



ARSI UNIVERSITY
COLLEGE OF HEALTH SCIENCES
DEPARTMENT OF PUBLIC HEALTH

**Magnitude of Voluntary Blood Donation Practice and Associated Factors Among
Asella Town Residents, Oromia, Ethiopia, 2025**

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ABSTRACT

Background: Blood donation is a critical process that involves collecting blood from healthy donors, ensuring a safe and adequate supply of blood and its components. Voluntary, non-remunerated blood donors are essential for maintaining this supply. In Ethiopia, over 60% of the total yearly collected blood comes from schools and community-based initiatives. However, challenges such as a limited number of voluntary donors, limited access to donation centers, and low participation rates hinder effective blood donation efforts in the country.

Objective: To assess the magnitude of voluntary blood donation practices and identify factors associated with them among community members aged 18–65 years in Asella town, Arsi Zone, Oromia Region, from September 1–30, 2025.

Methods: A community-based cross-sectional study was conducted among 698 participants selected using a multistage sampling technique with a design effect of 2. Kebeles were chosen through simple random sampling, and households were selected by systematic random sampling. From households with multiple eligible participants, one was selected using the lottery method. Data were collected through structured, pretested, interviewer-administered questionnaires and analyzed using SPSS version 25. Bivariate and multivariate logistic regressions were applied to identify factors associated with blood donation, with statistical significance set at $p < 0.05$ and 95% confidence intervals.

Results: A total of 698 participants were included in the final analysis. Among these participants, Only 15.5% had ever donated blood in their life time. Multivariate logistic regression showed that adults aged 45-65 were less likely to donate blood than those aged 18–25 (AOR = 0.17, 95% CI: 0.05-0.53), Respondents without cultural taboos (AOR = 2.46, 95%CI:1.39-4.34), those with a positive attitude (AOR = 5.72, 95%CI:3.11-10.52) were more likely to donate and Participants who had no exposure to blood donation messages were almost entirely absent from donation practice, with an (AOR =0.01; 95% CI: 0.00–0.07, $p < 0.001$).

Conclusion and recommendations: Voluntary blood donation practice in Asella town was found to be low. Factors such as age, marital status, cultural taboos, attitudes, and exposure to information significantly influenced donation. Collaboration, community education and awareness campaigns,are recommended to improve practices

Key words: Blood donation practice, voluntary blood donation, Asella town.

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ABBREVIATIONS AND ACRONYMS

AOR	Adjusted Odds Ratio
BSC	Bachelor of Science
CD-RW	Compact Disc-Rewritable
CI	Confidence Interval
EC	Ethiopia Calendar
EDHS	Ethiopian Demographic and Health Survey
EPI INFO	Epidemiology Information
ETB	Ethiopian Birr
G/DL	Grams per Deciliter
KG	Kilogram
ML	Milliliter
MMHG	Millimeters of Mercury
MOH	Minister of Health
NR	Non-Response Rate
OR	Odds Ratio
SPSS	Statistical Package for the Social Sciences
VBD	Voluntary Blood Donation
WHO	World Health Organization

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INTRODUCTION

1.1 Background of the study

Blood is fluid that transports oxygen and nutrients to the cells and carries away carbon dioxide and other waste products (1). Blood donation is the process in which a volunteer who is a healthy and eligible person voluntarily draws his/her blood for transfusions to those in need (2).

Blood transfusion is essential and life-saving support within the health-care system, which saves millions of lives each year (3). In high-income countries, transfusion is most commonly used for supportive care in cardiovascular surgery, transplant surgery, massive trauma, and therapy for solid and hematological malignancies. In low- and middle-income countries it is used more often to manage pregnancy-related complications and severe childhood anemia (4).

Voluntary donors are recognized to be the safest donors because they are motivated by altruism and the desire to help others and by a sense of moral duty or social responsibility. They are not placed under any pressure by hospital staff, family members or the community to donate blood and they entrust their blood donations to be used as needed, rather than for specific patients (3, 4).

The age range plausible to donate is 18 years up to 65 years, with 45 kg and above kg of weight. The amount of blood donated in a single donation is from 350ml to 450ml. The hemoglobin level should be more than 12g/dl for females and 13g/dl for males with blood pressure in the range of 110-160/70-95mmHg (5).

The World Health Organization global framework for action has developed twenty well-defined strategies to achieve 100% voluntary blood donation. It serves as a guide for developing programs which are implemented at community, regional, national and international levels. Some of the strategies are incorporating blood donation in national blood policy, mobilizing youth blood donors, donor education and community involvement, building partnerships with the media, ensuring convenience of service and providing quality donor service (4). This study assess community practices related to voluntary blood donation among adults in Asella Town.

1.2 Statement of the problem

Globally, 118.5 million blood donations are collected worldwide. 40% of these are collected from high-income countries, which constitute only 16% of the world's population. Data from approximately 13,300 blood centers in 169 countries report collecting a total of 106 million donations. The annual collection rates at these centers vary significantly by income group. The median annual donations per blood center are 1,300 in low-income countries, 4,400 in lower-middle-income countries and 9,300 in upper-middle income countries, as compared to 25,700 in high-income countries. (6) .

African countries collected only 5.2 units of blood per 1,000 people. The World Health Organization recommended at least 10 donations per 1,000 people. High-income countries reached 31.5 donations per 1,000 people, while upper-middle-income countries recorded 16.4 donations. Lower-middle-income countries achieved 6.6 donations per 1,000 people, and low-income countries collected 5.0 donations. (7) .

Hundreds of millions of people experience traumatic injury, obstetric bleeding, and pediatric anemia each year and require immediate access to blood transfusion (8). Hemorrhage is responsible for the majority of deaths of trauma patients who do not reach the hospital, and up to 40% of deaths of those who do (9).

Millions of lives are saved each year through blood transfusion yet the quantity, quality and safety of blood transfusion are still a concern particularly in developing countries where voluntary blood donation is lower than in high-income level countries (10).

Ethiopia has one of the highest maternal mortality rates of 412/100,000 (EDHS 2016) and a serious motor vehicle accident (ranks 12th in the world). One of the three major causes of maternal mortality is hemorrhage. Some 87,000 units of blood are donated for transfusion in Ethiopia, although the country needs 200,000 units of blood annually, The country requires 18,000 units of blood daily, yet the average daily amount collected is approximately 1,100 units a shortfall of 16,900 units the National Blood Bank of Ethiopia disclosed. So, only 43% of the total unit of blood needed was met (11).

In Ethiopia, of the total yearly collected blood, more than 60% were from schools and communities. Lack of voluntary donors, limited access to blood donation centers within the community, and low participation of blood donors are some of the challenges for blood donation in the country (12).

Several factors hindering volunteer blood donation have been identified. These barriers include demographic elements like age, sex, and education, as well as individual factors such as understanding, attitudes, and medical concerns. Practical obstacles, including lifestyle constraints, fear of needles or dizziness, and negative past experiences, also play a role. Additionally, insufficient knowledge about blood donation contributes to these challenges ([13](#), [14](#)).

In Ethiopia, an integrated strategy for voluntary blood donation and recruiting a sufficient number of safe blood donors are major confronts ([15](#)). This could be attributed to low community knowledge, unpromising attitude, and poor blood donation practice regarding voluntary blood donation. Many studies have been conducted to determine people's knowledge, attitude, and practice of blood donation ([16](#)), there remains a significant gap in understanding the actual practice of voluntary blood donation and its specific determinants at the local community level. Hence, This study was aimed to assess blood donation practices and associated factors among adults aged 18 to 65 years in Asella Town.

1.3 Significance of the study

Voluntary unpaid blood donors represent the safest source for blood and can provide a sustainable national blood supply to meet a country's needs. The findings of this study will inform policymakers in developing strategies to enhance voluntary blood donation practices within the community.

This study benefits patients by identifying key barriers to donation, ultimately increasing donor participation and saving lives. It offers actionable insights for blood banks, health offices, policymakers (such as the Ministry of Health and the Red Cross), and community education initiatives, enabling improvements in blood transfusion services.

This study will lead to better interventions to promote safe, voluntary blood donation and provide a foundation for effective health education strategies.

It will help Health care provider to manage and minimize unnecessary blood transfusion. In addition to this it will avail reliable information for researchers who are interested in this area.

2. LITERATURE REVIEW

2.1. Prevalence of voluntary blood donation practice

A study conducted in Maryland included 385 participants. Among them, 228 (59%; 95% CI: 54.1%–63.9%) had donated blood at least once in the past ([17](#)). Another cross-sectional study in Pelotas, Southern Brazil, in 2007 surveyed 2,986 individuals aged 20 years or older. In this group, 32% (95% CI: 30.3%–33.7%) reported having ever donated blood ([18](#)).

A study conducted in Chennai, India among the total sample size of 530 voluntary blood donors the practice of the donors have been shows that 250 (47.2% : 95% CI: 43.0%- 51.5%) have voluntary donated blood ([19](#)). A study conducted in Nepal among the total sample size 177 participants Only 32 (18.1%) respondents donated blood with 95% Confidence Interval: (12.4%- 23.8%) ([20](#)).

A study conducted in University of Benin teaching hospital among the total sample size 140 participants involved in the study 58 (41.4%: 95% CI :33.2%- 49.6%) participants donated blood voluntarily ([21](#)). A study conducted in South-East Botswana out of the 384 participants, 104 (27.1%: 95% CI : 22.7%-31.6%) reported that they had donated blood ([22](#)).

A study done in Kenya from the total sample size 456 participants among those 187(41.01%:95%CI: 36.5%- 45.5%) of respondents had ever donated ([23](#)). A quantitative descriptive cross-sectional study conducted in Zanzibar among the total participants 100 among those participants involved 40 (40%: 95%CI: 30.4%-49.6%) of participants donated blood before, 11 (27.5%) donated once, 22 (55.0%) donated twice, and 7 (17.5%) donated more than twice. Most of the participants, 31 (51.7%), reported that they did not donate blood ([24](#)).

A study done in Addis Ababa Health Facility professionals among the total sample size 295 participants, 113 (32.6: 95% CI: 32.8%-43.9%) of the respondents have ever donated blood ([15](#)). A community-based cross-sectional study was conducted in Gondar town, Northwest Ethiopia, Out of a total of 768 participants, 141 (18.4%: 95% CI: 15.7%-21.1%) had experience with blood donation, while the remaining 627 (81.6%) had never donated blood before. Among those who had donated, 86 (61%) were voluntary donors, while the remaining 39% were replacement donors ([25](#)).

A community –based study done in Adama town ,from the total sample 421 respondents ,only 70 participants (17.1% : 95% CI : 13.5%, 21%) reported that they had ever donated blood in their lifetime ([14](#)). A community –based study conducted in Harar town a total of 845 study

participants ,191(22.6%: 95% CI : 19.8%-25.4%) had ever donated blood among 191 respondents who ever donated blood before, 96 (50.3%) donated voluntarily ([26](#)).

A study conducted in Ambo University, a total 398 study participants , 94 (23.6% : 95% CI: 19.4%-27.8%) participants had ever donated blood ([27](#)). A community-based study was conducted among 422 adults in Hosanna town. Of the total participants, only 123 (29.15%:95% CI: 24.8%-33.5%) had ever donated blood. Among those who donated, 114 (92.7%) did so voluntarily, while 9 (7.3%) donated in place of family members ([28](#)).

