ARSI UNIVERSITY COLLEGE OF HEALTH SCIENCES DEPARTMENT OF MIDWIFERY

SELF- MEDICATION ABORTION PRACTICE AND ITS ASSOCIATED FACTORS AMONG PREGNANT WOMEN ATTENDING ABORTION SERVICE AT ASELLA TOWN PUBLIC HEALTH FACILITIES, OROMIA REGIONAL STATE, ASELLA, ETHIOPIA

BY

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A THESIS TO BE SUBMITTED TO THE DEPARTMENT OF MIDWIFERY COLLEGE OF HEALTH SCIENCE, ARSI UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE MSC IN MATERNITY AND REPRODUCTIVE HEALTH NURSING.

JANUARY, 2025 G.C

ASELLA, ETHIOPIA.

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Abbreviation and Acronyms

AOR	Adjusted Odd Ratio
CI	confidence interval
COR	Crude Odd Ratio
FDA	Food and Drug Administration
GA	gestational Age
IDI	In-Depth Interview
KII	Key Informant Interview
MA	Medication-Abortion
MTP	Medical termination of pregnancy
NGOs	Non-Governmental Organizations
SMA	Self-Medication Abortion
SPSS	Statistical Package for the Social Sciences
TP	terminating a pregnancy
UA	Unsafe Abortion
VIF	Variance Inflation Factor
WHO	World Health Organization

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Abstract

Background: When a woman, her husband, a family member, or a friend brings an abortion pill over-the-counter without a prescription, medical supervision, or instruction, it is referred to as "self-medication." Self-administered medication abortion pill by an unskilled person is considered to be unsafe abortion by World Health Organization. Even though many studies were conducted on unsafe abortion in Ethiopia, few studies have explored about unsupervised self-intake of medical abortion pills.

Objective: To assess Self- Medication Abortion Practice and its Associated Factors among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, Oromia Regional state, Asella, Ethiopia

Methods: Institution-based mixed method approach with sequential explanatory study design was employed in Asella town public health facilities. The quantitative part was conducted among 403 Pregnant Women. Random sampling technique with structured interviewer administered questionnaire was used. Data were entered into Epi data and cleaned using frequency distribution and cross- tabulation. The data were analyzed using SPSS version 25 software packages. The key informant IDI was transcribed and translated manually. Translated data was coded and categorized and different ideas in the text were merged in their categories.

Results: Out of 403 respondents, 97 (24.1%) were terminate their pregnancy by self-medication abortion practice. Predictors that were significantly associated with self-medication abortion practice at P-value <0.05 and P-value< 0.001 were private employee (AOR=7.28, 95% CI [1.92-32.21]), secondary education(AOR=0.25, 95% CI [0.07-0.84]), higher education (AOR=0.08, 95% CI [0.02-0.34]), average monthly income of household , (AOR=0.24, 95% CI[0.076, 0.78]), and unplanned(AOR=11.71, 95% CI [4.39, 31.21]).

Conclusion: The prevalence of self-medication abortion was significant in the study area. This significant increase was reasoned out by the qualitative study as unwanted pregnancy, financial constraints, and privacy concern. The predictors of self-medication abortion practice among the study population were private employee, education, household's average monthly income, and having unplanned pregnancy in the current particular study. Strict control and surveillance on abortion pills as over-the-counter and further research is necessary to explore additional reasons of self-medication abortion practice in diverse healthcare settings.

Keywords: Self-Medication, Practice, Unsupervised medication abortion

1. Introduction

1.1 Background

Medication abortion refers to safe and effective methods of ending an undesired pregnancy by the use of a drug or combination of drugs that are administered orally, vaginally, buccally, and sublingually (1). Medical abortion during the first trimester, when performed according to standard protocols is a safe and effective way of terminating a pregnancy (TP) (2,3). Medical termination of pregnancy (MTP) pills, usually including a combination of mifepristone and misoprostol, have a high success rate of 93%-98% in safe and effective termination of pregnancy when delivered under medical supervision(2–6). Women seeking a medical abortion should, in accordance with World Health Organization(WHO) recommendations, verify their pregnancy, precisely find out their gestational age, identify the pregnancy's site, and exclude any adverse conditions(5).

Unsafe abortion is performed by women by themselves without medical supervision(7). Unsafe abortion as defines by WHO is “a procedure for terminating an unintended pregnancy carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both”(8). Therefore, the use of self-medication without supervision leads to unsafe abortion practices (9). The term "self-medication" refers when the patient, her partner, a relative, or a friend acquires the abortion pill over the counter without medical assistance, supervision, or prescription(3,10,11). Unsupervised intake(self-administration of abortion pills) gives the women greater privacy and autonomy, but it also raises fundamental questions regarding the efficacy and safety of the practice(3). The World Health Organization classifies an unsafe abortion as one in which an untrained individual administers an abortion pill to themselves. Complications such as sepsis, uterine perforation, cervical trauma, ectopic pregnancy, and incomplete abortion are the most common outcomes for the women. It has also become a worldwide health concern and is the primary cause of maternal morbidity and mortality(12). Medication-Abortion (MA) is a safer option than surgical abortion because it avoids complications. However, it is only a blessing if used according to standard procedure and under adequate medical guidance (10,13).

1.2 Statement of the Problem

Worldwide, approximately 73.3 million induced abortions were carried out each year between 2015 and 2019. (12,14,15) From this, 19-20 million is unsafe abortion of which 18.5 million occurs in developing countries(11,15). Globally an estimated 68,000 per year women die as a result of unsafe abortions(14,16,17). In Africa, the annual rate of abortion is 34 per 1000 women. Abortion-related maternal fatalities comprise 13% of all maternal deaths globally, with unsafe abortion being the primary cause of these deaths (14). In Ethiopia 620,300 induced abortions responsible for 8.6% of maternal deaths(14). Self-medication abortion(SMA) without professional consultation is a serious issue(12) that may lead to potentially fatal consequences such as haemorrhagic shock, rupture uterus, sepsis, incomplete abortion, missed abortion, and missed ruptured ectopic pregnancies(3,13,15,18).In Ethiopia, barriers and challenges to accessing medication abortion exist at multiple levels which may deprive women from using safe medication abortion(19). Availability of medication Abortion access is often restricted, not only by legal restrictions but also by social, religious, and cultural barriers. This causes delays in seeking an abortion until after the legal time limit, and as a result, when faced with an unplanned pregnancy, women seek abortions and either self-induce them or find providers, regardless of the law and One of the major issues facing human rights and public health today is unsafe abortions (14). Even though many studies were conducted on unsafe abortion in Ethiopia, there seems to be no studies have explored about unsupervised intake of medical abortion pills as far as my understanding; as well as no facility based studies conducted on self-medication abortion to assess SMA Practice and its Associated Factors among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities.

1.3 Significance of the Study

Self-medication abortion is dramatically increasing including those married individuals so now is high time to dig into the problem.

For-policy makers and Non-Governmental Organizations (NGOs): the findings will provide relevant information for future planning and interventions of appropriate strategies to promote and maintain safe medication abortion practice.

For researchers: the results will be used as a baseline date for future research.

The findings of this study will also help Asella town public health facilities as a baseline data in their counseling/health education session to minimize maternal morbidity and mortality, to avoid complications and barriers of safe medication abortion and strengthen safe medication abortion practice.

2. Literature Review

2.1 Magnitude of Self- Medication Abortion Practice

A hospital-based observational study carried out in India from December 2020 to January 2020 on 125 women with a history of utilizing abortion pills for self-medication abortion were attended with a variety of issues throughout the study period. During the authorized Seven-week gestational period, 15(12%), seven to nine week gestational period 18(16%) of women utilized abortion pills, compared to 41(32.8%) beyond that and 49 (39.2%) after twelve week. More than half of the cases 98(78.8%) were found to had incomplete abortion and only7 (5.6%) had complete abortion. This shows the significant difference between complete and incomplete abortions, also18 (14.4%) had filed abortion; 3(2.4%) had missed abortion show an incorrect, unsupervised drug intake pattern. However, there was morbidity in the form of sepsis in 8 cases (6.4%), shock 7 cases (5.6%) requiring blood transfusion, higher antibiotics, ICU admission, and severe anemia 21 (16.8%); that is, about 25% of cases resulted in fatal complications that could be dangerous and increase the burden on society(4).

Another cross-sectional study conducted among 223 women abortion-related admissions in a tertiary care centre in Nepal from June 15, 2018 to March 15, 2020 Showed that, 37(16.6%) involved in self-induced abortions through the use of abortion pills. During the authorized less than nine-week gestational period, 27 (72.97%) of women utilized abortion pills, compared to 8(21.62%) beyond that and 2(5.41%) after twelve week. The majority of women, 14(37.8%) had an incomplete abortion diagnosis, whereas 8(21.6%) had a septic abortion diagnosis. Five individuals (13.5%) were found to have an ectopic pregnancy; one of these cases was an extremely uncommon ovarian molar ectopic pregnancy (20).

A prospective observational study conducted among patients attending Gandhi Medical College, Bhopal from January 2020 to July 2021, on 200 women showed that, the majority of patients 96(32%) had used medication pills between 9 and 12 weeks and 7 weeks of gestation,84(28%) between 7-9 weeks, and 8% after 12 weeks of gestation. On the same study, 210 (70%) of patients had an incomplete abortion diagnosis,66 (22%) had a complete abortion,4 (1.3%) had an incomplete abortion with shock, 3.3% had an ectopic pregnancy, and 10(3.3%) had an incomplete abortion with sepsis(11).

