ ይደረግላቸዋል።

ስጋት እና / ወይም ምችት ማጣት: ጥናቱ የሚካሄደው በጤና ተቋም ውስጥ ከሚገኙ ነፍሰ ጡር እናቶች አስፈላጊውን መረጃ በመውሰድ ስለሆነ እርጉዝ ሴቶች ላይ ምንም አይነት ጉዳት አያስከትልም። ስም ወይም ሌላ መለያ መረጃ በመጠይቁ ላይ አይመዘገብም እና ሁሉም ከቃለ መጠይቅ የተወሰደ መረጃ በሚስጥር ይጠበቃል።

ጥቅሞች: ጥናቱ በዚህ ጥናት ውስጥ ቃለ መጠይቅ ላይ ለሰው ቀጥተኛ ጥቅም የለውም። ነገር ግን በፕሮግራሙ ውስጥ ለተሳታፊው እና ለሌሎች ደንበኞች የጥናቱ ቀጥተኛ ያልሆነ ጥቅም ግልጽ ነው። ምክንያቱም የፕሮግራም አዘጋጆች የተተነበዩ ፕላን እያዘጋጁ ከሆነ ለነፍሰ ጡር ሴቶች ተገቢውን ክብካቤ እና አገልግሎት የማግኘት ጥቅም ይኖረዋል። በአጠቃላይ፣ የምርመራ ስራው ለጤና አጠባበቅ እቅድ አውጪዎች፣ አቅራቢዎች እና አስተዳዳሪዎች ዋና ቀጥተኛ ጥቅም አለው።

ምስጢራዊነት: ምስጢራዊነትን ለማረጋገጥ መረጃው ያለ ደንበኞች ስም የሚሰበሰብ ሲሆን ከዚህ የምርመራ ፕሮጀክት የሚሰበሰበው መረጃ በሚስጥር ይጠበቃል እና በፋይል ካቢኔ ውስጥ ይከማቻል። በተጨማሪም፣ ከመርመራው በቀር ለማንም አይታይም እና በቁልፍ እና በተቆለፈ ሲስተም በኮምፒዩተር ይለፍ ቃል ተጠብቆ ቆይቷል።

የሚመለከተው:- የምርመራ ፕሮጀክቱ በደብረ ብርሃን ዩኒቨርሲቲ አስራት ወልደየስ ጤና ሳይንስ ግቢ ተቋማዊ ግምገማ በርድ ታይቶ ይፀድቃል። ማንኛውም አይነት ጥያቄ ካሎት ከሚከተሉት ግለሰቦች (መርመሪ እና አማካሪዎች) ማነጋገር ይችላሉ እና በፈለጉት ጊዜ መጠየቅ ይችላሉ።

ምህረት ቦጋለ (ቢ.ኤስ.ሲ)

ኤሊያስ አድማሱ

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የፍቃድ ቅፅ:-ውድ ተሳታፊ፣ “በደብረ ብርሃን ከተማ ሰሜን ሸዋ ኢትዮጵያ 2023 የቅድመ ወሊድ ክትትል ክትትል በተደረገላቸው ነፍሰ ጡር እናቶች ላይ ያለው የደስታ ደረጃ እና ተያያዥ ምክንያቶች ግምገማ ላይ ጥናት እያደረግኩ ነው። በወሊድ እና በስነ-ተዋልዶ ጤና ውስጥ የማስተርስ ሳይንስ ስጦታን ለማሟላት እንደ አንዱ ቅድመ ሁኔታ።

ስለዚህ አንዳንድ ጥያቄዎችን እንድትጠይቁ እንጠየቃለን። እርስዎ በመሳተፍዎ ደስተኞች ብንሆንም የመቀነስ መብትዎን እናከብራለን። ላለመሳተፍ ከወሰኑ ይህ ከተመራማሪው ጋር ያለዎትን ግንኙነት ወይም የአገልግሎት ጥራት ላይ ለውጥ አያመጣም።

ለመሳተፍ ከወሰኑ እዚህ የፍቃድ ቅጽ ላይ እንዲፈረሙ ይጠየቃሉ።

ፊርማ:- _____

አማርኛ ጥያቄ

1. ስለ ማህበራዊ ስነ ህዝባዊ ባህሪያት የተመለከቱ ጥያቄዎች

101	እድሜ (በአመት)		
102	የጋብቻ ሁኔታ	1. ያላገባ 2. ያገባኛል 3. የተፋታኛ	
103	የትምህርት ደረጃ	1. ማንበብና መጻፍ አለመቻል 2. የመጀመሪያ ደረጃ 3. ሁለተኛ ደረጃ 4. ከሌጅ እና ከዚያ በላይ	
104	ሥራ	1. ተቀጥሮ መሥራት 2. ሥራ አጥ 3. የግል ስራ	
105	የአጋር ትምህርት ደረጃ	1. ማንበብና መጻፍ አለመቻል 2. የመጀመሪያ ደረጃ 3. ሁለተኛ ደረጃ 4. ከሌጅ እና ከዚያ በላይ	
106	የትዳር ዳደኛ ሥራ	1. ተቀጥረው 2. ሥራ አጥ 3. የግል ስራ	
107	የቤተሰብ መጠን		
108	ገቢ		
2. ወሊድ ታሪክመረጃ			
201	እርግዝና		
202	ልጅ ብዛት		
203	የእርግዝና እቅድ	1. አዎ	