2.2 Associated Factors influencing the Practice of Voluntary Blood Donation

Practice

2.2.1 socio-demographic factors influencing the practice of voluntary blood donation

2.2.1.1 Age

A study among adults in Debre Markos town, Northwest Ethiopia revealed that the practice of blood donation was higher among 18–25 years (AOR = 0.42 95 % CI: 0.19, 0.92) and 26–35 years (AOR = 0.26 95 % CI: 0.11, 0.63) of age groups compared to the reference group of 45 and above year olds (AOR= 1 95%CI: 1) older respondents ([29](#)).

Community based cross-sectional study was conducted in Gondar town Those participants in age ranges of 31–35 years (AOR = 2.61; 95% CI: 1.6; 4.86) and 36–40 years (AOR = 3.8; 95% CI: 2.0; 7.31) were more likely to donate blood as compared to participants in age range of 20–25 years ([25](#)).

A community-based cross-sectional study conducted in Chagni, Dangila, Injibara, and Jawi towns, the age group of 36–45 respondents had a higher likelihood of donating blood (AOR = 3.506, 95% CI: 1.400–30.710) ([30](#)).

A cross-sectional study was conducted in residents of Adama town the study participants younger age group of 18–25 years were more than three times likely to donate blood as compared to those older ages of more than 45 years (AOR: 3.40; 95% CI: 1.30, 12.43) ([14](#)).

2.2.1.2 Gender

During a study carried out among university students in Bangladesh, sex of the students was found to be associated with blood donation ([31](#)).

In Kilimanjaro, Tanzania males had 48% lower odds of donating blood compared to females (AOR: 0.52 (0.03–0.92) ([32](#)). In Ebony, Nigeria, A descriptive cross-sectional study design was done among 300 students showed that being male increases the odds of donation 3.8 times (AOR=3.8; 95% CI: 1.7-8.2) ([33](#)).

A study of adults in Debre Markos town, Northwest Ethiopia, found a significant association between male sex and both knowledge and practice of blood donation. Males were more knowledgeable about blood donation than females (AOR = 1.89 95 % CI: 1.36, 2.61) ([29](#)).

According to another study among healthcare providers in Addis Ababa health facilities, Ethiopia, being male was associated with favorable attitude towards blood donation ([15](#)). A Community based cross-sectional study was conducted in Gondar, more than half, 66.6%, of donors were male. Males were two times more likely to donate blood compared to females (AOR = 1.7; 95% CI: 1.14; 2.54) ([25](#)).

A community-based study was conducted among 422 adults in Hosanna town According to this study, men are more than 2.5 times more likely than women to donate blood (AOR: 2.53; 95% CI: 1.54, 4.15) ([28](#)). A community-based cross-sectional study conducted in Chagni, Dangila, Injibara, and Jawi towns. Male had a greater likelihood of donating blood compared to females (AOR = 1.153, 95% CI: 1.019–1.254) ([30](#)).

2.2.1.3 Marital status

A cross-sectional web-based community study Hyderabad city, Telangana state was conducted among adult Married individuals had a statistically significant favorable attitude compared to single participants ($P = 0.018$) ([34](#)).

The study was conducted in Public Hospitals of Central, North West and Western zone of Tigray Married health professionals were 1.7 times more participated on blood donation practice than those single health professionals (AOR = 1.729 95% CI 1.091–2.739) ([35](#)).

2.2.1.4 Occupational status and educational status

A cross-sectional web-based community study Hyderabad city, Telangana state was conducted among adult Participants with a university level of education had statistically significant favorable attitudes compared to those with high school education ($P = 0.005$) ([34](#)).

The study was conducted in Public Hospitals of Central, North West and Western zone of Tigray Health professionals having degree in their education level were 69% less likely to participate on blood donation compared to the specialist (AOR = 0.315 95% CI 0.104–0.950) (35).

A community-based cross-sectional study conducted in Chagni, Dangila, Injibara, and Jawi towns, respondents with a degree had a higher likelihood of donating blood (AOR = 6.267 (23.412–98.574) (30).

A community-based cross-sectional study conducted in Chagni, Dangila, Injibara, and Jawi towns, employment status were all strongly correlated with their blood donation practices. Private sector employees had a higher likelihood of donating blood (AOR = 1.216, 95% CI: 3.368–4.367) (30).

A community-based study in harar town show that college and above (AOR = 15.34, 95% CI: 5.01–46.91, $P < 0.05$) were significantly associated with comprehensive knowledge about voluntary blood donation (26).

2.2.2 Socio-Cultural Factors influencing the practice of voluntary blood donation

2.2.2.1 Religion

A study done in Saudi Arabia on Assessment of the knowledge beliefs and associated factors among Saudi adults towards blood donation The Muslims were 0.37 times less likely to have an attitude against blood donation (AOR = 0.37, 95% CI: 2.561–9.577) than non-Muslim respondents (36).

A community based cross-sectional study was conducted in Gondar town religion was the only variable significantly associated with the attitude of the participants. Those participants who were catholic and Jewish (AOR = 0.16; 95% CI: 0.05, 0.51) were less likely to have good attitude towards blood donation. Being catholic and Jewish reduces the attitude towards blood donation by 84% compared to being orthodox Christian by religion (25).

Among Samara university Ethiopia students, from religion towards voluntary blood donation, being Muslim were found to be less likely to practice than Orthodox [AOR (95%CI): 0.391(0.181, 0.844) (37).

2.2.2.2 Culture

During a study of knowledge, misconceptions and motivations towards blood donation among university students in Kingdom of Saudi Arabia(KSA), altruism which is a core of many cultures

was a major motivation for donors (38). According to a study on voluntary blood donation among Indian adults, customs related to culture were associated with not donating blood (39).

2.2.3. Knowledge about donating blood

According to a study among students of a tertiary institution in Nigeria, inadequate knowledge about blood donation was a major reason given by majority of those who did not donate blood (40). According to a study conducted in Karachi among young students, more than half of the respondents (63.12%) indicated that they had heard about voluntary blood donation, A total of 65.1% of the students had information about blood donations from family, friends, or relatives; 20.5% from schools, colleges, or universities; and 7.9% from television and other media (41).

A study conducted among adults in Chagni, Dangila, Injibara, and Jawi towns 55.6% had sufficient understanding regarding blood donation, 44.4% had inadequate information (30).

A community-based study done in harar town the majority of respondents, 93.7% had heard about blood donation before the study. Among the study participants who heard about blood donation, most of them, 77.7%, replied that mass media was their main source of information (26).

A study conducted Civil Servants in Chiro Town knowledge about blood donation [AOR=3.32; 95%CI=2.02, 5.46] and listening to mass media [AOR=1.83; 95%CI=1.01, 3.35] were variables significantly associated with voluntary blood donation practice (42).

According to a study in South-East Botswana, being informed about the life- saving benefits of blood donation was associated with a positive intention to donate blood (39). Also according to a study among blood donors in Lagos, Nigeria, a large number (92.1%) of the donors donated because of the benefits that could be obtained as a result of blood donation e.g. saving lives of relations (43).

A cross-sectional study was conducted on 421 adult residents of Adama town Understanding about the health benefits of donating blood is very limited as only 6.8% of them know they will have free medical checkups, 8.8% knew they will reduce their risk of cancer and 23.7% knew their risk of experiencing a heart attack is reduced as a result of their blood donation (14).

2.2.4 Attitude towards blood donation

According to a study on attitude to blood donation in Saudi Arabia, 99% of the respondents showed a positive attitude towards blood donations and its importance for patient care ([44](#)).

A study among adults in Debre Markos town, Northwest Ethiopia revealed that a positive attitude was associated with the practice of blood donation. 77.5 % of them showed willingness to donate blood in the future. Of these, 95.4 % of them wanted to donate blood as voluntary donor and, the rest 4.3 % and 0.3 % of them as replacement and paid donors, respectively. The odds of blood donation was 5.19 times (95 % CI: 5.19 (3.04, 8.85)) higher among those with favorable attitude than unfavorable attitude ([29](#)).

A study conducted among adults in Chagni, Dangila, Injibara, and Jawi, 74.7% had positive attitudes toward blood donation, and voluntary donation was thought to be the most effective way to obtain donors ([30](#)).

A study conducted in Alert hospital among health professionals and non-health professionals. Respondents who had adequate attitude were more likely to practice blood donation than those who have no adequate attitude (AOR=1.67; 95% CI: 0.71, 3.92) ([45](#)).

A community-based cross-sectional study done in Harar town. Among the 845 study participants, 798 (94.4%) of them believed that voluntary blood donation is good. The majority of respondents, 741 (87.6%), believed that voluntary non-remunerator donors are the best source of blood ([26](#)).

A cross-sectional study was conducted on 421 adult residents of Adama town. Having a favorable attitude was found to be significantly associated with blood donation practice. Those who have favorable attitudes were more than 10 times more likely to donate blood compared to those having unfavorable attitudes (AOR: 10.25; 95% CI: 4.90, 21.44) ([14](#)).

A community-based study was conducted among 422 adults in Hosanna town. According to this study, those with positive attitudes were 3.54 times more likely to volunteer to donate blood than people with negative attitudes (AOR: 3.54; 95% CI: 1.32, 9.46) ([28](#)).

2.2.5 Communication factors

A study among adults in Debre Markos town, Northwest Ethiopia showed a 13 association between knowledge of blood donation with practice of blood donation the majority 71.2 % of which were heard from television followed by 11.9 %, who were heard from radio The odds of being knowledgeable among radio broadcast listeners (AOR = 0.37 95 % CI = 0.19, 0.75) was significantly lower than internet and/or newspaper users (29).

A study conducted among university students of Nairobi, lack of health education students was associated with not donating blood. Students reported never being approached before as one of the main reasons for not donating blood (46). Similarly, research done in Lithuania revealed that people donated blood if they were requested to do it or informed of somebody's need for blood (47).

A study among adults in Debre Markos town, Northwest Ethiopia revealed that health education of the public was associated with participation in blood donation. Listening to radio broadcasts was found to be a predictor of knowledge on blood donation (29). A study investigating the knowledge and attitudes of blood donors and barriers concerning blood donation in Jordan revealed a positive association between health education of the public and practice of blood donation. Encouraging media was found influential in the practice of blood donation (48).

2.3 Conceptual framework

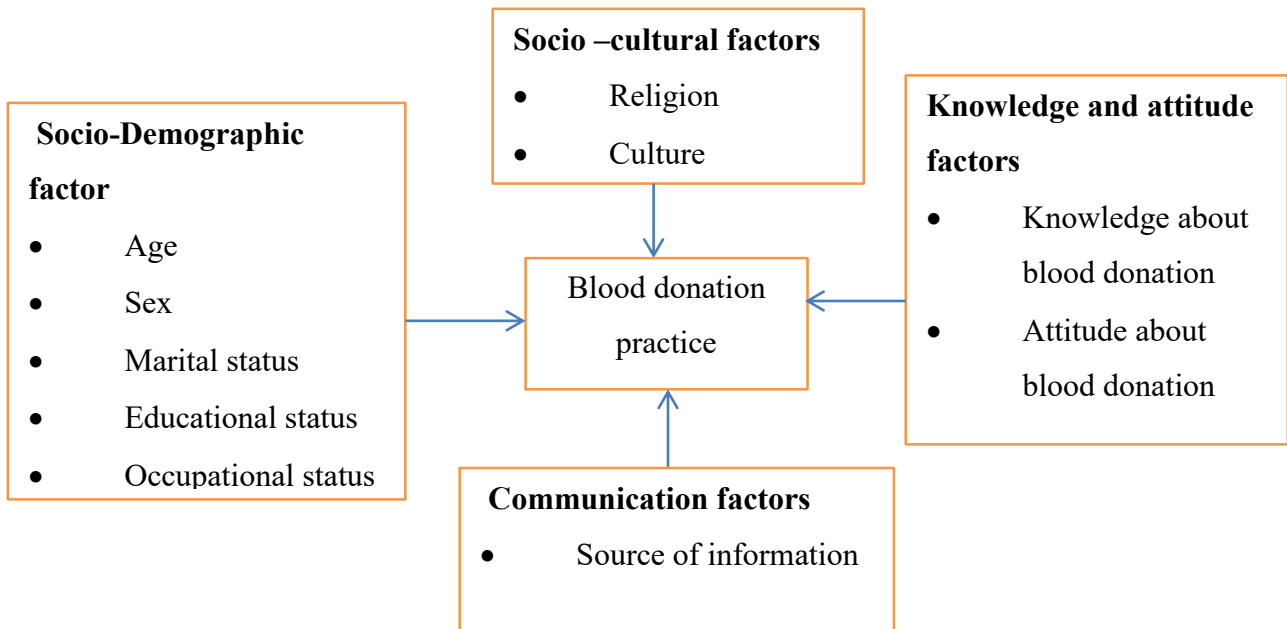


Figure 1: Conceptual frameworks for assessing the Magnitude of voluntary blood donation practice and associated factors among Asella Town Residents, Southeast Ethiopia, 2025 ([19](#), [25](#), [26](#), [28](#)).