2.2 Factors associated with Self- medication abortion practice

2.2.1 Socio-Demographic and Socio Economic Factors

A cross-sectional study conducted at a tertiary healthcare centre in India from February to April 2023 on 150 women with a history of unsupervised MTP pills use showed that more than half, 70 (46.66%), the usage of SMA pills was significantly higher among women aged 25-29 years ($p= 0.000$). Regarding educational status, for self-medication abortion practice, primary school women were more likely $p\leq 0.000$ to practice SMA than women how are educated more. Average family income per capita (in Indian Rupees) 3000-6000 ($p= 0.000$) and in Hindu‘s ($p= 0.000$) in comparison to Muslim participants. Furthermore, there was a significant ($p<0.05$) association between their age, educational attainment, average family income and religion with self-medication abortion(5).

2.3 Socio-Cultural Factors

A qualitative study in Ethiopia in 2023 showed that, participants explained that motivations for unsafe abortion stigma and societal disappointment because safe abortion was considered as against religious and cultural practices in Ethiopia. The majority mentioned their religious convictions as an excuse for carrying out dangerous abortions. They asserted that the Bible prohibited abortion, and their belief was further strengthened by the counsel they received from friends and the accounts of other women living in their community.They noted Ethiopia, where abortion is outright forbidden(21).

A retrospective cross sectional study done in Government Doon Medical College & Hospital between the periods of August 2022- July 2023, on 148 cases of abortion, 75 patients had self-administered abortion pills. Among this 1.33% of unmarried, not seeing a doctor could be due to fear of social stigma(10).

Abortion is seen negatively by the community in places like Cato Manor, South Africa, and this sentiment is frequently based on cultural and religious convictions. Despite an increasing acceptance among younger generations following legalization, these sentiments can push women to look for illegal abortion choices in order to avoid embarrassment in their communities(22)

2.4 Obstetric Related Factor

Across sectional study conducted in Tertiary Care Hospital in central government of Gujarat from December 2020 to September 2021on 70 women showed that, parity had an association with their self-medication abortion practice. The majority of the women (72.9%) belonged to the age range of 26 to 30. Regarding Gravida status, 92.9% of the ladies had multiple. Among the total study participants, 11.4% had previously two uterine scars, 17.1% had one uterine scar, and the majority of the women 71.4% had no uterine scars at all. The usage of SMA drugs was significantly higher among women multipara incomplete abortion ($p \leq 0.025$) in comparison to primipara, previous scar ($p \leq 0.027$) in comparison to no previous scar and Gestational age >9-12 week ($p \leq 0.029$).When women self-medication abortion, three factors; previous uterine scarring, advanced gestational age, and gravida status are significantly associated with incomplete abortion(7).

Another cross-sectional study conducted at a Tertiary Health Care Centre in India from February to April 2023 on 150 women showed that, Parity had an association with their self-medication abortion practice with para1- 2 women (n=94;62.66% and p= 0.039). Women whose para1-2 (n=94) 62.66% also have more abortion practice than women whose number of Para was three or more (n= 30, 20%) and nulliparous women (n=26, 17.33%) of them have had self-medication abortion record(5).

2.5 Conceptual Frame Work

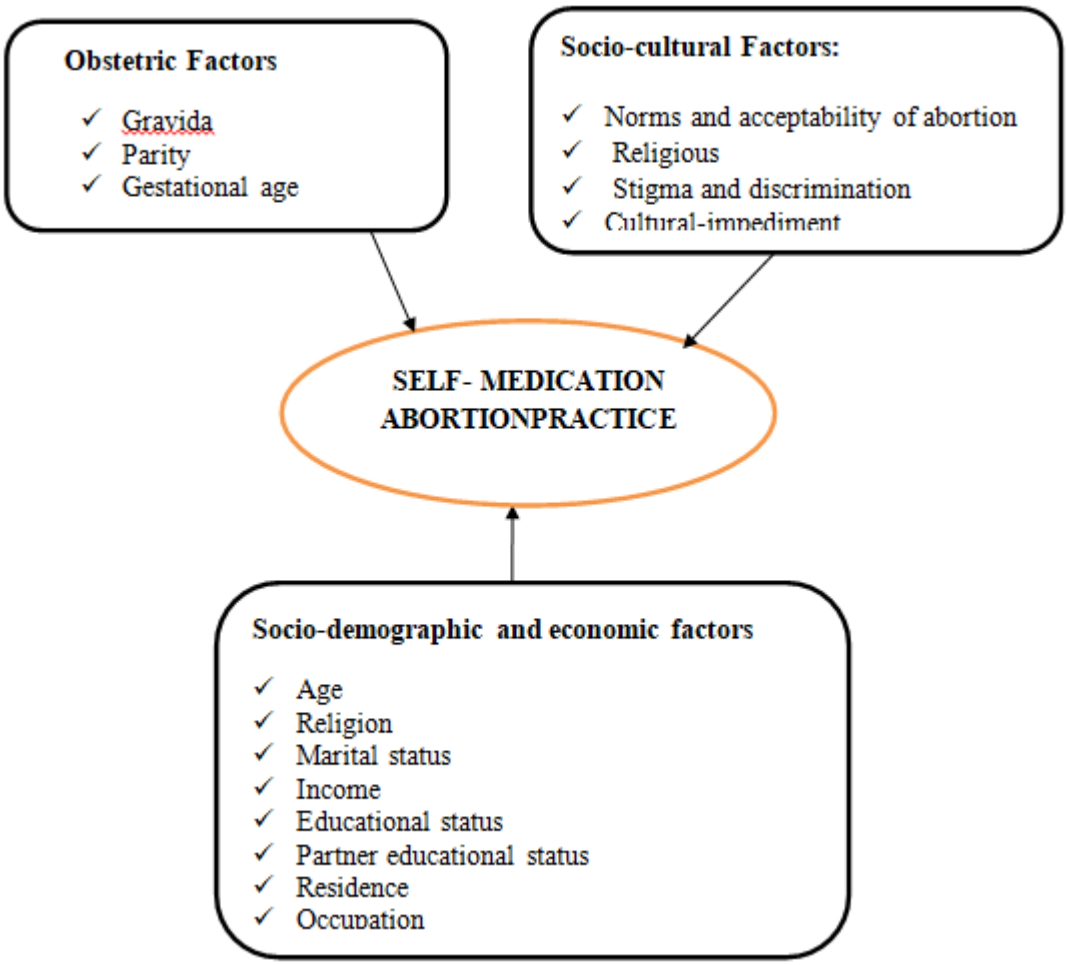

Figure 1 Conceptual frame work for Self- Medication Abortion Practice and its Associated Factors among Pregnant Women Attending for Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia (1,3,11,23)

2.6 The Research Questions

1. What is the magnitude of self-medication abortion practice among pregnant women in Asella Town Public Health Facilities, 2024?

2. What are the factors associated with self-medication abortion practice among pregnant women in Asella Town Public Health Facilities, 2024?

3. What are the barriers to safe medication abortion practice among servivors of self-medication abortion among pregnant women in Asella Town Public Health Facilities, 2024?

3. Objectives

3.1 General objective

- To Assess Self- Medication Abortion Practice and its Associated Factors Among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, Asella, Ethiopia, 2024

3.2 Specific Objectives

- To determine the magnitude of self-medication abortion practice Service at Asella Town Public Health Facilities, Asella, Ethiopia, 2024
- To identify factors associated with self-medication abortion practice Service at Asella Town Public Health Facilities, Asella, Ethiopia, 2024
- To explore barriers to safe medication abortion practice among survivors of self-medication abortion Service at Asella Town Public Health Facilities, Asella, Ethiopia 2024

4. Methods and Materials

4.1 Study Period and Setting

The study was conducted at Asella Town Public Health Facilities, Arsi zone, Oromia regional State, Ethiopia from October 2024 to January 2025. Asella Town is the town of Arsi zone and located 175 km away from the capital of Ethiopia, Addis Ababa. Geographically, the town has a latitude and longitude of 7º57'N39º7'E, with an elevation of 2,430 meters. There are 8 Kebeles, which are directly accountable to the town administration. According to the 2007 population and housing census, the town has a total population of 135,559. Among these, pregnant women account 4704. Regarding Health Facilities, there is 1 Referral and Teaching Hospital, 2 private hospital, 2 Governmental Health centers, 2 non-Governmental organization (NGO) clinics, 8 private clinics, and 20 private Pharmacy which serve the town. Include number of health care providers (midwives and obstetricians). The health care providers in Asella Town Public Health Facilities who provide abortion service include 15 gynecologists, 58 midwives.

4. 2 Study Design

The study utilized explanatory sequential mixed methods study design

4.3 Population

4.3.1 Source Population

All abortion cases attending in Asella town public health facilities for abortion service during data collection period

4.3.2 Study Population

Pregnant women attending Asella town public health facilities for any abortion related services during data collection period were included

4.4 Inclusion and Exclusion Criteria

4.4.1 Inclusion Criteria

Pregnant Women attending in Asella town public Health facilities Abortion Service during data collection period

4.4.2 Exclusion Criteria

Pregnant Women attending in Asella Town Public Health Facilities for abortion Service who were severely ill during the Data Collection Period

4.5 Sample Size Determination and Sampling Procedure

4.5.1 Sample Size Determination

The sample size for quantitative study was determined using a single population proportion formula as follows:

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

Where: n=sample size, Z = standard normal distribution corresponding to significance level at α = 0.05, P= proportion from the target to have a particular characteristics = 50% is taken due to absence of reliable previous study, d = margin of error assumed to be 5%.

$$n = \frac{(1.96)^2 (0.5)(1- 0.5)^2}{(0.05)^2} = 384$$

By considering 5% non-response rate, the total sample size will be 384+19= 403

For qualitative phase: The sample size for the in-depth interview was 4 survivals of self-medication abortion women, 2 midwives and 2 private pharmacists selected purposively considering time given and allocated resources.