		2.አይ	
204	በዚህ እርግዝናዎቅት የጤናእክሎች	1.አዎ 2.አይ	አይ ከሆነ 207
205	አዎ ከሆነ ምን አይነት		
206	ተያያዥ በሽታ	1.አዎ 2.አይ	አይ ከሆነ209
207	አዎ ከሆነ	1.HTN 2.DM 3. ኤች አይ ቪ/ኤድስ 4. የልብ ህመም 5. የመተንፈሻ አካላት በሽታ 6. ሌሎች	
208	ወር እርግዝና		
209	የፅንሰ ማጣት ታሪክ		

3.እባክዎ ከአመለካከትዎ መለኪያዎች መካከል የተሻለ የሚስማማ አንድ ምላሽ ብቻ ይምረጡ.በጥብቅ አይስማሙም (1)፣ መጠነኛ አለመግባባት (2)፣ በመጠኑም ቢሆን አይስማሙም (3)፣ በመጠኑም ቢሆን ይስማማሉ (4)፣ በመጠኑም ቢሆን ይስማማሉ (5)፣ በጥብቅ ይስማማሉ (6)::

ተ. ቁ	መጠይቅ	ምርጫ					
		6	5	4	3	2	1
301	እኔ ባለሁበት መንገድ በተለየ ደስተኛ አደለሁም						
302	ለሌሎች ሰዎች ከፍተኛ ትኩረት እሰጣለሁ ::						
303	ሕይወት በጣም የሚክስ እንደሆነ ይሰማኛል ::						
304	ለሁሉም ማለት ይቻላል ሞቅ ያለ ስሜት አለኝ::						

305	ብዙውን ጊዜ ከእንቅልፌ የምነቃው እረፍት የማገኝበት ጊዜ አለ።						
306	ስለ ወደፊት ጊዜ ብሩህ አመለካከት የለኝም						
307	አብዛኞቹ ነገሮች የሚያስቁ ናቸው።						
308	ሁልጊዜ ቃል እገባለሁ እንዲሁም ተሳትፎ አደርጋለሁ						
309	ሕይወት መልካም ነው።						
310	ዓለም ጥሩ ቦታ ነው ብዬ አላስብም						
311	በጣም ነው የምስቀው።						
312	በሕይወቴ ውስጥ ባሉት ነገሮች ሁሉ ረክቻለሁ።						
313	ማራኪ የምመስል አይመስለኝም።						
314	ማድረግ በምፈልገውና በሠራሁት ነገር መካከል ልዩነት አለ						
315	በጣም ደስተኛ ነኝ.						
316	በአንዳንድ ነገሮች ውበት አገኘሁ።						
317	ምንጊዜም ቢሆን በሌሎች ላይ አስደሳችተጽዕኖ አደርገዋለሁ						
318	በፈለግሁት ነገር ሁሉ (ጊዜ ማግኘት) እችላለሁ።						
319	በተለይ ሕይወቴን መቆጣጠር እንደማልቸግረኝ ይሰማኛል።						
320	ማንኛውንም ነገር መውሰድ እንደቻልኩ ይሰማኛል።						
321	አእምሮዬ ሙሉ በሙሉ ንቁ እንደሆነ ይሰማኛል።						
322	ብዙውን ጊዜ ደስታና ደስታ እሰጣለሁ።						
323	ውሳኔ ማድረግ ቀላል ሆኖ አላገኘሁም።						

324	በሕይወቴ ውስጥ የተለየ ትርጉም እና ዓላማ የለኝም።						
325	ብዙ ጉልበት እንዳለኝ ይሰማኛል						
326	አብዛኛውን ጊዜ በሁኔታዎች ላይ በጎ ተጽዕኖ አደርገዋለሁ						
327	ከሌሎች ሰዎች ጋር አልዝናናም።						
328	ጤነኛ እንደሆንኩ አይሰማኝም						
329	ከዚህ በፊት የነበርኩበት ጊዜ አስደሳች ትዝታ የለኝም።						
4. የማህበራዊ ድጋፍ ጥያቄዎች							
401	የትዳር ጓደኛህ ወይም ትልቅ ቦታ የሚሰጠው ሰው ስሜታዊም ሆነ አካላዊ ጥቃት ደርሶብህ ያውቃል	1.አዎ 2.አይ					
402	ባለፈው ዓመት ውስጥ አንድ ሰው ሲመታህ፣ በጥሬ ሲመታህ፣ ሲመታህ፣ ሲመታህ ወይም ሌላ ዓይነት አካላዊ ጉዳት እንዳደረሰብህ ታውቃለህ?	1.አዎ 2.አይ				አይ ከሆነ 404	
403	አዎ ከሆነ ማን ነው?	1. ባል 2. የቀድሞ ባል /የወንድ ጓደኛ 3. እንግዳ 4. ሌላ 5. ብዙ					
404	ከፀንሰ ጀምሮ በጥሬ፣ በጥሬ ወይም በሌላ መንገድ በአካል ተጎድተሃል? አንድ ሰው?	1.አዎ 2.አይ				አይ ከሆነ406	
405	አዎ ከሆነ ማን ነው?	1. ባል 2. የቀድሞ ባል /የወንድ ጓደኛ 3. እንግዳ 4. ሌላ 5. ብዙ					
406	ባለፈው ዓመት ውስጥ የፆታ ግንኙነት እንድትፈጽም ያስገደደህ ሰው አለ?	1.አዎ 2.አይ				አይ ከሆነ408	