3. OBJECTIVES

3.1. General objective

To assess the magnitude of voluntary blood donation practice and associated factors among community members aged 18 to 65 years in Asella town, Arsi zone, Oromia region, from September 01-30 2025.

3.2. Specific objectives

1. To determine the prevalence of voluntary blood donation practice among community members aged 18 to 65 years in Asella town, Arsi zone, Oromia region, from September 01-30 2025.
2. To identify the factors associated with voluntary blood donation practices among community members aged 18 to 65 years in Asella town, Arsi zone, Oromia region, from September 01-30 2025.

4. METHODS

4.1. Study area

The study was conducted at Asella town, which is located in the Arsi zone Oromia regional state about 175km southeast of the capital city Addis Ababa. This town has a latitude and longitude of 7°57'N 39°7'E, with an elevation of 2,430 meters above sea level. According to the 2007 Ethiopian census report and based on annual population growth rate, Asella has an estimated total population of 101,739 and almost half of them 51,159(50.3%) are males. The largest proportion of the inhabitants (67.43%) were followers of Ethiopian Orthodox Christianity, while 22.65% were Muslim, and 8.75% were Protestant. In 2018 Gregorian Calendar, Asella town's population estimate was 111,433 and about 23,215 households under 8 kebeles (60). In the town there is 1 teaching public hospital with 2 health centers and 3 private hospitals with one youth clinic family guidance association of Ethiopia (52).

4.2. Study design and period

A community-based cross-sectional study was conducted from September 01-30 2025.

4.3. Source and study population

4.3.1. Source population

The source population were all adults aged 18 to 65 years residing in Asella town.

4.3.2. Study population

Those adults who lived in the selected kebeles and interviewed during data collection period were the study population.

4.4 Inclusion and exclusion criteria

4.4.1 Inclusion criteria:- community members aged from 18 to 65 years in Asella town.

4.4.2 Exclusion criteria:- Individuals who are critically ill and mental problem.

- Individuals unable to communicate during the data collection period.

4.5. Sample size determination and Sampling technique /Sampling procedures

4.5.1. Sample size determination

1. The sample size was determined using the single population proportion formula, with a margin of error (d) that was tolerated on either side of the true proportion set at 5%.

A 95% confidence level ($\alpha = 0.05$) was used, and 10% was added to compensate for nonresponses.

$$n = (Z\alpha/2)^2 p(1-P)/d^2 = \frac{(1.96)^2 0.2915(1-0.2915)}{0.05^2} = 317$$

Add a 10% non-response rate then the total sample size is 349 the total sample size

A design effect of 2 was multiplied by the sample size calculated at 698.

Where, n=sample size required for the study

p = proportion

$Z\alpha/2$ = the confidence level at α level of significance (=1.96)

d= margin of error

P=prevalence of voluntary donated blood from Adults in Hosanna Town 29.15 (28), Which gives the largest sample size.

2.Sample size for the second objective was determined using population proportion formula by Epidemiology Information (Epi info) statistical calculation considering 80% power and one to one ratio based on a study conducted in Adama town, Oromia regional state, central Ethiopia 2019 (14). (Table 1)

Table 1 : Summary of sample size calculation for factors associated voluntary blood donation practice using Open Epi info 7.2.5.0.

Variables as exposure	Assumptions					Sample size with 10% non-response rate		
	OR	P	Ration	Power	CI	N	10%NR	Nf
Knowledge	2.21	62.9	1:1	80%	95%	274	27.4	301.4
Attitude	10.25	87.1	1:1	80%	95%	190	19	209
Age 18-25	3.4	21.4	1:1	80%	95%	114	11.4	125.4

The sample size of the second objective was found to be less than the first objective. Therefore, the final sample sizes for the first objective was 698.

4.5.2. Sampling procedures

A multistage sampling technique was used in this study. At stage one, 4 kebeles from a total of 8 kebeles was chosen using a simple random sampling technique. At stage two, systematic random sampling technique was used to select households with proportional allocation to the size of the kebeles. Finally, lottery method was employed to select one study participant from households with more than one eligible individual (aged 18–65 years old). The sampling interval (K) value was calculated for each selected kebele dividing the total households of kebele to their corresponding proportional sample size calculated for each kebele $k=12$. (Figure2),

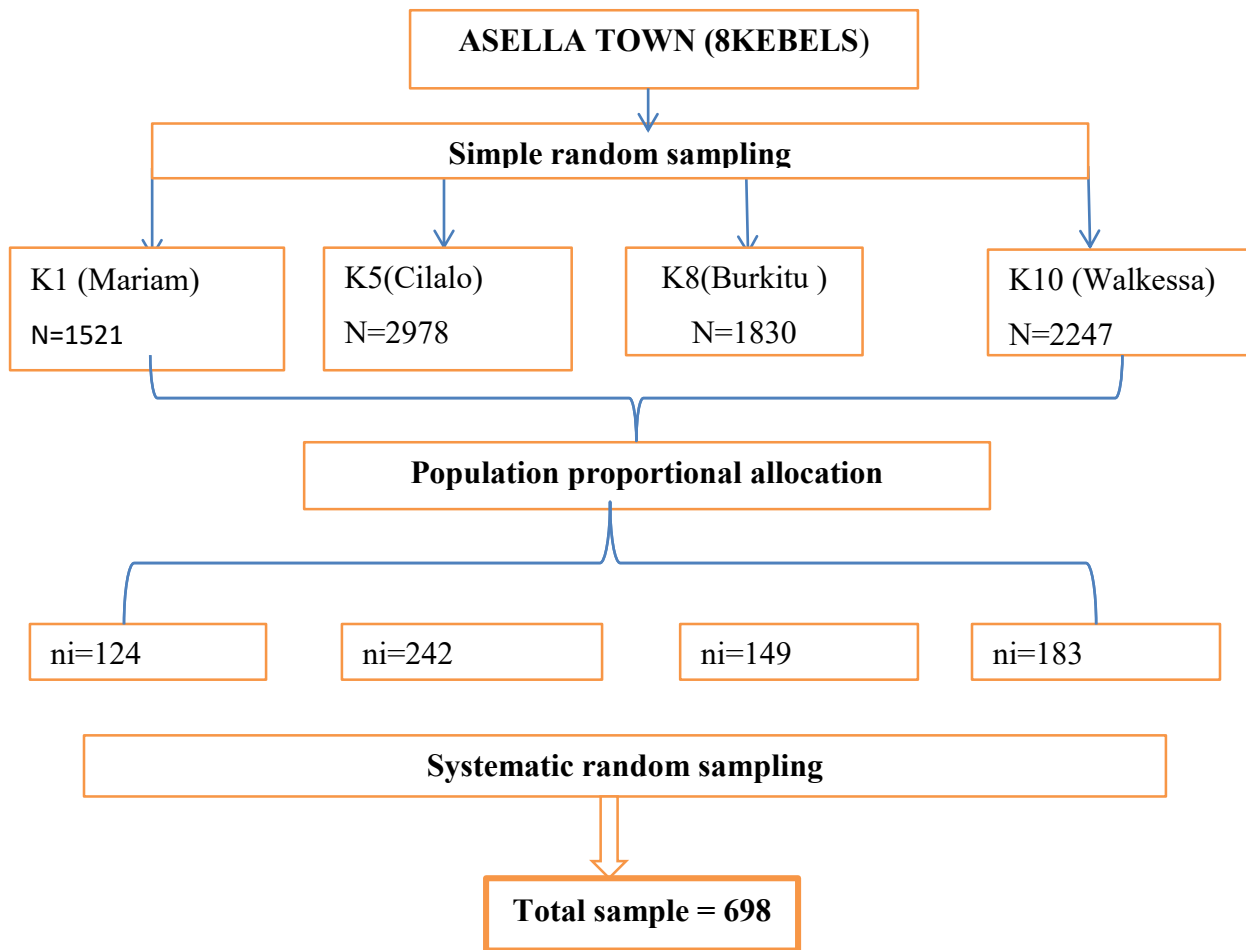


Figure 2: Schematic presentation of the sampling process for estimating the magnitude and associated factors of voluntary blood donation Among Asella Town Residents, Southeast Ethiopia, 2025.

4.6. Study variables

4.6.1. Dependent variables

- Practice of voluntary blood donation (Ever donated).

4.6.2. Independent variables

The independent variable assessed in this study included

- **Socio demographic factors:** Age, sex, marital status, educational status, occupational status.
- **Socio -cultural factors:** culture and religion.

- **Knowledge and attitude factors:** knowledge about blood donation, attitude about blood donation.
- **Communication factors:** Source of information.

4.7. Operational definitions

- **Ever donated:** Study participants who gave at least one voluntary blood donation before the study period. In this study, the practice of blood donation is measured by the history of every blood donation (ever donated in the past) ([49](#)).
- **Knowledge:** Knowledge was assessed by ten questions. Based on the total score computed from individual questions, knowledge about voluntary blood donation was categorized using the mean as the cut-off point. Respondents were categorized as having poor knowledge if they score less than the mean and good knowledge if they score equally with mean and above ([50](#)).
- **Attitude assessment towards blood donation**
In this study, attitude was assessed using seven questions. Similar to knowledge scoring “1” and “zero” were used for favorable and unfavorable attitude, respectively. The total score was calculated up to determine the total attitude score. The score was ranged from 0 to 7. Attitude score of half and more (50%) was considered as favorable attitude ([51](#)).

4.8. Data collection Techniques and procedures

Data was collected through face-to-face interview method with a structured and pretested questionnaire collected with Kobo Toolbox. The questionnaire developed after an extensive review of related literatures. ([19](#), [25](#), [26](#), [28](#)). The questionnaire is first prepared in English, then translated into Afan Oromo and Amharic, and subsequently translated back into English by another person to check for consistency. The questionnaire consists of five parts, including socio-demographic items such as sex, age, marital status, education level, religion, and; a knowledge question; an attitude question; a practice question, and communication factors. Data collectors and supervisors were hired, consisting of 3 diploma nurses and 2 BSc nurses.