4.5.2 Sampling Procedure

All the three Asella Town public health facilities, Halila health center, Asella health center and Asella Teaching and Referral Hospital were included purposively. The total population of those health facilities average monthly abortion service users for the previous three months, 105, 368 and 477, were taken. Lastly, the client or women were recruited for three months using systematic random sampling technique until the required sample size was obtained. Based on assessment of health facility monthly load by systematic random sampling technique (i.e. Kth = N/n / 950/403≈ 2. Thus, every two woman who came to the abortion related service. Lottery methods were used to select the starting point.

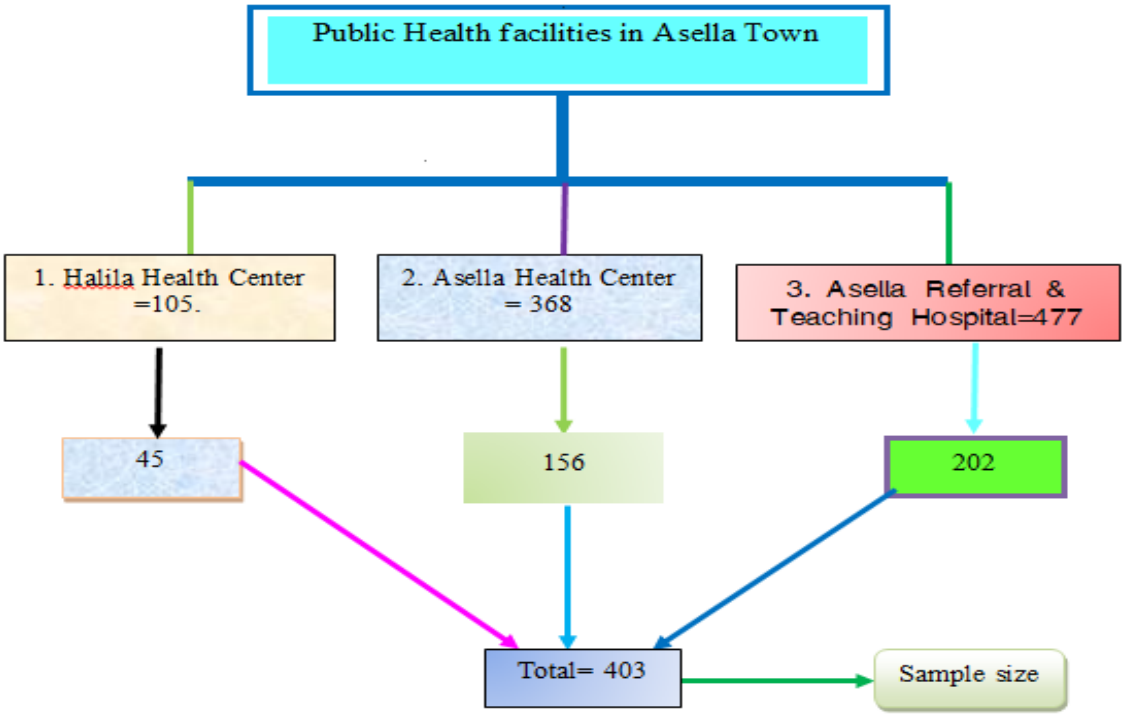

Figure 2 Schematic representation of the sampling procedure for the study on SMA Practice and its Associated Factors among Pregnant Women Attending for Abortion Service at Asella Town Public Health Facilities

4.6 Variables of the Study

4.6.1 Dependent Variable

Self- medication abortion Practice

4.6.2 Independent variables

Age, educational status, residence, religion, marital status, occupation, income, norms and acceptability of abortion, Religious, Stigma and discrimination and Cultural obstacles, Gravidity and parity were variables included in this study.

4.7 Operational Definitions

Self-medication abortion; is when a pregnant women accessed abortion pills by herself, her husband, her relative or her friends has brought the abortion pill over the counter without medical guidance/ supervision/ prescription.

Abortion Cases: the women with expulsion of a fetus from the uterus before it has reached the stage of viability

Pregnancy: is when a sperm fertilizes an egg after it's released from the ovary during ovulation and the fertilized egg travels and implant into the uterus as a result of pregnancy

4.8 Data Collection Tools and Procedures

Quantitative data was collected using an interviewer administered semi structured questionnaire. The questionnaire was prepared after in-depth revision of previous studies and modified to fit with the current study objectives(3,5,10,11).The questionnaire originally prepared in English, and then translated in to Afan Oromo and Amharic languages, again back to English to validate consistency of meaning. The data collection instrument was pre-tested on 5% (20) of randomly selected women of abortion cases attending Asella Town Public Health Facilities before 15 days of data collection period

The qualitative data was collected using an interview guided. The interview guide was prepared by the researcher based on the literature review and objectives of the study in English, and then translated in to Afan Oromo and Amharic languages, again back to English to validate consistency of meaning.

4.9 Data Quality Control Measures

The questionnaire was evaluated by experts in related fields. Pre-test was used to check for language clarity, appropriateness of data collection tools, estimate time required and to consider the necessary amendments. One-day training was given on the purpose of study and data collection process prior to the procedure for five BSc midwives data collectors who have previous data collection experience. During the data collection time, close supervision was carried out by the principal investigator to ensure the quality of the data. Finally, all the collected data was checked by investigator for its completeness and consistency and necessary actions were taken.

The researcher conducted all the in-depth interviews at private room and privacy was assured. Each participant was provided information using a semi structured in-depth interview guide and informed consent was obtained including for use of the audio recorder. The researcher then posed the interview themes one by one from the interview guide giving enough time for participants to respond. The in-depth interview was recoded through audio recorder and the researcher has taken note including nonverbal responses, cues, and other interactions.

The key criteria for ensuring the quality of qualitative research include credibility, achieved through extended involvement, persistent observation, and triangulation; transferability, achieved through comprehensive and detailed explanations; dependability, achieved through rigorous documentation. Four criteria are widely used to appraise the trustworthiness of qualitative research: credibility, dependability, conformability and transferability

4.10 Data Management and Analysis

Epi-data 4.4.2.1 was utilized for quantitative data entry and analysis was done using SPSS version 25 software packages. Variables that were significant (p value 0.25) in the bivariate analysis were included in the multivariable logistic regression analysis to determine the effect of various independent variables on the outcome variable and to control for confounding effects. The Hosmer-Lemeshow goodness-of-fit model was used to check the fitness of the model. A p value greater than 0.05 was considered the model's fit for the logistic regression. Multicollinearity among the independent variables was tested using Variance inflation factor

(VIF). The mean variance inflation factor (VIF) cutoff point of 10 was used to test for multi-collinearity. The degree of association between the independent and dependent variables was analyzed using odds ratio with 95% confidence interval(CI). Variables with p-value<0.05 was considered statistically significant.

Qualitative Data Analysis

A careful verbatim transcription of the audio recorded interview data was made by the researcher. The transcript was then translated to English language by an experienced English language expert. The verbatim transcription and the careful translation were used to grantee the accuracy of the original messages of the key informant interviewee. The analysis employs thematic content analysis approaches. By using the qualitative thematic content analysis approaches, the study participants perceived reasons and explanation to use self-medication abortion and barriers not to use safe abortion service were identified.

Unlike the quantitative data analysis, the current study analysis instigates with listening of the audio recorded data reading and carefully reading the transcripts. The next step was the qualitative thematic content analysis. The thematic analysis instigates with identification of relevant pieces of information or coding. The relevance of the information labeled or coded from the transcript was made based on the objectives of the study, the frequency or degree of repetitiveness with which it occurs, if the interviewee states that it is too important, and based on its relation with lists of factors identified with the previous research findings. Those codes that can come together were merged to form a new code or merge with previously identified similar or closely related code. The final mutuality exclusive codes which could not be reduced to any form were the main and final themes used in the study. Finally, these themes were categorized within the domain categories.

4.11 Ethical Considerations

Ethical clearance and approval was obtained Arsi University College of Health Sciences Research Board, which also facilitates an official letter written to Asella Town Public Health Facilities, and getting study approval from Public Health Facilities. Verbal consent was obtained from each study participants, and participants' anonymity and confidentiality was kept or maintained. The respondents were having the right not to participate or withdraw from the study at any stage according to the interest of the study sample. Study participants were also explained for the attainment of confidentiality and the information they give was not contain their name or any identifiers and was not used for any purpose other than the study.

4.12 Dissemination of the Result

The study result will be submitted to Arsi University College of Health Science, Department of Midwifery Maternity and Reproductive Health Post Graduate program, Asella Town Public Health Facilities. The finding will also be presented in seminars, workshops, conferences and meetings. Attempt was made to publish the paper in internationally or nationally recognized peer reviewed journal.

5. Results

5.1 Quantitative Study

5.1.1 Socio-Demographic and Socio Economic Characteristics of Self- Medication Abortion Practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

A total of four hundred three (403) participants were studied with a response rate of 100%. Mean age was 25.28 years (SD± 6.01). Majority, 127(31.5%) were in the age group of 20 to 24years, 199(49.4%) Muslim, 267(66.3%) Oromo and 254 (62.8%) urban residence, and 168(41.7%) were house wife. Out of the total participants, 149 (37%) attended up to secondary education. Out of the total respondents, 272 (67.5%) were married and average monthly income of the house hold, 282 (70%) was > 5251 and 150(37.2%) respondents had their own monthly income (Table 1).