407	አዎ ከሆነ ማን ነው?	1. ባል 2. የቀድሞ ባል/የወንድ ጓደኛ 3. እንግዳ 4. ሌላ 5. ብዙ	
408	.የትዳር ጓደኛህን ወይም ከላይ የተዘረዘሩትን ሰዎች ትፈራለህ?	1.አዎ 2.አይ	
	የማህበራዊ ድጋፍ ጥያቄ		
409	ከባድ የግል ችግር ቢያጋጥምህ በእነሱ ላይ ልትተማመንባቸው የምትችላቸው ስንት ሰዎች አሉ?	1. አንድም 2.1-2 3.3-5 4.5+	
410	ሰዎች ለምታደርጋቸው ነገሮች ምን ያህል ትኩረትና አሳቢነት ያሳያሉ?	1. አንድም 2. ትንሽ 3. እርግጠኛ ያልሆነ	
411	የሚያስፈልግህ ከሆነ ከጎረቤቶቻችሁ እርዳታ ማግኘት ምን ያህል ቀላል ነው?	1. በጣም አስቸጋሪ 2. አስቸጋሪ 3. ይቻላል 4. ቀላል 5. በጣም ቀላል	
5. የባህሪ ምክንያቶች			
501	እስከዛሬ ድረስ የትኛውንም አይነት አልኮል መጠጥ ቢያንስ አንድ የአልኮል መጠጥ ለአንድ ጊዜም ቢሆን ጠጥተዉ ያዉቃሉ?	አዎ የለም	
502	የአልኮል መጠጦችን ምን ያህል ገዜ ይጠጣሉ?	በየወሩ ወይም ከወር ያነሰ ጊዜ በወር ከሁለት እስከ አራት ጊዜ በሳምንት ከሁለት እስከ ሦስት ጊዜ በሳምንት አራት ጊዜ እና ከዚ በላይ	
503	እስከዛሬ ድረስ ጫት ቅመዉ ያዉቃሉ?		

504	ምን ያህል ጊዜ ይቅማሉ?	<p>በየወሩ ወይም ከወር ያነሰ ጊዜ</p> <p>በወር ከሁለት እስከ አራት ጊዜ</p> <p>በሳምንት ከሁለት እስከ ሦስት ጊዜ</p> <p>በሳምንት አራት ጊዜ እና ከዚያ በላይ.</p> <p>በየቀኑ</p>	
505	<p>እስከዛሬ ድረስ የትኛውንም</p> <p>የትምባሆ/ሲጋራ አጭሰው ያዉቃሉ?</p>	<p>አዎ</p> <p>የለም</p>	
506	ምን ያህል ጊዜ ሲጋራ ያጭሳሉ?	<p>በየቀኑ</p> <p>በተወሰኑ ቀናት/አልፎአልፎ ...</p>	
507	<p>በአሁኑ እርግዝናዎ ወቅት የቅዴመ ወሊድ የአካል</p> <p>እንቅስቃሴዎች ይሰራሉ?</p>	<p>አዎ</p> <p>የለም</p>	
508	<p>አሁን እየሰሩ ያለት የትኞቹን የአካሌ እንቅስቃሴ</p> <p>አይነቶች</p> <p>ነው?</p>	<p>(ከአንዴ በላይ መልስ መስጠት ይችላሉ)</p> <p>የእገር ጉዞ ማዳረግ(Walk)</p> <p>ኤሮቢክስ</p> <p>መፍታታትና አየር መውሰዴ</p> <p>የዳሌ እንቅስቃሴ</p> <p>የጀርባ እንቅስቃሴ</p> <p>ጉልበትና የእግር ጣቶችን እንቅስቃሴ</p>	

12.4 Annex III Approval Letter

Submitted by

Name of student:

Signature

Date

Mihret Bogale

Approved by:

Signature

Date

1. Mr. Elyas Admasu (Assistant professor)

2. Mr. Kassa Ketsela (MSc in Maternity)