4.9. Data quality assurance

The sample questionnaire was pre-tested on 5% of the sample size one of the Kebeles (4) other than the selected Kebeles before the actual data collections. The pre-test was conducted to ensure clarity, appropriate wording, logical sequence, and skip patterns in the questionnaire. Necessary amendments were made. A one-day training was given by the principal investigators to the data

facilitators and supervisors prior to data collection. The training focused on understanding the study objectives, data collection tools, and procedures they should follow during interviews. On top of this, supervisors followed data facilitators and the investigators also checked for the collected data clarity and completeness.

4.10. Data analysis procedures

Before data entry, questionnaires were checked for completeness, consistency, and clarity. Cleaned and coded data was entered and analyzed using SPSS version 25. Percentage and Frequency were calculated. The findings of the study were presented using tables and graphs. Binary logistic regression analysis was used to examine the relationship between variables. All variables with p-value <0.25 in the bivariate analysis were entered into the final multiple logistic regression model to identify variables independently associated with blood donation. Multivariate logistic regression was conducted to select factors independently associated with blood donation. Descriptive statistics were used to summarize the results. Adjusted odds ratios with a 95% confidence interval were calculated to assess the association between the dependent and independent variables. The level of statistical significance and the final decision were determined based on a p-value of less than 0.05 and an adjusted odds ratio at the 95% confidence level.

4.11. Ethical consideration

Ethical clearance was approved by the Ethical Research Review Committee of Arsi University, College of Health Sciences. Then Department of Public Health Before data collection. Prior to administering the questionnaires, the objectives of the study were clearly explained to the participants and informed voluntary consent was obtained. Confidentiality was ensured throughout the execution of the study. Participants were informed that their participation was voluntary that they could withdraw from the study at any time if they wish to do so. All the information was given by the respondents used for research purposes only.

4.12. Dissemination plan

The results of the study will be submitted to the Department of Public Health, Arsi University College of Health Sciences Library, and the Arsi Zone Health Bureau. Efforts will be made to publish the findings in international journal.

5. RESULTS

5.1 Socio-demographic characteristics of study participants

In this study a total of 698, participants were interviewed giving 100% response rate. Nearly a quarter, 257 (36.82%), of participants were found between the age group of 26 - 35 years. The mean age of the participants was 35.6 ± 10.8 years. Of the respondents, 544 (50.71%) of them were male participants. Approximately 327 (46.84%) of the participants had diploma and above followed by secondary education 181 (25.93%). Regarding marital status, 446 (63.89%) of the respondents were married, and 330 (47.28%) of the participants were followers of the orthodox religion. Regarding occupational status nearly a quarter of the respondents had government employees 173(24.78%) followed by house wife 133(19.05%). (Table 2).

Table 2: Socio-Demographic Characteristics Related to The Magnitude and Associated Factors of Voluntary Blood Donation Practice Among Asella Town Residents, Southeast Ethiopia, 2025.

Variables	Categories	Frequency	Percentage
Age categories	18-25	139	19.90%
	26-35	257	36.82%
	36-45	159	22.78%
	45-65	143	20.48%
Sex of respondents	Male	354	50.71%
	Female	344	49.28%
Marital status of respondents	Single	187	26.79%
	Married	446	63.89%
	Separated	15	2.14%
	Widowed	33	4.72%
	Divorced	17	2.43%
Religion of the respondents	Orthodox	330	47.28%
	Muslim	234	33.52%
	Protestant	134	19.19%
Educational status of the respondents	Illiterate	104	14.89%
	Primary	86	12.32%

	Secondary	181	25.93%
	diploma and above	327	46.84%
Occupational status of the respondents	Government employee	173	24.78%
	Farmer	73	10.45%
	Housewife	133	19.05%
	Students	116	16.61%
	daily laborer	84	12.03%
	Merchant	119	17.04%

5.2 Socio-cultural characteristics study participants

A little above half 360 (51.56%) of the respondents reported that there are beliefs regarding blood donation, 470 (67.33%) reported that there are no cultural traits/taboo regarding blood donation. When asked if there are risks/adverse effects regarding blood donation, Most of the respondents, 468 (67.05%) reported that there is no risks/adverse effects regarding blood donation, and 231 (32.95%) there are risks/adverse effects regarding blood donation, out of those 230, 83 (36.15%) reported anemia, pain related to needle 65 (28.26%) and 53 (23.04%) reported dizziness. (Table 3).

Table 3: Socio-Cultural Characteristics Related to The Magnitude and Associated Factors of Voluntary Blood Donation Practice Among Asella Town Residents , Southeast Ethiopia, 2025.

Variables	Response	Frequency	Percentage
Do you think there are beliefs regarding blood donation?	No	338	48.42%
	Yes	360	51.56%
In your opinion are there any cultural traits or taboos regarding blood donation?	Yes	228	32.66%
	No	470	67.33%
In your opinion are there any risks/ adverse effects regarding	No	468	67.05%
	Yes	230	32.95%

blood donation?			
If yes, what are the risks/adverse effects	pain related to needle	65	28.26%
	Anemia	83	36.15%
	Weakness	29	12.61%
	Dizziness	53	23.04%

5.3 Knowledge about blood donation

Among the total study participants, 355 (50.9%) were poor knowledge about blood donation followed by 343(49.1%) were good knowledge, Over half of respondents 396 (56.73%) were knew common blood groups, yet only 46.27% knew their own. Among those who did, blood group O was most common (36.53%), followed by B (25.38%), AB (20.12%), and A (17.95%). Most participants (77.79%) correctly believed that donating blood does not cause infection. Regarding donation frequency, 53.53% reported donating every three months, while 23.23% were unsure. Misconceptions were evident in eligibility criteria: although 33.93% correctly identified diseased individuals as ineligible, cited youth under 18 (29.33%), older adults over 65 (24.23%). About 489 (70.05%) did not know the volume of blood collected, and 68.19% were unaware of the donation duration. Perceived benefits of donation were mixed: 54.58% saw no benefit, while 45.27% cited reasons such as personal satisfaction (50.31%), free health checkups (26.58%), reduced cancer risk (14.56%), and lower heart attack risk (8.5%). In general, 343(49.14%) of respondents were found to have good knowledge of blood donation. (Table 4).

Table 4 :Knowledge Related to The Magnitude and Associated Factors of Voluntary Blood Donation Practice Among Asella Town Residents, Southeast Ethiopia, 2025.

Variables	Response	Frequency	Percentage
Do you know common blood groups	No	302	43.26%
	Yes	396	56.73%
Do you know your blood group	No	375	53.72%
	Yes	323	46.27%
What is your blood group	A	58	17.95%
	B	82	25.38%

	AB	65	20.12%
	O	118	36.53%
Can a person be infected by donating blood	No	543	77.79%
	Yes	155	22.20%
How often individual donate	Monthly	31	7.83%
	three monthly	212	53.53%
	six monthly	38	9.56%
	Annually	23	5.80%
	i don't know	92	23.23%
Who should not donate blood	Women	21	5.35%
	Men	6	1.53%
	young<18yrs	115	29.33%
	old greater than 65	95	24.23%
	Diseased	133	33.93%
	vulnerable groups	22	5.61%
What volume of blood is collected during each donation	<500mls	111	15.90%
	500-1000mls	98	14.04%
	Don't know	489	70.05%
What is the duration of a donation process	20 minutes	156	22.35%
	20 to 60 minutes	66	9.45%
	I don't know	476	68.19%
Does blood donation benefit donor	No	381	54.58%
	Yes	316	45.27%
If yes ,what is the benefit of blood donation	free health checkup	84	26.58%
	Satisfaction	159	50.31%
	reduction of heart attack	27	8.54%
	lower risk of cancer	46	14.55%
Over All Knowledge	poor knowledge	355	50.9%
	good knowledge	343	49.1%

5.4 Attitude about blood donation

Among the study participants, 341 (48.85%) were found to have a good attitude towards blood donation. But only 228 (32.66%) reported that voluntary donor is the best source of blood donation and around, 404 (57.87%) responded that don't know the best source of blood donation. Temporary weakness was commonly assumed to happen to a donor after donation 55 (60.7%). Ninety (12.89%) reported that the relative of the patient should be asked to donate. Overall, the data indicates that negative attitudes (56.45%) outweigh positive ones (43.55%), (Table 5).

Table 5: Attitude Related to The Magnitude and Associated Factors of Voluntary Blood Donation Practice Among Asella Town Residents, Southeast Ethiopia, 2025.

Variables	Response	Frequency	Percentage
What do you think about blood donation	Good	357	51.15%
	Bad	341	48.85%
What do you think is the best source of blood donation	voluntary donor	228	32.66%
	remunerated donor	27	3.86%
	self-donor	39	5.58%
	I don't know	404	57.87%
Can something harmful happen to a blood donor during or after blood donation	No	163	23.35%
	Yes	90	12.89%
	I don't know	445	63.75%
What can happen to a blood donor during or after blood donate	contact infection	13	14.89%
	temporary weakness	55	60.74%
	fall sick	22	24.35%
Do you think that patient's relative should be asked to donate	No	156	22.35%
	Yes	90	12.89%
	I don't know	452	64.75%
Do you encourage relatives to donate	No	402	57.59%
	Yes	296	42.41%
Will you donate if called upon or reminded to do so	No	422	60.46%
	Yes	276	39.54%

Overall Attitude Level	negative attitude	394	56.45%
	positive attitude	304	43.55%

5.5 Communication factors

Out of the 698 study participants, above half of the respondents, 407 (58.31%) had heard about blood donation before the study and 291 (41.69%) not heard about blood donation. (Figure 3)