Table 1: Socio-Demographic and Economic Factors of Self- Medication Abortion Practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

Variables		Frequency	Percentage
Age of participants	15-19	66	16.4
	20-24	127	31.5
	25-29	107	26.6
	30+	103	25.6
Religion	Muslim	199	49.4
	Orthodox	156	38.7
	Protestant	48	11.9
Ethnicity	Oromo	267	66.3
	Amhara	89	22.1
	Gurage	46	11.4
	other	1	0.2
Residence	Rural	149	37.2

	Urban	254	62.8
Participant occupational status	Government employee	42	10.4
	Private employee	30	7.4
	Merchant	31	7.7
	Daily labourer	39	9.7
	House wife	168	41.7
	Student	93	23.1
Participant's education	No formal education	52	12.9
	Primary education	146	36.2
	Secondary education	149	37.0
	College/University	56	13.9
Partner's education	No formal education	52	19.1
	Primary education	64	23.5
	Secondary education	71	26.1
	College/University	85	32.5
Marital status	Single	119	29.5
	Married	272	67.5
	Divorced	8	2.0
	Widowed	4	1.0
Average monthly income of the house hold	< 1650	32	7.9
	1651-3200	37	9.2
	3201-5250	52	12.9
	> 5251	282	70.0
Do you have own income?	Yes	150	37.2
	No	253	68.2
Average monthly income of you	< 1650	22	14.6
	1651-3200	33	21.9
	3201-5250	17	11.3
	> 5251	79	52.3

5:1. 2 Past Obstetric and Pregnancy Related History of Self-Medication Abortion Practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

The current study revealed that, among the total respondents, 231(57.3%) had history of previous pregnancy, 172(42.7%) were primigravida, 195(48.4%) were nulliparous, 65(16.1%) of them had history of previous abortions with the frequency of 41(63.1%) once, 22(33.8%) 2-3 times and 2(3.1%) more than 3 times and in terms of type; 18(27.7%) Medication, 41(63.1%) unspecified, 5(7.7%) Self-induced and 1(1.5%) Surgical. Majority, 218 (54.1%) of participants' pregnancy was unplanned/unintended. Regarding GA of the current pregnancies, 145(36%) was in the GA of 6-9 weeks. Among the participants who practiced SMA with abortion pills (97women), their current pregnancy's gestational age(GA) were, 58(59.8%) in the GA of 6-9wks, 19(19.6%) in the GA of 10-12wks, 13(13.4%) in the GA of <6wks and 7(7.2) in the GA of >12wks. Majority of the participants, 272(67.5%) did not take ever family planning. The main reasons given for not taking family planning were 63(23.2%) want to deliver, followed by fear of religious factor, 62(22.8). (Table 2)

Table 2: Past Obstetric and Pregnancy Related History of Self-Medication Abortion Practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

Variables	Responses	Number	Percentage
Did you have previous pregnancy?	Yes	231	57.3
	No	172	42.7
Gravidity	Primigravida	172	42.7
	Multigravida	156	38.7
	Grand multipara	75	18.6
Parity	Nulliparous	195	48.4
	Primipara	102	25.3
	parity 2	32	7.9
	parity 3	18	4.5
	Parity 4 or >4	56	13.9
Did you have history of abortion?	Yes	65	16.1
	No	338	83.9
No of previous abortion	Once	41	63.1
	2-3 times	22	33.8
	more than 3 times	2	3.1
Type of Previous Abortions	Medication	18	27.7
	Surgical	1	1.5
	Self-induced	5	7.7
	Not specified	41	63.1
Is this pregnancy planned?	Yes	185	45.9
	No	218	54.1
Current Gestational age in weeks	Less than 6 weeks	25	6.2
	6-9 weeks	145	36.0
	10-12 weeks	136	33.7
	More than 12 weeks	97	24.1
Have you ever used family planning?	Yes	131	32.5

	No	272	67.5
The reasons not want to take FP?	Fear of side effects	56	20.6
	Partner refusal	9	3.3
	Fear of religious factor	62	22.8
	Want to deliver	63	23.2
	Student	53	19.5
	Have no partner	29	9.6

5:1. 3 Self-Medication Abortion Practice

Out of which, 97(24.1) were practiced SMA using abortion pills obtained without prior medical consultation. The primary reason for the majority of the participants, 55(56.7%) for their choice of self-medication abortion practice than Safe abortion service was privacy concern. Majority of participants, 69(71.1%) were decided by themselves to practiced self-medication abortion without any advice. Of the participants who practiced SMA, 88(90.7%) obtained the abortion pills directly from a private pharmacy. Among the participants who practiced SMA, majority of them, 84(86.6%) consumed both Mifepristone and Misoprostol, followed by Mifepristone alone, 10(10.6%). The rout of administration of medication pills for Mifepristone 94(96.9%) orally, and for Misoprostol, 36(41.4%), 33(37.9%) and 18(20.7%), sublingually, vaginally and orally respectively. Time interval for the participants who consumed both Mifepristone and Misoprostol was 57(67.9%) 48hrs, 12(14.3%) 24hrs, 10(11.9%) 48-72hrs and 5(5.9%) >72hrs. Regarding medication side effects, 83(85.6%) of them complained. When the participants interviewed about time interval between pill intake and health facility visit after complication of medication pills in days, majority of them, 63(64.9%) reported within 0-3 days followed by 19(19.6%) within 4-7 days. Regarding treatment, majority of these participants, were treated by MVA, 61(62.9%), Antibiotics, 59(60.8%) Misoprostol, 33(34%), Blood transfusion 3(3.1%), and Exploratory laparotomy 4(4.1%) (Table 3)

Table 3: Self-medication Abortion Practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

Variables	Responses	Frequency	Percentage
SMA practice	Yes	97	24.1
	No	306	75.9
Primary reasons for SMA	Lack of access to medical services	10	10.3
	Privacy concerns	55	56.7
	Financial constraints	20	20.6
	Perceived effectiveness	12	12.4

Types of medications used	Mifepristone alone	10	10.6
	Misoprostol alone	3	3.4
	Both	84	86.6
Frequency of using abortion pills	Once	40	41.2
	2-3 times	56	57.7
	More than 3 times	1	1.0
Route of Mifepristone	Orally	94	96.9
Route of Misoprostol	Sublingual	36	41.9
	Vaginal	33	38.4
	Oral	18	20.7
Time interval b/n misoprostol and Mefiprostol	24hrs	12	14.3
	48 hrs	57	66.3
	48-72hrs	10	11.6
	>72hrs	5	5.9
Time interval b/w pill intake and at visit to hospital in days	0-3 days	63	64.9
	4-7days	19	19.6
	8-14day s	9	9.3
	15-21days	5	5.2
	>28days	1	1.0
Kinds of medical service provided	MVA	61	62.9%
	Blood transfusion	3	3.1%
	Exploratory laparotomy	4	4.1%
	Misoprostol	33	40%
	Antibiotics	59	60.8%

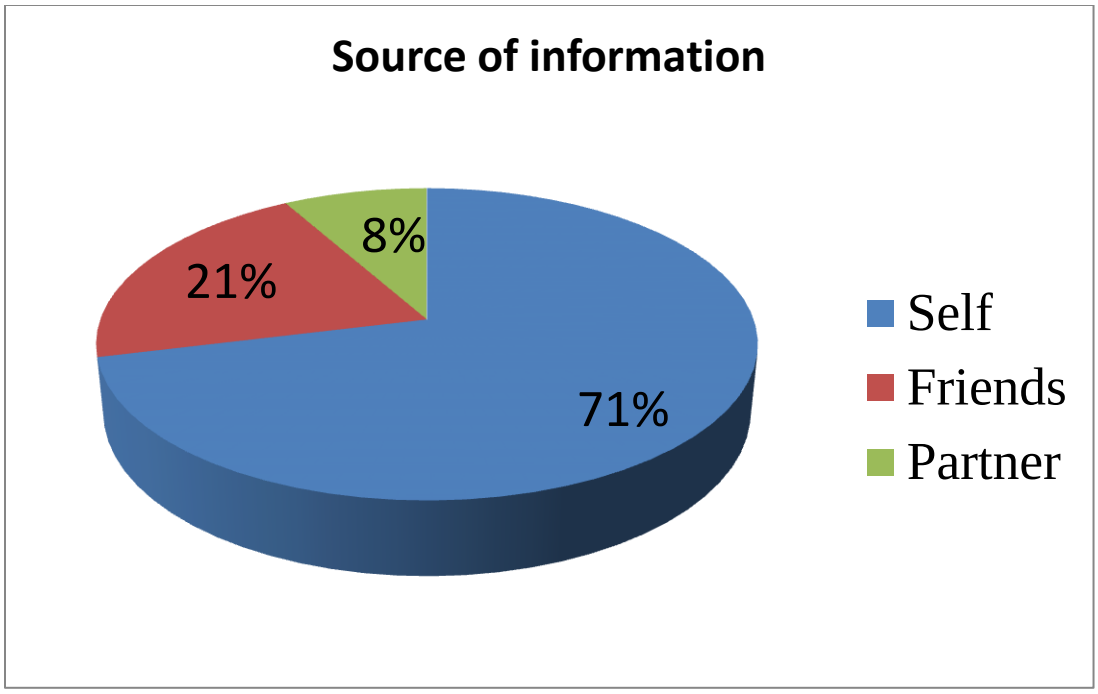

Figure 3 Source of information of self-medication abortion practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