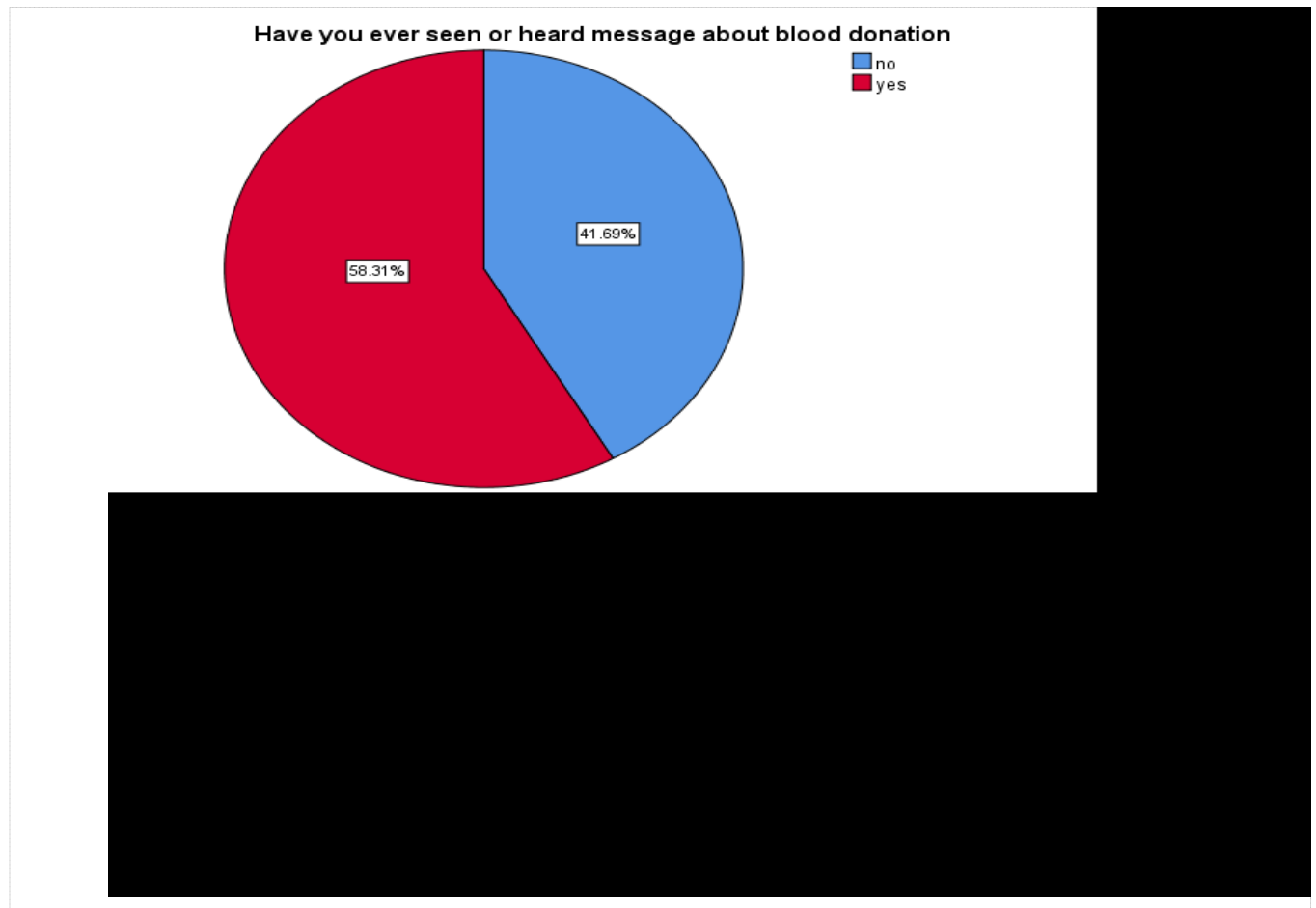


Figure 3: Communication Factors Related To The Magnitude And Associated Factors Of Voluntary Blood Donation Practice Among Adults In Asella Town Residents.

The main source of information was TV/radio, cited by 151 respondents' (37.10%), followed by health workers, as reported by 147 respondents (36.12%), respectively (figure 4)

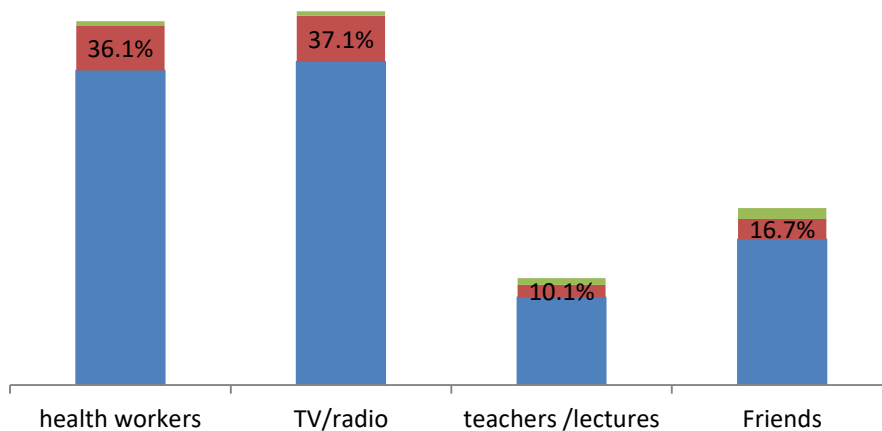


Figure 4: Source of Information Related to The Magnitude and Associated Factors of Voluntary Blood Donation Practice Among Asella Town Residents, Southeast Ethiopia, 2025.

5.6 Voluntary blood donation practice

The study assessed the practice of blood donation practice of the respondents. figure 5 below shows the practice of voluntary blood donation by the respondents. Respondents were asked if they had ever donated blood. Of the 698 respondents, only 108 (15.50% ; 95% CI: 13%–18%), had ever donated blood while the majority 590 (84.52%) had never donated blood. From those who had ever donated blood, many had donated twice and above 70 (64.81%) and once 38 (35.18%). (Figure 5).

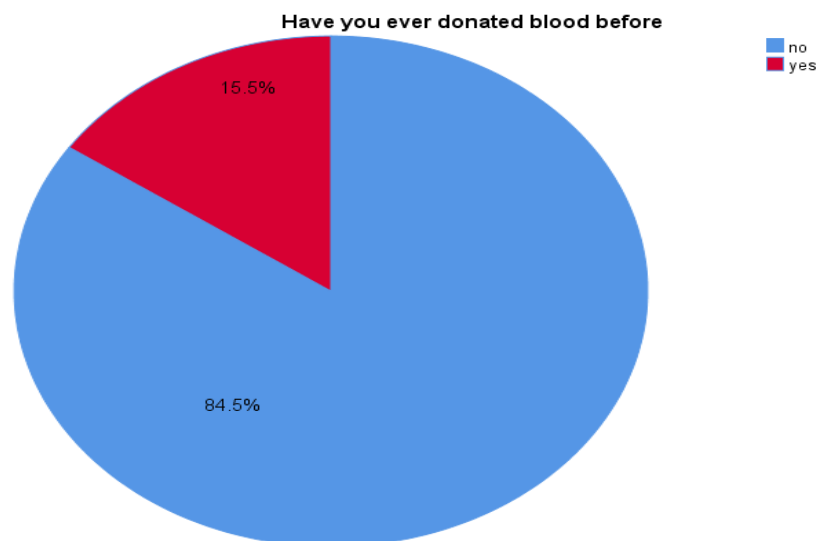


Figure 5 : Magnitude of Voluntary Blood Donation Practice and Associated Factors Among Asella Town Residents , Southeast Ethiopia, 2025.

5.6.1 Reasons for Donating, Not Donating Blood and Have you taken part in blood donation campaigns

Among those who ever donated blood, the reason for donating blood, Over half of the respondents 145 (57.77%) of them were moral satisfaction, altruism followed by 34 (13.54%) were a sick person needed. The main reasons given by the respondents for not donating were lack of information 245 (35.40%), medically unfit 168 (24.27 %), under age 87 (12.57%), never thought of it 59 (8.52%), inaccessibility of the service 49 (7.08%), fear of blood donation 48 (6.9%) and cultural and religious rejection 20 (2.93%). Out of a total of 698 respondents, 48.28% (337 individuals) reported having taken part in blood donation campaigns.51.72% (361 individuals) reported not participating in such campaigns.(Table 7).

Table 6: Reasons for Donating, Not Donating Blood and Have you taken part in blood donation campaigns related to the magnitude and associated factors of voluntary blood donation practice Among Asella Town Residents , Southeast Ethiopia, 2025.

Reason	Frequency	Percentage
Reasons for Donating Blood		
Moral Satisfaction / Altruism	145	57.77%
A Sick Person Needed It	34	13.54%
Motivated by Friend / Family Donor	29	11.55%
Media Appeal	19	7.56%
For free health checkup	24	9.56%
Reasons for Not Donating Blood		
I Have No Information	245	35.40%
Medically Unfit	168	24.27%
Under Age	87	12.57%
Never Thought of It	59	8.52%
Inaccessibility of the Service	49	7.08%
Fear of Blood Donation	48	6.93%
Cultural or Religious Rejection	20	2.89%
Lack of Time	16	2.31%
Have you taken part in blood donation campaigns?		

Variable	Response		
Have taken part in blood donation campaigns	Yes	337	48.28%
	No	361	51.72%

5.7 Factors Associated with Voluntary Blood Donation Practices

Bivariate logistic regression analysis was performed to identify variables associated with voluntary blood donation practice. According to conventional logistic regression procedures, all variables with a p -value < 0.25 in the bivariate analysis (COR) are included in the multivariate model (AOR). Seven variables were identified as candidate for multivariate logistic regression model: Age, Religion, Marital status, Education, Cultural traits, Attitude, and Communication factors. After adjustment for potential confounders, four variables remained significantly associated with blood donation practice. Participants aged 45-65 years were significantly less likely to donate blood compared to those aged 18–25 years (AOR = 0.168; 95% CI: 0.053–0.531; $p = 0.006$), Respondents who were separated 7.54 times more likely to donate blood compared to single participants (AOR = 7.54; 95% CI: 1.45–39.28; $p = 0.016$). The absence of cultural taboos related to blood donation was positively associated, with 2.46 times higher odds (AOR = 2.46; 95% CI: 1.40–4.35; $p = 0.002$). Similarly, respondents with a positive attitude toward blood donation were about 5.72 times more likely to donate compared to those with a negative attitude (AOR = 5.72; 95% CI: 3.11–10.52; $p < 0.001$). Moreover, Participants who had no exposure to blood donation messages had extremely low odds of donating blood, with an (AOR = 0.01; 95% CI: 0.00–0.07, $p < 0.001$). Compare to those who had seen or heard communication messages were far more likely to donate, serving as the reference group (AOR = 1.0). Other variables, including religion and educational status, did not remain statistically significant after adjustment with ($p < 0.05$) (Table8).

Table 8: Bivariate And Multivariate Logistic Regression Analysis of Factors Associated With Voluntary Blood Donation Practice Among Asella Town Residents, Southeast Ethiopia, 2025.

Variables	Blood donation practice		COR (95% CI)	p-value	AOR (95% CI)	p-value
	Yes	No				
Age						
18-25	20	119	1		1	
26-35	50	207	1.44(0.82-2.53)	0.209	1.34(0.71-2.50)	0.426
36-45	34	125	1.619(0.88-2.97)	0.120	1.28(0.66-2.51)	0.871
45-65	4	139	0.17(0.06-0.52)	0.002	0.17(0.05-0.53)	0.006*
Religion						
Orthodox	44	286	1		1	
Muslim	36	198	1.18(0.73-1.90)	0.492	1.27(0.75-2.16)	0.425
Protestant	28	106	1.72(1.02-2.89)	0.043	1.80(1.014-3.19)	0.060
Marital status						
Single	26	161	1	0.119	1	
Married	78	368	1.31(0.81-2.12)	0.268	3.08(0.53-17.87)	0.21
Separated	2	13	0.95(0.20-4.47)	0.95	7.54(1.45-39.28)	0.016*
Widowed	2	48	0.40(0.09-1.77)	0.07	2.12(0.21-21.85)	0.53
Educational status						
Illiterate	8	96	0.85(0.52-1.39)	0.51	2.05(0.76-5.53)	0.78
Primary	14	72	0.39(0.18-0.84)	0.016	1.79(0.71-4.46)	0.44
Secondary	28	53	0.90(0.48-1.71)	0.75	1.75(0.75-4.06)	0.34
Diploma and above	58	269	1		1	
Cultural traits						
Yes	20	208	1		1	
No	88	382	2.39(1.41-4.05)	0.001	2.46(1.40-4.34)	0.002*
Attitude						

poor attitude	15	269	1		1	
Good attitude	93	321	5.20(2.94-9.18)		5.72(3.11-10.52)	
				0.000		<0.001**
Communication factor						
No	2	290	0.01(0.00-0.05)	0.000	0.01(0.00–0.07)	<0.001**
Yes	106	300	1		1	

COR, crude odds ratio; AOR, adjusted odds ratio; CI, confidence interval.

* $P < 0.25$, ** $p < 0.05$.

6. DISCUSSION

The proportion of respondents who had ever donated blood was 15.5% (95% CI: 13%–18%), This is comparable with studies conducted in Gondar 18.4% (95% CI: 15.7%–21.1%), and Adama town 17.1% (95% CI: 13.5%–21%). (28), (17), as well as studies conducted Nepal, 12.4% (95% CI: 12.4%–23.8%) (23).

The prevalence in Asella town (15.5%) is lower compared to several Ethiopian studies: Harar town 22.6% (95% CI: 19.8%–25.4%), Ambo University 23.6% (95% CI: 19.4%–27.8%), Hosanna town 29.15% (95% CI: 24.8%–33.5%), and Addis Ababa health facility professionals 32.6% (95% CI: 32.8%–43.9%) .(26),(27). (28), (15). This might be due to the difference in study area, study population as the study done in Ambo University was among student and Addis Ababa was among health professionals.

The prevalence in Asella town (15.5%) was lower compare to study done in Kenya 41.01% (95% CI: 36.5%–45.5%), Zanzibar 40% (95% CI: 30.4%–49.6%). University of Benin Teaching Hospital, Nigeria 41.4% (95% CI: 33.2%–49.6%) and in South-East Botswana 27.1% (95% CI: 22.7%–31.6%).(26), (39), (21), (22) As well as in Maryland, USA 59% (95% CI: 54.1%–63.9%), Chennai, India (47.2%; 95% CI: 43.0%–51.5%).and Southern Brazil 32% (95% CI: 30.3%–33.7%). (17), (19), (18). These disparities may stem from differences in awareness of the community between study areas, health system engagement, fear-related barriers, study population and socio-cultural difference among study participants.

Age was also a significant factor. In Asella town, participants aged 18–25 years (AOR = 0.17; 95% CI: 0.05–0.53; $p = 0.006$) and those aged 26–35 years (AOR = 1.34; 95% CI: 0.71–2.50) were more likely to donate compared to those aged 45 years and above. This finding is consistent with Debre Markos, where younger adults (18–25 years: AOR = 0.42; 95% CI: 0.19–0.92; 26–35 years: AOR = 0.26; 95% CI: 0.11–0.63) were more likely to donate (31). and Adama town, where individuals aged 18–25 years were over three times more likely to donate compared to those older than 45 years (AOR = 3.40; 95% CI: 1.30–12.43) (17).

Marital status also a significant factor. In Asella town, separated respondents were significantly more likely to donate compared to singles (AOR = 7.54; 95% CI: 1.45–39.28; $p = 0.016$). This aligns with findings from Tigray, Ethiopia, where married health professionals were 1.7 times more likely to donate compared to singles (AOR = 1.729; 95% CI: 1.091–2.739). (38), In

Hyderabad, India, married individuals demonstrated a statistically significant favorable attitude toward blood donation compared to singles ($P = 0.018$) (37).

In this study the absence of cultural taboos was positively associated with donation ($AOR = 2.46$; 95% CI: 1.40–4.35; $p = 0.002$). In contrast, in Saudi Arabia (KSA), altruism deeply rooted in cultural values was the primary motivator. (41), also compare to Indian adults, cultural customs were linked to not donating blood.(26).

Attitude was another strong predictor. In Asella town, respondents with positive attitudes were 5.72 times more likely to donate ($AOR = 5.72$; 95% CI: 3.11–10.52; $p < 0.001$). Similar associations were reported in Debre Markos ($AOR = 5.19$; 95% CI: 3.04–8.85), Awi zone (74.7% positive attitudes), and Hosanna ($AOR = 3.54$; 95% CI: 1.32–9.46) (32), (33), (31). In Adama, favorable attitudes were even stronger predictors ($AOR = 10.25$; 95% CI: 4.90–21.44). (17).

Participants who had no exposure to blood donation messages were almost entirely absent from donation practice, with an ($AOR = 0.01$; 95% CI: 0.00–0.07, $p < 0.001$). Compare to those who had seen or heard communication messages were far more likely to donate, serving as the reference group ($AOR = 1.0$). This finding is consistent with studies in Debre Markos, Nairobi, Lithuania, and Jordan, all of which emphasized the importance of health education and awareness campaigns (31), (47), (48), (49).

7. CONCLUSION

This study revealed that only 15.5% of respondents had ever donated blood, highlighting a significantly low level of voluntary blood donation practice. The findings highlight that blood donation prevalence in Asella town is lower than many Ethiopian, regional, continental, and global contexts. Determinants such as age, marital status, cultural taboos, attitudes, and exposure to information consistently influence donation practices. In the multivariable analysis, voluntary blood donation practice was found to be significantly influenced by Participants aged 18–25 and those aged 26–35 years were significantly more likely to donate blood, Respondents who were separated had a higher likelihood of blood donation practice, the absence of cultural taboos was positively associated with blood donation practice, Attitude consistently emerged as a strong predictor of blood donation practices, and individuals exposed to communication messages were significantly more likely to donate blood.

8. RECOMMENDATIONS

Based on the findings of the study the following recommendations are made:

Strengthen institutional collaboration: Health institutions—both public and private including Arsi University Asella Referral and Teaching Hospital, the Red Cross Society Asella branch, local health bureaus, and the university should coordinate efforts to enhance public knowledge and foster positive attitudes toward blood donation.

Arsi Zone Health Bureau : Lead the coordination of the zone-wide behavior-change communication program, Integrate blood-donation messaging into health extension workers outreach, school health programs, and community health forums. Organize capacity-building training for health workers on communication and motivation strategies.

Asella Red Cross Society : Intensify community mobilization and outreach activities and Develop culturally appropriate educational materials.

Asella town Community Leaders: Address Cultural Barriers: Engage community and religious leaders to challenge taboos and promote blood donation as a socially accepted and life-saving act and publicly endorse blood donation during community gatherings, sermons, and cultural events.

Oromia Health Bureau : Ensure local capacity-building for frontline health workers on community-level blood-donation promotion and Provide technical and financial support to scale up the Asella Zone communication initiative.

Arsi University & Asella Hospital: Conduct continuous community engagement through students, staff, and hospital networks, Use hospital platforms to disseminate targeted messages , focusing on older adults and negative-attitude groups and Collaborate with Red Cross to schedule regular hospital-based donor days.

Ministry of Health (MOH): Integrate blood-donation promotion into national health-communication strategies and Support development of nationwide social-behavior-change communication programs.

9. STRENGTH AND LIMITATIONS OF THE STUDY

9.1. Strength of the study

This study has several strengths. Being a community-based study, it provides a comprehensive and representative understanding of voluntary blood donation practices among adults in Asella Town. The use of a multistage sampling technique further enhanced the representativeness of the sample by systematically selecting participants from different areas of the town, reducing selection bias.

9.2 Limitation of the study

The study also has some limitations. Being cross-sectional in design, it only captures associations at a single point in time and cannot establish causal relationships between the identified factors and blood donation practices. Data were collected through self-report, which may be influenced by recall bias or social desirability bias.

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11. ANNEXES

Annex1. English version information sheet and consent Form

Information sheet

I am assigned as data collector on behalf of kenenisa Hailu, who is a post graduate student at Arsi University, Department of Public Health. The aim of the study is to assess the practice of voluntary blood donation and associated factors using face to face interview.

You are selected randomly & your participation in the study is completely voluntarily based.

You can decide not to participate in the study or you can interrupt the study at any time

During the interview. If you participate in the study, the information you give helps us to

Understand the current situation on practice of voluntary blood donation and associated factors so that it serves as input for policy makers and programmers planning and designing interventions to improve problems. The interview takes about 15 minutes. Your name will not be written in the questionnaire and I assure you that all information you give will be kept strictly confidential.

Please contact the principal investigator for any further explanation through the address

Below KENENISA HAILU– 09 41743432/ Kenenihailu46@gmail.com

CONSENT FORM

This questionnaire is prepared to assess the practice of voluntary blood donation and associated factors among community members of Asella town residents I hope that the result of this study will show the status of blood donation in the community. Based on such a result and comments from the researchers the problems will be solved accordingly. I would like to request you to answer questions carefully and honestly. Confidentiality will be kept.

NB: - There is no need to write your name on the questionnaire.

Annex2. English version of Questionnaire

Section A: socio-demographic characteristics

S.No	Question	Response
101	How old are you	
102	Sex	1. Male 2. Female
103	What is your marital status?	1. Single 2. Married 3. Separated 4. Widowed 5. Divorced
104	What is your religion?	1. orthodox 2. Muslim 3. protestant 4. others(specify)
105	What is your educational status?	1.No formal education 2.Primary education 3.Secondary education 4.Diploma and above
106	What is your occupation status?	1.Government employee 2.Farmer 3.Housewife 4.Student 5.Daily labor 6.Merchant

Section B: socio-cultural factors

201	Does your religion accept blood donation?	1. yes 0. no
202	Do you think there are beliefs regarding blood donation?	1. yes 0. no
203	In your opinion are there any cultural traits or taboos regarding blood donation?	1. yes 0. no
204	In your opinion are there any risks/ adverse effects regarding blood donation?	1. yes 0.no
205	If yes, what are the risks/adverse effects (More than one answer is Possible.)	1.pain related to needle 2. anemia 3. weakens 4. Others (specify).....

Section c: knowledge on blood donation

S.n	Variables	response	Skip
402	Do you know common blood groups?	1. Yes 0. No	
403	Do you know your blood group?	1.Yes 0.No	
404	What is your blood group?	1.A+ 5.A- 2.B+ 6.B- 3.AB + 7.AB- 4.O+ 8.O-	
405	Can a person be infected by donating blood ?	1.Yes 0.No	
406	How often individual donate?	1.Weekly 2.Monthly 3.Three monthly 4.Six monthly 5.Annually 6.Don't know	
407	Who should not donate blood	1.Men 2.Women 3.Young<18yrs 4.Old >60yrs 5.Vulnerable groups 6.Healthy 7.Diseased	
408	What volume of blood is collected during each donation	1.<500mls 2.500-1000mls	

		3.Don't know	
409	What is the duration of a donation Process?	1.20 min 2.20-60min 3.don't know	
410	Does blood donation benefit donor?	1.yes 0.no	
411	If yes, what is the benefit of blood donation? More than one answer is possible	1.free health checkup 2.satisfaction 3.reduction of heath attack 4.low risk of cancer	

Section D : Attitude on blood donation

501	What do you think about blood donation?	1.Good 2. Bad 3.No idea	
502	What do you think is the best source of Blood donation?	1.Voluntary donor 2.replacement donor 3.remunerated donor 4.self-donor 5.don't know	
503	Can something harmful happen to a blood donor during or after Blood donation?	1.Yes 0.No 3.I don't know	
504	What can happen to a blood donor during or	1. Contract infection	

	after donation?	2. Temporary weakness 3. Fall sick	
505	Do you think that patient's relative Should be asked to donate?	1.Yes 0.No 3.I don't know	
506	Do you encourage relatives to donate?	1.Yes 0.No	
507	Will you donate if called upon or reminded to do so?	1.Yes 0. No	

Section E: Practice on blood donation

601	Have you ever donated blood Before?	1.Yes 0. No
602	If your answer to Q. no.601 is "Yes", how many times do you donate?	1. Once 2. Twice and more than
603	If your answer to Q. no.601 is "Yes", what prompted you? (More than one answer is Possible.)	1. A sick person needed 2. Moral satisfaction, altruism 3.Earning profit in cash / kind 4. For free health checkup 5. Motivated by friend /family donor 6.Media appeal 7.others(specify)
604	If your answer to Q. no.601 is "No", what was the reason?	1. I have no information 2. Fear of blood donation

	(More than one answer is Possible.)	3. Medically unfit 4. Under age 5. Lack of time 6. It takes long time 7. Inaccessibility of the service 8. Never thought of it 9. Parental or peer opposition 10. Never had the opportunity 11. My blood will be sold 12. Others specify.....
605	Have you taken part in Blood donation campaigns?	1.Yes 0. No

Section F: Communication factors

606	Have you ever seen or heard messages about blood donation?	1.Yes 0.No
607	If yes, where did you receive that information from?	1.Health workers 2.TV/ Radio 3.Teachers/ Lecturers 4.Friends 5. Others (specify).....