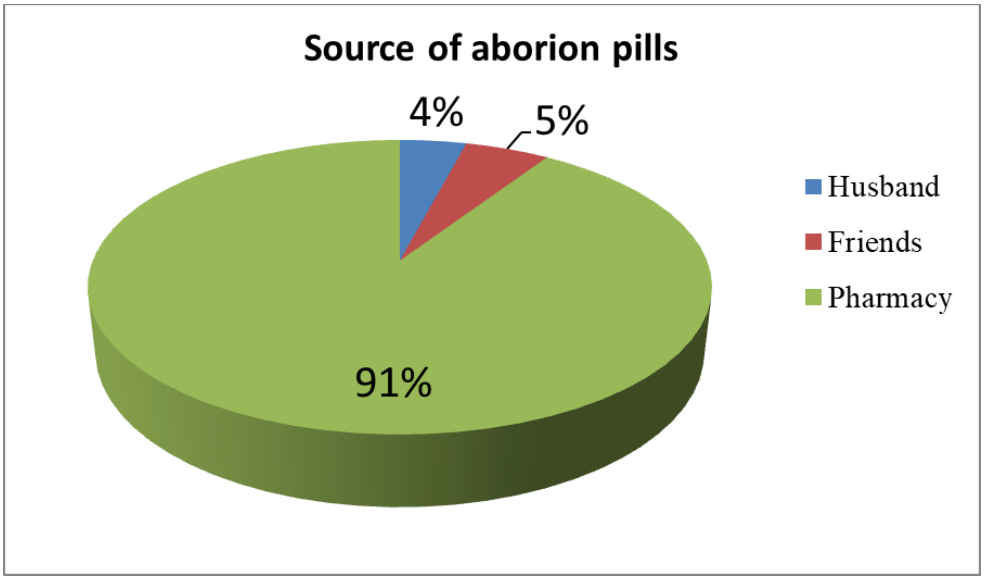

Figure 4 Source of abortion pills procurement of self-medication abortion practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

5. 1. 4 Bivariate and Multivariable Logistic Regression Analyses of Self-Medication Abortion Practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

Bivariate Logistic regression analysis was performed to assess the association of each independent variable with self-medication abortion practice. As a result, the factors that showed a p-value of less than 0.25 were participant's age, place of residence, occupation, education, marital status, average monthly income of household, history of previous pregnancy, gravidity, and current pregnancy status were selected as a candidate for multivariable logistic regression analysis. Multivariable Logistic regression analysis was employed and the result showed that; private employee, secondary and higher education, average monthly income of household, and current pregnancy status were significantly associated with self-medication abortion practice at P-value <0.05 and P-value< 0.001 (table 4). The odds of private employee was 7.86 times higher as compared with those of students (AOR=7.28, 95% CI [1.92-32.21]). The odds of secondary and higher education decreased as educational level increased which means the odds of secondary and higher education were 75% and 92% less likely as compared to those no formal education (AOR=0.25, 95% CI [0.07-0.84]) and (AOR=0.08, 95% CI [0.02-0.34]) respectively. The odds of households with their average monthly income decreased as average monthly income increased which means the odds of < 1650 were 76% times less likely as compared to those with their average monthly income >5251 (AOR=0.24, 95% CI[0.076, 0.78]). The odds of unplanned pregnancy was 11.71 times higher as compared to those respondents how have planned pregnancy (AOR=11.71, 95% CI [4.39, 31.21]).

Table 4: Bivariate and Multivariable Logistic Regression Analysis of Self-Medication Abortion Practice among Pregnant Women Attending Abortion Service at Asella Town Public Health Facilities, 2024, Ethiopia

Variables with Category		SMA practice		COR(95% CI)	AOR (95% CI)
		Yes	No		
		Freq.	Freq.		
Age	15-19	25	41	1	1
	20-24	35	92	1.603[0.852-3.014]	0.717[0.308-1.667]
	25-29	21	86	2.497[1.254-4.974]*	0.406[0.126-1.305
	+30	16	87	3.316[1.599-6.874]*	0.523[0.134-2.048]
Residence	Rural	70	183	1.743 [1.058-2.871]*	1.414[0.71-2.802]
	Urban	27	123	1	1
Occupation	Priv. Employee	6	24	11.978[4.733-30.314]*	7.858 [1.917-32.211]*
	Merchant	5	26	7.078[2.291-21.862]*	1.921[0.351-10.510]
	Daily labourer	18	21	1.270[0.601-2.685]	1.920[0.527-6.990]
	House wife	20	148	8.058[4.344-14.947]*	1.706[0.472-6.160
	Student	48	45	1	1
	No formal education	5	47	1	1
Educational status	1^0 education	30	116	3.760[1.265-11.173]*	0.427[0.128-1.426]
	2^0 education	46	103	1.547[0.764-3.131]	0.245[0.072-0.839]*
	Higher	16	40	0.896[0.456-1.761]	0.076(0.017-0.344)*
Marital status	Married	69	14	9.698[5.765-16.315]*	2.775[0.898-8.582]
	Unmarried	28	244	1	1
Average	< 1650	14	18	0.168[0.078-0.359]*	0.243[0.076-0.775]*

monthly income of the house hold/partner	1651-3200	20	17	0.254[0.124-0.518*	0.382[0.144-1.011]
	3251-5250	40	12	0.718[0.352-1.467]	0.801[0.322-1.989]
	> 5251	232	50	1	1
History of previous pregnancy	Yes	37	199	1	1
	No	60	107	0.332[0.207-0.532]*	1.057[0.290-3.858]
Gravidity	Primigravida	65	140	1	1
	Gravida 2	10	40	1.857[0.875-3.943]	0.508[0.124-2.090]
	Gravida 3	9	46	2373[1.096-5.138]*	0.599[0.140-2.560]
	Gravid 4+	13	80	2.857[1.483-5.505]*	0.724[0.162-3.228]
Current pregnancy status	Planed	6	179	1	1
	Unplanned	91	127	0.047[0.020-0.110]*	11.712[4.396-31.209]**

Key: ∗ P-value <0.05, ∗∗ P-value <0.001, COR-Crude odd ratio, AOR-Adjusted odd ratio (VIF) was found acceptable (less than 10) and the Hosmer-Leme show goodness of fit test indicated (P = 0.647)

5.2 The Qualitative Result

5.2.1 Study Participants' Socio-Demographic Characteristics

A total of eight key informants were participated in in-depth interview. Among the total key informants, two of them were pharmacists, two midwives, two of them House wife, one daily labourer and one student. Four of them were BSc holders, two of the in secondary school, one primary and one university education. Their age was ranged from 30 to 40 years, with 7 to 13 years of work experience.

Table 5: Socio-Demographic Characteristics of Key Informants

Participant ID	Age	Sex	Educational status	Occupational status	Work experience
W1	30	F	Secondary	House wife	-
W2	32	F	Secondary	House wife	-
W3	19	F	Primary	Daily labourer	-
W4	21	F	University	Student	-
M1	40	F	BSc	Midwifery	13years
M2	30	F	BSc	Midwifery	7 years
P1	35	M	BSc	Pharmacist	13 years
P2	34	M	BSc	Pharmacist	10 years

NB: W1= Woman participant 1, M1= Midwife participant 1, P1= Pharmacist participant 1

5.2.2 Themes of Key Informants

The major themes that emerged from the data when exploring the reasons to practice SMA over Safe Abortion were easy availability of abortion pills, privacy concern, perceived cost-effectiveness, legal issue to safe abortions, lack of awareness and resources availability, time sensitivity, and reluctance of health workers. The direct quotes from the participants provide a detail description of the findings. Pseudonyms were used to protect the participants' identities and confidentiality.

1. Easy availability of Abortion Pills

Key informants acknowledged that abortion pills were easily accessible, particularly where private pharmacies easily accessible, and unwillingness of health professionals to provide the service on time they preferred SMA practice.

"I used self-medication abortion pills because the pregnancy was unwanted and the Ethiopian abortion law doesn't allow me to terminate it legally. I went to the pharmacy and bought the pills by myself, as I had used abortion pills five times in the past and had prior experiences about the process self-medication abortion pills."(W1 aged 30) "The inaccessibility of health services, due to the reluctance of health professionals …" (P1 aged 35)

2. Privacy concern:

Self-medication abortion can provide a higher level of privacy, especially for individuals who feel uncomfortable with disclosing their situation to medical professionals, family, or peers result fear of stigma, judgment, or legal consequences, , influence of family, community and cultural perceptions of reproductive health, self-medication may seem like a more preferable alternative. One participant confirmed by describing as:

"……. When I consult to my friend, she informed me to take abortion pills buying from pharmacy. When I go to pharmacy and ask the pills, they gave me without any question." (W2 aged 32)

Another woman also described as:

"I live with my family and I am a student. It was my first pregnancy. The pregnancy was unwanted and I had privacy concerns. I didn't want anyone to know about it because I was afraid." (W4 aged 21).

3. Perceived Cost-Effectiveness

Self-medication abortion might be practiced due to costs related to seeking a safe abortion. But due to wrong decision that medical procedures are prohibitively expensive, self-medication may appear to be a more affordable option as described below:

".... I am a housewife with two children, and my husband is a daily laborer. Our current financial situation doesn't allow me to have another child. When I consult to my friend, she informed me to take abortion pills buying from pharmacy by low cost." (W2 aged 32)

"……. They can easily obtain the pills from a pharmacy, believing that seeking legal abortion services at a health institution is too expensive ……." (M2 aged 30)

4. Legal issue to Safe abortion service

In counties where abortion laws are restrictive like Ethiopia, which allows safe abortion service only for few cases, individuals may obliged to practice self-medication abortion as supported by:

".....the Ethiopian abortion law doesn't allow me to terminate it legally."(W1 aged 30)

"…… since the law does not allow them to abort a healthy fetus, they resort to self-medication abortion." (M1 aged 40)

".....the Ethiopian abortion law does not permit abortion for unwanted or unintended pregnancies." (M2 aged 30)

5. Lack of awareness/knowledge

Lack of information about safe abortion methods including how to access medical care, legality and availability of services, and lack of comprehensive sexual health education which lead to decision to practice SMA

"….I didn't know about safe abortion before, but when I talked to my friend about it, she told me about self-medication abortion pills and said I could buy them from a pharmacy. So, I bought the pills and used them." (W3 aged 19)

"….I didn't want anyone to know about it because I was afraid, so I went to the pharmacy and bought the pills myself, not knowing that healthcare institutions provided this service." (W4 aged 21)

"……lack of awareness about the complications." (M1 aged 40)

"There is a lack of awareness about the consequences of abortion pills." (M2 aged 30)

6. Time Sensitivity and Delays in Seeking Professional Care

The participants confirmed that choosing self-medication abortion due to the urgency of their situation, especially if they feel that obtaining a professional abortion might take too long or require waiting time.