Thank you.

Annex 3: Afaan Oromo version information sheet and consent form

DABALATA I: ODEEFFANNOO SEENSA

Akkam bultan/ooltan ani maqaan Koo obbo /addee_____Jedhama. Sababiin ani iddoo kanatti argamuu danda'eef qorannoo Qananisaa Haayiluu barata Yuunivaarisiti Arsii kan taa,ee Mummee “MPH” dhaan digirii lammaffaa isaa Xumuruuf ragaa qorannoof tahuu funaanaa jiraa. Kanaafuu oddefanno sirrii ta'ee akkaa nuf kennitanii fi akkasumas qorannoo kana kessatti hirmachuu kessaaniif guddaa isiin galatefanna. Kaayyoon qorannichaa af-gaaffii fuula fuulatti fayyadamuun shaakala dhiiga fedhiidhaan arjoomuufi wantoota kanaan walqabatan madaaluudha. Ati akka caraa filatamte hirmaannaan kee qo'annoo keessatti guutummaatti fedhii keetiin kan hundaa'edha. Qo'annoo irratti akka hin hirmaanne murteessuu dandeessa ykn yeroo barbaaddetti Qo'annoo addaan kutuu dandeessa Yeroo af-gaaffii. Yoo qorannicha irratti hirmaattan, odeeffannoon isin kennitan haala yeroo ammaa shaakala dhiigaa fedhiidhaan arjoomuu fi wantoota kanaan walqabatan irratti qooraanu gargaara, kunis akka galtee imaammata baastootaa fi sagantaa qopheessitoota karoora fi dizaayinii gidduu seensaa rakkoolee fooyyessuuf karoorfatanii fi dizaayinii godhaniif akka tajaajiluuf nu gargaara. Af-gaaffiin kun daqiiqaa 15 fudhata. Maqaan keessan gaaffilee keessatti waan hin barreeffamneef odeeffannoon isin kennitan hundi iccitii cimaan akka eegamu isiniif mirkaneessa. Ibsa dabalataa kamiyyuu karaa teessoo armaan gaditti:

Qananiisaa Haayiluu:– 09 41743432/ Kenenihailu46@gmail.com

DABALATA II UNKA HEEYYAMA: Gaaffiin kun kan qophaa'e gocha arjooma dhiigaa tola ooltummaa fi wantoota kanaan walqabatan hawaasaa jiraattota magaalaa Asellaa biratti madaaluuf bu'aan qorannoo kanaa haala arjooma dhiigaa akka agarsiisu abdiin qaba hawaasa keessatti. Bu'aa akkanaa fi yaada qorattootaa irraa bu'uura godhachuun rakkoon haala kunii ni furama. Gaaffilee of eeggannoo fi amanamummaadhaan akka deebistan isin gaafadha. Iccitiin ni eegama.

Hubachisaa : Gaaffilee irratti maqaa keessan barreessuun hin barbaachisuu.

DABALATA 2 III: GAAFFIILEE

KUTAA A: AMALOOTAA HAWAASAA-DIMOGRAAFII

Lakk	Gaaffii	Deebii
101	Umriin kee meeqaa	
102	Saala	
103	Haalli gaa'ela kee maali?	1. Kan hin heeruumne 2. Heerumte 3. Adda baate 4. Dubartii abbaan manaa irraa du'e
104	Amantiin kee maali ?	1. ortodoksii 2. Muslima 3. protestant 4. kaan(ibsi)
105	Haalli barnoota kee maali?	1.Barnoota idilee hin qabu 2.Barnoota sadarkaa tokkoffaa 3.Barnoota sadarkaa lammaffaa 4.Dippiloomaa fi isaa ol
106	Haalli hojii kee maali?	1.Hojjetaa mootummaa 2.Qonnaan bulaa 3.Haadha manaa 4.Barataa 5.Hojii human 6.Daldala

KUTAA B: SABABOOT AADAAN HAWAASAA-WALIN QABBUU

Lakk	Gaafii	Deebii
201	Amantiin kee dhiiga arjooma ni hayama?	1. Eyyeen 0. lakki
202	Dhiiga arjooma ilaalchisee shaakki / yaadni dogoggoraa fi amantaan ni jira jettanii yaaddu ?	1. Eyyen 0. Lakki
203	Akka yaada keessaniitti arjooma dhiigaa ilaalchisee amala aadaa ykn dhorkaa ni jiraa?	1. Eyyeen 0. Lakki
204	Akka yaada keessaniitti arjooma dhiigaa ilaalchisee balaan/ miidhaa guddaa jiraa?	1. Eyyeen 0. lakki
205	Yoo eyyee ta'e balaan/bu'aa badaa maali (Deebiin tokkoo ol ni danda'ama.)	1.dhukkubbii cirrachaana walqabatee 2. hir'ina dhiigaa 3. ni dadhaba 4. Kanneen biroo (ibsi).....

Kutaa C: BEEKUMSA ARJOOMA DHIIGAA

401	Gartuu dhiigaa waliigalaa beektaa	1. Eyyeen 0. Lakki	
402	Gartuu dhiigaa kee beektaa?	1.Eyyeen 0.Lakki	
403	Gartuu dhiigaa keessan maali?	1.A+ 2.B+ 3.AB + 4.O+ 5.A- 6.B- 7.AB- 8.O-	
404	Namni tokko dhiiga fudhachuudhaan dhukkuba qabamuu danda'aa?	1.Eyyen 0.Lakki	
405	Namni tokko yeroo meeqa meeqan dhiigaa arjoomuu danndaa,aa?	1.Torbaan 2.Ji'aan 3.Ji'a sadii 4.Ji'a ja'a 5.Waggaatti 6.Hin beeku	
406	Eenyu dhiiga arjoomuu akka hin qabne	1.Dhiira 2.Dubartoota 3.Dargaggoota<18yrs 4.Dargaggoota >60yrs 5.Gareen saaxilamoo 6.Fayyaa 7.Dhukkuba	
407	Tokkoon tokkoon yeroo dhiiga hangamii sassaabama arjooma	1.<500mls 2.500-1000mls 3.Hin beeku	

408	Yeroon Adeemsi arjooma tokkoo meeqa	1.20 min 2.20-60min 3.hin beeku	
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KUTAA D: ILLAALCHA ARJOOMA DHIIGAA

501	Dhiiga arjooma ilaalchisee maal jettu?	1.Gaarii 2. Hamaa 3.Yaada hin qabu
502	Maddi Arjooma Dhiigaa hundarra gaariin maali jettu?	1.Arjooma tola ooltummaa 2.arjooma bakka bu'aa 3.arjooma mindaa argatu 4.of arjooma 5.hin beeku
503	Yeroo Dhiiga arjooma ykn booda arjooma dhiigaa irratti wanti miidhaa geessisu mudachuu danda'aa?	1.Eyyeen 2.Lakki 3.Hin beeku
504	Namni dhiiga arjoome yeroo arjooma ykn arjooma booda maaltu mudachuu danda'a	1. Infeekshinii kontiraataa 2. Yeroodhaaf dadhabuu 3. Dhukkuba kufaatii
505	Firri dhukkubsataa Arjooma akka godhu gaafatamuu qaba jettanii yaaddu	1.Eyyeen 2.Lakki 3.Hin beeku
506	Firri akka gumaachan ni jajjabeessituu?	1.Eyyeen 0.Lakki
507	Yoo waamamtan ykn yaadachiiftan ni arjoomtuu?	1.Eyyeen 0. Lakki

KUTAA E- SHAAKALA DHIIGAA ARJOOMUU

601	kanaan dura dhiiga arjoomtee beektaa?	1.Eyyeen . 0. Lakki
602	Yoo deebii kee Q. Lakk.601 ta'e . “Eyyee”, yeroo meeqa arjoomta?	1. al tokko . 2. Yeroo lama . 3.Yoo yeroo lamaa ol ta'e(specify)____ .
603	Yoo deebii kee Q. Lakk.601 ta'e . “Eeyyee”, maaltu si kakaase? (Deebiin tokkoo ol Kan danda'amu.)	1. Nama dhukkubsate barbaachise . 2. Itti quufinsa naamusaa, altruism . 3.Bu'aa maallaqaan / gosa argachuu . 4. Checkup Fayyaa Bilisaan . 5. Hiriya /maatiitiin kan kakaafame . Arjooma . 6.Iyyannoo miidiyaa . 7.Kanneen biroo(Specify) .
604	604 Yoo deebii kee Q. Lakk.601 ta'e . . “Lakki”, sababni isaa maal ture? (Deebiin tokkoo ol ni danda'ama.)	1. Odeeffannoo tokkollee hin qabu . 2. Sodaa Dhiigaa Arjoomuu . 3. Fayyaa malee kan hin dandeenye . 4. Umurii gadi . 5. diduu aadaa ykn amantii 6. Yeroo dhabuu . 7. Yeroo dheeraa fudhata . 8. Tajaajilichi dhaqqabamaa ta'uu dhabuu 9. gonkumaa itti hin yaadne 10. Mormii warraa ykn hiriya . 11. Carraa argate hin beeku . 12. Dhiigni koo ni gurgurama . 13. Kaan immoo.....
605	Duula dhiiga arjoomuu irratti hirmaatte beektaa ?	1.Eyyeen 2. lakkii

KUTAA F QABXIILEE ODEEFFANNOO

606	Ergaa waa'ee dhiiga arjoomuu argitee ykn dhageessee beektaa?	1.Eyyeen 0.Lakki
607	606 .Yoo eeyyee ta'e odeeffannoo sana eessaa argatte?	1. Hojjetoota fayyaa 2. TV/ Raadiyoo 3. Barsiisota 4. Hiriyyoota 5. Kanneen biroo (ibsi)

Gaalatoomaa.