"The inaccessibility of health services, due to the reluctance of health professionals, leads mothers to prefer private pharmacies for quick access to medication, as they can easily find what they need there……" (P1 aged 35)

"Mothers prefer private pharmacies because they can access services quickly …." (P2 aged 34)

Table 6: Themes and sub-themes of Key Informants

Themes	Sub-themes	Category
1. Reasons to practice SMA	Easy availability of abortion pills	Weak regulatory enforcement
	Privacy concern	Being student Cultural Religious stigma Influence of family and community
	Perceived Cost-Effectiveness	Low income Belief of expensive safe abortion service
	Lack of legal support	Law constraint
	Lack of awareness/knowledge	Lack of attention Inconsistent education on availability of services Lack of information Miss understanding
	Time Sensitivity and Delays in Seeking Professional Care	Unwillingness of health workers Lack of medical service Lack of transport Desire to save time For quick access

6. Discussion

The current study revealed that, the magnitude of SMA was 24.1% which was higher than the study done in Nepal, 16.6 %(20). This might be due to the fact that increased awareness about safe medication abortion, difference in abortion law of the countries, and difference in study methods.

The current study findings revealed that the main reason for the majority of the participants 56.7% was privacy concern. This result was in line with the study done in Ranchi, Jharkhand, India was 50%(2) . The possible explanations of privacy concern were feeling of uncomfortable with disclosing their situation to medical professionals, family, or peers that result fear of stigma, judgment, or legal consequences, influence of family, community and cultural perceptions of reproductive health. This was supported by the qualitative finding as:

"I live with my family and I am a student. It was my first pregnancy. The pregnancy was unwanted and I had privacy concerns. I didn't want anyone to know about it because I was afraid." (W4 aged 21).

The next reason was financial constraints, 20.6%, higher compared to the study done in, Doon Medical College & Hospital, India, high cost of visiting health facilities, 6.66% (10). The difference might be due to socio-economic status of the two countries population. This was supported by the qualitative finding as:

"……. They can easily obtain the pills from a pharmacy, believing that seeking legal abortion services at a health institution is too expensive ……." (M2 aged 30)

The other reason was lack of access to medical services, 10.3% which was in line with the study done in, Doon Medical College & Hospital, India poor public health services nearby 13.33%(10). This indicates that the need of health service near- by was mandatory to prevent practice of SMA practice. This condition was supported by the qualitative study participant as:

"The inaccessibility of health services, due to the unwillingness of health professionals, leads mothers to prefer private pharmacies for quick access to medication, as they can easily find what they need there……." (P1 aged 35).

Among characteristics assessed in this study ,private employee, secondary and higher education, average monthly income of household, and current pregnancy status were significantly associated with self-medication abortion practice at P-value <0.05 and P-value< 0.001.

This study showed that, the odds of private employee was 7.86 times higher as compared with those of students. This might be due to the private employee have more privacy concern, financial access, perceived effectiveness and easy accessibility of abortive pills from over the counter. This association was not seen in any of the previous studies.

This study showed that, the odds of secondary and higher education decreased as educational level increased which means the odds of secondary and higher education were 75% and 92 % times less likely as compared to those no formal education.

This association also had not seen in any of the previous studies. This might be due to the fact that secondary and higher education have more social and cultural concern, better understanding about safe abortion service and the danger of self-medication abortion on health compared to those with have no formal education. But it was oppositely described in qualitative study as:

"I live with my family and I am a student…… not knowing that healthcare institutions provided this service." (W4 aged 21).

The current study showed that, the odds of households average monthly income decreased as average monthly income increased which means the odds of < 1650 ETB were 76% times less likely as compared to those with their average monthly income >5251 ETB. This might be due to less financial access, privacy concern and easy accessibility of medication pills in over the counter. The current study result was supported by the study conducted in India with that of the high incidence of self-medication abortion pill use among lower-income women (5).

The current study revealed that the odds of unplanned pregnancy, 11.71 times higher as compared to those respondents who have planned pregnancy.

This might be due to the fact that pregnancy may be resulted from rape, incent, partner disagreement, financial constraints and may not interest to have children. This association also had not seen in any of the previous studies.

The qualitative study described that, most participants mentioned as the main reasons to practice self-medication abortion were financial constraints, and privacy concern that supports the quantitative study result.

7. Strength and Limitations of the Study

7.1 Strength

- The use of qualitative method to triangulate the results found in the quantitative part of the

7.2 Limitations of the Study

- The study was based on cross-sectional data, which implies that the direction of causal relationships cannot always be determined
- There was lack of similar studies, even, in other countries.
- The study was conducted in public health facilities and the experiences of clients from private health facilities and non-governmental organization were not included

8. Conclusion and Recommendation

8.1 Conclusion

The prevalence of self-medication abortion among pregnant women was found to be significant in the study area. This significant increase was reasoned out by the qualitative study as unwanted pregnancy, financial constraints, and privacy concern. The main source of abortion pills was private pharmacy. The predictors of self-medication abortion practice among the study population were private employee, education, household's average monthly income, and having unplanned pregnancy in the current particular study.

8.2 Recommendations

Based on the results of the study the following recommendations can be forwarded:

Food and Drug Administration (FDA): Strict control and surveillance on abortion pills as over-the-counter drug sellers and provide the drug through approved MTP centers after prescription.

Asella Town Public Health care Facilities: Educating the society for risk of self-intake of abortion pills and their dangerous consequences and sexual and reproductive health education and family planning programs should target community-based outreach programs regularly to raise community awareness of contraception

Governmental Organizations: Collaborate to create awareness on how to avoid unwanted pregnancy to prevent self-medication abortion.

Researchers: Similar studies should be undertaken in different parts of the country to see the trends, magnitude and associated factors of self-medication abortion practice.

Policymakers and MOH: Should put restrictions on the over the counter sale of drugs that are used for medical abortion and provision should be made to make these drugs available only on authorized prescription from qualified personals.

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10. Annexes

Annex I: Participant Information Sheet

Participant Information Sheet and Informed Consent Form for the Quantitative Study Arsi University, College of Health Sciences Department of Midwifery Information Sheet And Consent Form to assess "Self- Medication Abortion Practice among Pregnant Women Attending Asella Town Public Health Facilities.

Hello, how are you?

My name is_____ I am currently a data collector of research work team of Arsi University, college of health sciences, Department of Midwifery. This is an interview to be done with you. I would like to appreciate your participation and the questionnaire takes about 10 minutes. I would also like to assure you about the confidentiality of information. The information will only be used for this research. You have a full right to reject, to participate or to interrupt the interview at any time. The information that you will give us is very important to meet the objective of study.

Are you willing now to participate in the study?

Tick one. Agree_____ Do not agree____. Thank you.

Interviewer name: _____ Signature: _____

Date of interview: _____Supervisors Name: _____Signature:_____

Checked on date: _____

The outcome is (thick one) complete _____ or Incomplete_____

Participant's serial number: _____. Questionnaire serial number: _____

Annex 2: English Version of Questionnaire

Part I: Socio-Demographic and Economic Related Questions

S.N	Questions	Response	Remark
101	How old are you?	_____(in years)	
102	What is your marital status?	1. Single 3.Divorced 2. Married 4.Widowed	
103	What is your religion?	1. Muslim 3.Protestant 2. Orthodox 4.Others(specify)_____	
104	What is your ethnicity?	1. Oromo 2. Amara 3. Gurage 4.Tigre 5.Others(specify)_____	
105	What is your occupation?	1. Govern. employed 4.House wife 2.Private employed 5.Student 3.Merchant 6. Daily laborer 7.Other(Specify)----------	
106	What is your educational Status?	1.No formal education 2.Primary education 3.Secondary education 4.Higher education(College/University)	
107	What is your household's/partner's educational status?	1.No formal education 2.Primary education 3.Secondary education 4.Higher education(College/University)	
108	Where is your place of residence?	1. Rural 2. Urban	
109	How much is the average monthly income of the house hold/partner?	_____EBR	
110	Do you have your own income?	1.Yes 2.No	If yes for question

			no 110.
111	How much is the average monthly income of you?	_____EBR	

Part II: Past Obstetrics History and Pregnancy Related Questions

201	Did you have previous pregnancy?	1.Yes 2.No	If No go to Q.no 207
202	Number of pregnancy	_____	
203	Number of delivery after 28 weeks	_____	
204	Did you have history of abortion?	1.Yes 2.No	
205	For how many times?	1. Once 2. 2-3 times 3. more than 3times	
206	Type of Previous Abortions	1. Medication 3. self-induced 2. Surgical 4.Not specified	
207	Is this pregnancy planned?	1. Yes 2. No	
208	Current Gestational age in weeks	_____wks.	
209	Have you ever take post pill?	1. Yes 2. No	If yes go to Q.no 210
210	Within how many days You take post pill after unprotected sex?	1.24hrs 3.48-72hrs 2.24-48hrs 4.>72hrs	
211	Have you ever used family planning?	1.Yes 2.No	If No go to Q.no 212
212	Why don't you want to take FP?	1.Fear of side effects 2.Partner refusal	

		3.Religious factor 4.Other(specify it)----------	

Part III: Current Experience of Abortion

301	Why you want to terminate your pregnancy?	1.Rape 2.Pregnancy from incent 3.Age under 18 years 4.Unintended/Unwanted pregnancy 5.financial constrains 6.Lack of access to medical service 7. Others (specify it)----------	
302	How do you initiate termination of this pregnancy?	1. Self 2. Health care provider 3. Traditional healer 4. Spontaneous induced 5. Medically induced 6. Other(specify it)----------	
303	If self, how?	1. Abortion pills 2. Other drugs(specify it)----------	
304	Who advice you to have Practice of Self - medication abortion?	1. My-self 2. Healthcare provider 3. Partner 4. Relatives/ Friends 5.Other (specify it)----------	
305	From where you obtained the abortion pills?	1. Purchased from a pharmacy 2. Obtained from partner/husband 3. Obtained from friends 4. Other (specify)----------	

306	Who brought you the abortion pills?	1. My-self 2. Healthcare provider 3. Partner 4. Relatives/ Friends 5.Other (specify it)----------	
307	Have you ever used abortion pills without medical supervision?	1.Yes 2.No	If yes go to Q.no 308
308	Which medications did you use?	1. Mifepristone 2. Misoprostol 3. Both	
309	How many times have you used abortion pills?	1.Once 2. 2-3 times 3. more than 3times	
310	What was your primary reason for choosing SMAS vs safe abortion?	1. Lack of access to medical services 2. Privacy concerns 3. Financial constraints 4. Perceived effectiveness 5. Other (please specify)_____	
311	In which route you had taken mifepristone?	1.Sublingual 3.Orally 2.Vaginal 4.Bucal	
312	In which route you had taken misoprostol?	1.Sublingual 3.Oral 2.Vaginal 4.Bucal	
313	At what interval you had taken misoprostol after you take mefiprostol?	1.24hrs 3.48-72hrs 2.48hrs 4..>72hrs	
314	Do you have medication side effect?	1.Yes 2.No	If yes go to Q.no 315
315	What was/ it/were they?	1 .Diarrhea 3. Vomiting. 2.Nausea 4.Shivering	

316	Have you experienced any complications from the abortion pills?	1.Yes 2.No	If yes go to Q.no 317
317	What type of complication you experienced?	1. Complete abortion 2. Incomplete abortion 3. Heavy bleeding 4. Missed abortion 5. Shock 6. Uterine perforation 7. Sepsis 8. Ect. pregnancy 9. Other (specify)_____	
318	If you experience heavy bleeding, how many soaked pads you change per hours?	1. One soaked pad within 1hr 2. Two soaked pads within 1hr 3. three soaked pads within 1hr 3. Four soaked pad within 2hrs 4. Other(specify)_____	
319	Did you seek medical help for these complications?	1. Yes 2.No	If yes go to Q.no 320
320	Where did you seek help first?	1. Emergency department 2. Gynecology OPD 3. Gynecology ward 4. Primary care provider 5. Other (please specify)	
322	Have medical services provided to you?	1. Yes 2. No	
323	If yes, what kinds of services have been provided to you?	1. Suction evacuation 2. Blood transfusion 3. Tab misoprostol 4. Exploratory laparotomy	

		5. Antibiotics 6. Ferrous sulphate 6. Other (please specify)	
324	Time interval b/w pill intake and at visit to hospital in days)?	1. 0-3 days 2.4-7days 5.22-25days 3. 8-14day s 6. >28days 4. 15-21days	

Qualitative Section

For Self-Medication Abortion victim women:

1. Why you preferred self-medication abortion than safe abortion?

2. Who advise you to practice self-medication abortion?

3. From where you found abortion pills?

4. What challenges you experience with self-medication abortion on your health (both physically and emotionally)?

Questionnaire for Key Informants

Thank you for participating in this study. Your insights are invaluable for understanding the practice of self-medication abortion among women. Please answer the following questions based on your experience and knowledge. Your responses will remain confidential and used only for research purposes.

Part I Demographic Information

1. Age _____

2. Professional Role _____

3. Years of Experience _____

4. Type of Facility_____

Part II Practices and Challenges

1. What are the primary reasons women might choose self-medication abortion over seeking safe abortion services?

2. What sources of information do women typically use to obtain information about self-medication abortion?

3. What do you recommend

Annex 3: Ragaa odeeffannoo fi unka eeyyamaa (Afan Oromo Version)

Waraqaa Odeeffannoo Hirmaattotaa fi Unka Hayyama Odeeffannoo Qo'annoo Baay'inaan Yuunivarsiitii Arsii, Kolleejjii Saayinsii Fayyaa Kutaa Deessistootaa Waraqaa Odeeffannoo Fi Unka Hayyamaa madaaluuf "Hojii Of- Qoricha Ulfa Baasu Dubartoota Umurii Walhormaataa Dhaabbilee Fayyaa Hawaasaa Magaalaa Asellaatti Hirmaatan.

Akkam fayyaa keetii?

Maqaan koo_____ Yeroo ammaa kana Yuunivarsiitii Arsii, kolleejjii saayinsii fayyaa, Kutaa Deessistootaa keessatti garee hojii qorannoo daataa walitti qabaa. Kun gaaffii fi deebii isin waliin taasifamuu qabuudha. Hirmaannaa keessan dinqisiifadha gaaffileen gara daqiiqaa 10 fudhata. Waa'ee iccitii odeeffannoos isiniif mirkaneessuu barbaada. Odeeffannoon qorannoo kanaaf qofa kan oolu ta'a. Yeroo barbaaddetti gaaffii fi deebii diduu, hirmaachuu ykn addaan kutuuf mirga guutuu qabda. Odeeffannoon isin nuuf kennitan kaayyoo qo'annoo galmaan ga'uuf baay'ee barbaachisaadha.

Amma qo'annaarratti hirmaachuuf fedhii qabdaa?

Tokko irratti mallattoo kaa'i. Walii_____ Walii hin galle____. Galatoomaa.

Maqaa gaafataa: _____ Mallattoo: _____ .

Guyyaa gaaffii fi deebii: _____Maqaa supparvaayizaroota: _____Mallattoo:_____

Guyyaa ilaalame: _____

Bu'aan isaa (kan furdaa) guutuu _____ ykn Hin Guutu_____ dha .

Lakkoofsi tartiiba hirmaataa: _____. Lakkoofsa tartiiba gaaffilee: _____ .

Dabalata 2: Gaaffii Ingiliffaa

Kutaa I: Gaaffilee Hawaas-Dimoogiraafii fi Diinagdee Waliin Walqabatan

101. Umuriin kee meeqa? _____(waggoota keessatti) .

102. Haalli gaa'ela keessanii maali?

1. Qophaa'e
2. Kan heerumte
3. Hiikaan
4. Dudha manaa irraa du'e

103. Amantiin kee maali?

1. Muslima
2. Ortodoksii
3. Pirootestaantii
4. Kanneen biroo(ibsu)_____

104. Sabni kee maali?

1. Oromoo
2. Amara
3. Tigree
4. Gurage
5. Kanneen biroo(ibsu)_____

105. Hojiin kee maali?

1. Bulchuu. qacarame
2. Qaxara dhuunfaa
3. Daldalaa
4. Hojjetaa guyyaa guyyaa
5. Haadha manaa6.Barataa7.Biroo(Ibsa) _____

106. Haalli barnootaa keessan maali?

1.Barnoota idilee hin qabu
2.Barnoota sadarkaa tokkoffaa
3.Barnoota sadarkaa lammaffaa
4.Barnoota olaanoo (Kolleejjii/Yuunivarsiitii) .

107 Haalli Barnootaa maatiin keessanii maali?

1. Barnoota idilee hin qabu
2. Barnoota sadarkaa tokkoffaa
3. Barnoota sadarkaa lammaffaa
4. Barnoota olaanoo(Kolleejjii/Yuunivarsiitii)

108. Bakki jireenyaa kee maali?

1. Baadiyyaa
2. Magaalaa

109 Galiin maatii ji'a ji'aan argamu giddu galeessaan meeqa?_____EBR jedhamuun beekama

110. Galii mataa keetii qabdaa?

1. Eeyyee 2. Lakki Gaaffii lakk 110f eeyyee yoo ta'e.

111. Galiin ji'a ji'aan argattu giddu galeessaan meeqa?_____EBR jedhamuun beekama

Kutaa II: Seenaa Da'umsa Darbee fi Gaaffilee Ulfaan Walqabatan

201. Ulfa kanaan dura godhattee turtee?

1.Eeyyee 2.Lakk Yoo Lakki ta'e gara Q.lakk 204 deemaa

202. Baay'ina ulfaa _____ .

203. Baay'ina da'umsaa torban 28 booda _____ .

204. Seenaa ulfa baasuu qabdaa? 1.Eeyyee 2. Lakki Yoo Lakki gara Q.lakk 206 deemaa

205. Yeroo meeqaaf? 1. Al tokko 2. Yeroo 2-3 3. yeroo 3 ol

206. Gosa Ulfa Baasuu Duraan 1. Fayyaa (of-dawaa) . 2. Baqaqsanii hodhuu 3.Hin ibsamne

207. Ulfi kun karoorfamee? 1. Eeyyee 2. Lakki

208. Wks meeqa. yeroo LNMP irraa shallagu? _____wks.

209. Umurii Ulfaa ammaa torbaniin 1. Torban 6 gadi 2. Torban 6-9 3. Torban 10-12 4. Torban12 ol

210. Kiniinii poostaa fudhattee beektaa? 1. Eeyyee 2. Lakki Yoo eeyyee ta'e gara Q.lakki 212 deemaa

211 Walqunnamtii saalaa of eeggannoo malee erga raawwattee booda guyyoota meeqa keessatti kiniinii postii fudhatta? 1.24hrs 2.24-48hrs 4.>sa'aatii 72tti 3.48-72hrs sa'aatii 1.24tti