8. ማጣቀሻዎች

1. 8 ማጣቀሻ

1. የአማርኛ ትርጉም መረጃ ወረቀት እና ስምምነት ፎርም ወረቀት

የፎርም መረጃ ወረቀት..... እኔ የአርሲ ዩኒቨርሲቲ የድህረ ምረቃ ተማሪ የሆኑትን ቀንኒሳ ሃይሉን ወክለው መረጃ ሰብሳቢ ሆነው ተመድበዋል። የጥናቱ ዓላማ በፈቃደኝነት የሚደረግ የደም መዋጮና ከዚህ ጋር ተያይዘው የሚመጡ ነገሮችን ፊት ለፊት በሚደረግ ቃለ ምልልስ መገምገም ነው። በአጋጣሚ ተመርጠሃል ፤ በጥናቱ ላይ የምትሳተፈውም ሙሉ በሙሉ በፈቃደኝነት ነው ። በጥናቱ ላለመካፈል ወይም ቃለ መጠይቅ በምታደርጉበት ጊዜ በማንኛውም ጊዜ ጥናቱን ለማቋረጥ ልትመርጡ ትችላላችሁ። በጥናቱ ላይ ለመሳተፍ ከመረጥክ የምታቀርበው መረጃ በፈቃደኝነት የሚደረግ የደም መዋጮና ከዚህ ጋር ተያይዘው የሚመጡ ነገሮችን በተመለከተ አሁን ያለውን ሁኔታ ለመረዳት ይረዳናል። እነዚህን ችግሮች ለማሻሻል ጣልቃ ገብነት ለመፍጠር ለሚፈልጉ ፖሊሲ አውጪዎችና የፕሮግራም አቅራቢዎች አስተዋጽኦ ያደርጋል። ቃለ መጠይቁ በግምት 15 ደቂቃ ይፈጃል። ስምህ በጥያቄው ላይ አይመዘገብም፤ የምታቀርበው መረጃ ሁሉ በምሥጢር እንደሚቀመጥ አረጋግጥላለሁ።

ከዚህ በታች ባለው አድራሻ ላይ ተጨማሪ ማብራሪያ ለማግኘት እባክዎን ዋናውን መርማሪ ያነጋግሩ-ቀንኒሳ ሀይሉ- 09 41743432/ Kenenihailu46@gmail.com- 09 41743432 / Kenenihailu46@gmail.com። ይህ ጥያቄ በአሳላ ከተማ ነዋሪዎች መካከል በፈቃደኝነት የሚደረግ የደም መዋጮና ከዚህ ጋር ተያያዥነት ያላቸው ነገሮች ምን እንደሆኑ ለመገምገም ታስቦ የተዘጋጀ ነው ። የዚህ ጥናት ውጤት በማህበረሰቡ ውስጥ ያለውን የደም ልገሳ ሁኔታ እንደሚያንፀባርቅ ተስፋ አደርጋለሁ። በነዚህ ውጤቶችና ከተመራማሪዎቹ በሰጡት አስተያየት መሰረት ጉዳዮች በዚህ መሰረት ይዳሰሳሉ። ለጥያቄዎቹ በአሳቢነትና በእውነት እንድትመልሱልኝ በደግነት እጠይቃለሁ። ምስጢርህ ይጠናቀቃል። ማስታወሻ:- በጥያቄው ላይ ስምዎን መፃፍ አያስፈልግም።

ማጣቀሻ 2 አማርኛ የጥያቄ ቅርጽ ተንብብ

ክፍል U ማህበረሰብ-ነክ ባህሪያ

S.No	ጥያቄ	ምላሽ
101	እድሜዎ	
102	ሴክስ	ወንድ 2. ሴት
103	የጋብቻ ሁኔታሽ ምንድን ነው?	1. ነጠላ 2. ትዳር 3. ተለይተው 4. መበለት 5. ፈታ
104	ሃይማኖታችሁ ምንድን	1. ኦርቶዶክሳዊ 2. ሙስሊም 3. ፕሮቴስታንት 4. ሌሎች (ግለጽ)
105	የትምህርት ደረጃዎ	1. መደበኛ ትምህርት 2. የመጀመሪያ ደረጃ ትምህርት 3. ሁለተኛ ደረጃ ትምህርት 4. ዲፕሎማ እና ከ በላይ
106	የስራ ቦታዎ ምንድን ነው?	1. የመንግስት ሰራተኛ 2. ገበሬ 3. የቤት እመቤት 4. ተማሪ 5. የዕለት ተዕለት ጉልበት 6. ነጋዴ

ክፍል ለ፡- ሶሻሎ-ባህላዊ ምክንያቶች

201	ሃይማኖትህ የደም ልገሳን ይቀበላል?	1. አዎ 0. አይ
202	የደም መዋጮን በተመለከተ እምነት ያላቸው ይመስልሃል?	1. አዎ 0. አይ
203	በእርስዎ አስተያየት, የደም መዋጮን በተመለከተ ባህላዊ ባህሪያት ወይም የተንቆጠቆጠ ነገር አለ?	1. አዎ 0. አይ
204	በእርስዎ አስተያየት የደም ልገሳን በተመለከተ አደጋ/ጉዳት አለ?	1. አዎ 0. አይ
205	አዎ ከሆነ አደጋ/ጉዳት ምንድነው? (ከአንድ በላይ መልስ ማግኘት ይቻላል።)	ከመርፌ ጋር ተያይዞ የሚመጣ ህመም። በደም ውስጥ ዝቅተኛ የብረት መጠን ጥንካሬን ይቀንሳል ሌላ (እባክዎን ይመልከቱ) ...

ክፍል ስለ ደም ልገሳ እውቀት

403	የደም ቡድኖችን ታውቃለህ?	1. አዎ 0. አይ	
404	የደም ዓይነትህን ታውቃለህ?	1. አዎ 0. አይ	
405	የደምህ ዓይነት ምንድን ነው?	1.A+ 5.A- 2.B+ 6.B- 3.AB + 7.AB- 4.O+ 8.O-	
406	አንድ ሰው ደም በመስጠቱ በበሽታው ሊለከፍ ይችላል?	1. አዎ 0. አይ	
407	ደም በመስጠት ምን በሽታዎች ሊተላለፉ ይችላሉ?	1. ኤች አይ ቪ 2. ሄፕታይተስ ቢ 3. ሄፕታይተስ ሲ 4. ሲፊሊስ 5. ማሌሪያ 6. ሲኤምቪ	
408	አንድ ግለሰብ ምን ያህል ጊዜ መዋጮ ያደርጋል?	1. ሳምንታዊ 2. ወርሃዊ 3. በየሶስት ወሩ 59 4. በየስድስት ወሩ 5. ዓመታዊ	

		6. እርግጠኛ ያልሆነ	
409	ደም ከመለገስ መቆጠብ ያለበት	1. ወንድ 2. ሴት 3. ወጣት (< 18 ዓመት) 4. ያረጀ (> 60 ዓመት) 5. ለአደጋ የተጋለጡ ቡድኖች 6. ጤናማ 7. በበሽታ የታመሰ	
410	በእያንዳንዱ መዋጮ ወቅት ምን ያህል ደም ይሰበሰባል?	ከ 500ml ያነሰ. ከ 500 እስከ 1000ml አላውቅም	
411	መዋጮ ለማድረግ የጊዜ ርዝመት ምን ያህል ነው?	1. 20 ደቂቃ 2. 20 ወደ 60 ደቂቃ 3. አላውቅም	

ክፍል E የደም ልገሳን በተመለከተ ያለው አመለካከት

501	የደም መዋጮን በተመለከተ ምን ዓይነት አስተሳሰብ አለህ?	1. መልካም 2. መጥፎ 3. ምንም ሀሳብ የለም
502	ለደም መዋጮ ከሁሉ የተሻለው ምንጭ ምንድን ነው ብለህ ታስባለህ?	1. በፈቃደኝነት ለጋሽ 2. ምትክ ለጋሽ 3. ለጋሽ 4። ራስ-ላገሰ 5. አታውቅም
503	ደም በሚለግስበት ጊዜም ሆነ ከዚያ በኋላ ደም ለጋሽ የሆነ ሰው ጉዳት ሊያስከትልበት ይችላል?	1. አዎ 0. አይ

		3.አላውቅም
504	አንድ ደም ለጋሽ ደም በሚለግስበት ጊዜም ሆነ ከዚያ በኋላ አንድ ጎጂ ነገር ሊደርስበት ይችላል?	1. አዎ 0. አይ 3.አላውቅም
505	አንድ ደም ለጋሽ መዋጮ በሚደረግበት ጊዜም ሆነ ከዚያ በኋላ ምን ሊያጋጥም ይችላል?	1. ኢንፌክሽንን 2 ያግዝ። የአጭር ጊዜ ድክመት 3. ታምሙ
506	የታካሚው ዘመድ መዋጮ እንዲያደርግ መጠየቅ ያለበት ይመስልሃል?	1. አዎ 0. አይ 3.አላውቅም
507	የቤተሰብህ አባላት መዋጮ እንዲያደርጉ ታበረታታለህ?	1. አዎ 0. አይ
508	እንዲህ እንዲያደርግ ከተጠየቅክ ወይም እንድታስታውሰው ከተጠየቅህ መዋጮ ታደርጋለህ?	1. አዎ 0. አይ

ክፍል F የደም ልገሳ ላይ ተግባራት

601	ከዚህ በፊት ደም ለግሰህ ታውቃለህ?	1. አዎ 0. አይ
602	ለጥያቄ ቁጥር 601 መልስህ 'አዎ' ከሆነ ስንት ጊዜ ትለግሳላችሁ?	1. አንዴ 2. ሁለት ጊዜ። 3 ከሁለት ጊዜ በላይ ከሆነ (እባክዎን ይግለጹ)___
603	ለጥያቄ ቁጥር 601 የሰጠኸው ምላሽ "አዎ" ከሆነ ምን አነሳሳህ? (ከአንድ መልስ በላይ መምረጥ ትችላለህ።)	1. ያልተፈለገ ሰው 2. ሥነ ምግባራዊ ፍጻሜ፣ ራስ ወዳድነት 3። በገንዘብ ወይም በሽቀጦች 4 ገቢ ማመቻች. ለምስጋና ጤና ምርመራ 5። በጓደኛ ወይም በቤተሰብ አባል የተበረታታ በሚዲያ

		በኩል ይግባኝ. ሌሎች (እባክዎን ይመልከቱ)
604	ለጥያቄ ቁጥር 601 መልስህ 'የለም' ከሆነ ምክንያቱ ምን ነበር? (ብዙ መልሶች ማግኘት ይቻላል።)	1. መረጃ የለኝም 2. የደም መዋጮን መፍራት 3. የህክምና ብቃት የሌላቸው 4. ዕድሜያቸው ከ5 ዓመት በታች ነው ። ባህላዊ ወይ 5. ሀይማኖታዊ እምቢተኝነት 6. የጊዜ እጥረት 7. ረጅም ጊዜ ይወስዳል። የአገልግሎት 9 አለመግባት። 10ን ፈጽሞ አላሰብነውም ። የወላጆች ወይም የእኩዮች ተቃው 11። 2 አጋጣሚ አግኝተን አናውቅም ። ደሜ 13 ይሸጣል። ሌሎች ደግሞ ይገልፀሉ.....
605	የደም መዋጮ ዘመቻ ተካፍላል?	1. አዎ 0. አይ

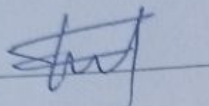
ክፍል G የመገናኛ ምክንያቶች

606	ደም ስለመስጠት የሚነገሩ መልእክቶችን አይተህ ወይም ሰምተህ ታውቃለህ?	1. Yes 0. አይ
607	አዎ ከሆነ ይህን መረጃ ከየት አግኝተሃል?	1. የጤና ሰራተኞች 2. ቴሌቪዥን/ ሬድዮ 3. መምህራን/ መምህራን 4. ጓደኞች 5. ሌሎች (ግለጽ).....

Declaration of Investigator

I, the undersigned student of the Master of Public Health program, declare that this thesis is my original work, submitted in partial fulfillment of the requirements for the degree of Master of Public Health in General Public Health, to the best of my knowledge.

Name of investigator: Kenenisa Haileu

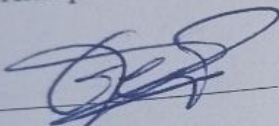
Signature: 

Date 3/4/2018

Declaration of Advisors

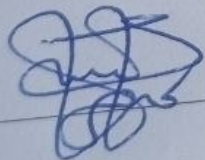
We, the undersigned, hereby declare that we have carefully reviewed this thesis and provided guidance for its preparation. We confirm that this thesis is ready for defense with our approval as the university advisor(s), and to the best of our knowledge, the work presented meets the academic standards and is in partial fulfillment of the requirements for the degree of Master of Public Health in General Public Health.

1. Name of Principal Advisor: Getu Teshome

Signature: 

Date: 12/12/2025

2. Name of Co-Advisor: Mesfin Afa

Signature: 

Date: _____