212. Karoora maatii fayyadamtee beektaa? 1.Eeyyee 2.Lakki Yoo Lakki Q.lakk 212

213 Maaliif FP fudhachuu hin barbaaddu? 1.Sodaa miidhaa cinaa 2.Hiriyaa gaa'elaa diduu 3. Dhimma amantii 4. Kan biraa _____

214. Ulfa kee maaliif addaan kutuu barbaadda?

1. Gudeeddii
2. Ulfa onnachiiftuu irraa
3. Umurii waggaa 18 gadi
4. Ulfa hin yaadamne/hin barbaadamne
5. danqaa maallaqaa
6. Tajaajila fayyaa argachuu dhabuu
7. Kanneen biroo (maaloo ibsaa)

Kutaa III: Beekumsaa fi Muuxannoo Yeroo Ammaa gara Of –Qoricha Ulfa Baasu

301. Ulfa Ofii qorichaan baasuu ni beektaa? 1.Eeyyee 2. Lakki Yoo eeyyee ta'e gara Q.lakki 303 deemaa

302. Waa'ee Shaakala Of - Qoricha ulfa baasuu odeeffannoo eessaa argatta?

1. Dhiyeessaa eegumsa fayyaa
2. Michuu
3. Fira / Hiriyyoota
4. Internat
5. Miidiyaa (TV, Raadiyoo fi kkf) .
6. Kanneen biroo (If ibsaa)---------- .

303. Shaakala Of - qoricha ulfa baasuu akka gootu eenyutu si gorsa?

1. Ofii
2. Dhiyeessaa eegumsa fayyaa
3. Hiriyaa
4. Fira/ Hiriyyoota
5. Kan biroo (ibsi)----------

304. To'annoo ogeessa fayyaa malee kiniinii ulfa baasuu fayyadamtee beektaa?

1.Eeyyee 2.Lakki Yoo eeyyee ta'e gara Q.lakki 306 deemaa

305. Yoo eeyyee ta’e qoricha kam fayyadamte?

1. Mifepristone jedhamuun beekama
2. Misoopiroostoolii
3. Lamaanuu

306. Qoricha akkamitti argatte?

1. Mana qorichaa irraa kan bitame
2. Bittaa toora interneetii
3. Hiriyaa/miseensa maatii irraa kan argame
4. Kan biroo (maaloo ibsi) .

307. Kiniinii ulfa baasuu yeroo meeqa fayyadamteetta? 1.Al tokko 2. Yeroo 2-3 3. yeroo 3 ol

308. Sababni inni guddaan ulfa ofumaan qorichaan baasuu filachuuf maal ture?

1. Tajaajila yaalaa argachuu dhabuu
2. Yaaddoo dhuunfaa
3. Rakkoo maallaqaa
4. Bu’a qabeessummaa hubatame
5. Kan biroo (maaloo ibsaa)_____ .

309. Karaa kamiin mifepristone fudhattee turte?

1. Afaan jalaa
2. Qaama saalaa
3. Afaan
4. Bucal

310. Erga mefiprostol fudhattee booda yeroo meeqatti misoprostol fudhattee turte?

1. 24hrs
2. 48hrs
3. 48-72hrs sa'aatii 1.24tti
4. >sa'aatii 72tti

311. Karaa kamiin misoprostol fudhattee turte?

1. Afaan xiqqaa
2. Qaama saalaa
3. Afaan
4. Bucal

Kutaa IV: Bu’aa Shaakala Ulfa Ofii Qorichaan baasuu

40. 1 Miidhaa qorichaa ni qabdaa? 1.Eeyyee 2.Lakki Yo o eeyyee ta’e gara Q.lakki 403 deemaa

402. Maal ture? 1 .Garaachaa 3. Garaa kaasaa 2. Garaa kaasaa 4.Raafachuu

403. Kiniinii ulfa baasuu kanaan walqabatee rakkoon isin mudatee jiraa? 1.Eeyyee 2.Lakk Yoo eeyyee ta’e gara Q.no 405 deemaa

404. Rakkoon gosa akkamii si mudata?

1. Ulfa guutuu baasuu
2. Ulfa guutuu dhabuu
3. Dhiigni ulfaataa
4. Ulfa baasuu dhabuu

5. Rifachiisuu
6. Sepsis
7. Ulfa gadameessaa ala
8. Boca gadameessaa
9. Kan biroo(Itti ibsi_____

405.Yoo dhiigni baay'ee sitti ba'e, sa'aatii tokkotti paadiiwwan jiidhaan meeqa jijjiirta?

1. Paadiin tokko jiidhe 1hr keessatti
2. Paadiiwwan lama jiidhaman 1hr keessatti
3. Paadiin afur jiidhe 2hrs keessatti
4. Kan biroo(ibsu)_____ .

406. Rakkoolee kanaaf gargaarsa ogeessa fayyaa barbaaddanii?

1. Eeyyee 2.Lakki Yoo eeyyee ta'e gara Q.lakki 408 deemaa

407. Gargaarsa eessaa barbaadde?

1. Kutaa balaa tasaa
2. Haadholii OPD
3. Dhiyeessaa kunuunsa sadarkaa duraa
4. Kan biroo (maaloo ibsi) .

408. Yeroo gidduu (guyyoota keessatti daawwannaa hospitaala irratti kiniinii fudhachuu gidduu)?

1. 0-7guyyaa 4.22-25guyyaa
2. Guyyaa 8-14 5. >guyyaa 28
3. Guyyoota 15-21

409. Tajaajilli gosa akkamii siif kenname?

1. Xuuxuudhaan baqachuu
2. Dhiiga dabarsuu
3. Tab misoprostol jedhamu
4. Laparotomy qorannoo
5. Qoricha farra baakteeriyaa
6. Kan biroo (maaloo ibsi) .

Kutaa Qulqullinaa

Muuxannoo Ulfa Ofiin Qorichaan Baasu:

Mee muuxannoo ulfa of qorichaan baasuu irratti qabdan ibsaa. Mala kana akka filattu kan si taasise maali?

Adeemsa of-qoricha fudhachuu keessatti qormaata akkamii si mudate?

Ulfa of qorichaan baasuu ilaalchisee odeeffannoon jiraachuu isaa maaltu sitti dhaga'ame?

Ilaalcha Tajaajila Ulfa Baasu: 1.1.

Tajaajila ulfa baasuu yeroo ammaa naannoo keessanitti argamu irratti yaadni keessan maali?

Qulqullinni ykn dhaqqabummaan tajaajila ulfa baasuu ogeessaa akkamitti fooyya'uu danda'a jettanii yaaddu?

Dhiibbaa Jireenya Irratti Qabu:

Muuxannoon ulfa ofumaan of qorichaan baasuu irratti qabdan jireenya keessan irratti dhiibbaa akkamii geessiseera, qaamaa fi miiraan?

Adeemsa of-qoricha fudhachuu keessatti sirna deeggarsa akkamii (yoo jiraate) qabda turte?

Gaaffii Odeeffattoota Ijoo

Qo'annoo kana irratti waan hirmaattaniif galatoomaa. Hubannoon keessan gocha ulfa of-qorichaatiin dubartoota biratti ulfa baasuu hubachuuf gatii guddaa qaba. Muuxannoo fi beekumsa qabdan irratti hundaa'uun gaaffilee armaan gadii deebisaa. Deebiin keessan iccitii ta'ee kan turuu fi qorannoo qofaaf kan oolu ta'a.

Kutaa I Odeeffannoo Dimogiraafii

1. Umurii---------- .
2. Gahee Ogummaa---------- .
3. Muuxannoo Waggaa ---------- .
4. Gosa Dhaabbataa---------- .

Kutaa II Shaakala fi Qormaata

1. Dubartoonni yeroo baay'ee madda odeeffannoo akkamii fayyadamuun waa'ee ulfa of-qoricha ofumaan baasuu odeeffannoo argachuuf fayyadamu?----------

3. Sababoonni jalqabaa dubartoonni tajaajila yaalaa idilee barbaaduu caalaa ulfa ofumaan qorichaan baasuu filachuu danda'an maali?----------

4. Qabxiileen hawaas-dinagdee (fkn, galii, barnoota, haala hojii) murtoo ulfa baasuuf of qoricha fudhachuu irratti dhiibbaa akkamii geessisu?----------

5. Murtee ulfa baasuuf of qoricha gochuu keessatti maqaa balleessiin gahee akkamii qaba?
6. Ulfa of qorichaan ofirraa baasuu ilaalchisee wantootni aadaa ykn hawaasaa filannoo dubartootaa irratti dhiibbaa geessisan jiruu?---------- 7. Rakkoowwan ykn balaawwan ulfa of-qoricha fudhachuun wal-qabatan kan ati argite maali?---------- 8. Dubartoonni naannoo keessan tajaajila ulfa baasuu nageenya qabu yeroo argatan gufuuwwan akkamii isaan mudata?---------- .

Declaration

I, the undersigned, declare that this is my original work and has not been presented in any other University and all source of materials used for this thesis have been fully acknowledged.

Name of investigator: _____

Signature: _____ Date_____

Place: Arsi University, College of Health Science, Department of Midwifery.

This thesis has been submitted with our approval as University Advisers

Primary advisor: _____

Signature_____ Date: _____

Co- Advisor: _____

Signature: _____ Date_____

Department: _____

Signature: _____ Date_____