

# ATTITUDE AND ITS PREDICTORS TOWARDS SEXUAL AND REPRODUCTIVE HEALTH SERVICE AMONG PODOCONIOSIS PATIENTS IN WOLAITA ZONE, SOUTH ETHIOPIA

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## ABSTRACT

**BACKGROUND:** Sexual and reproductive health (SRH) refers to the comprehensive well-being of individuals in matters concerning sexuality and reproduction. Despite the integration of SRH into primary healthcare frameworks, billions globally still lack access to fundamental reproductive health services. Perception and attitudes significantly shape individuals' willingness to utilize these services. This study aimed to assess attitudes and influencing factors related to SRH service utilization among individuals living with podoconiosis in Wolaita Zone, South Ethiopia.

**METHODS:** This study employed a community-based cross-sectional design involving 836 podoconiosis patients of reproductive age, selected using a multistage random sampling approach. Attitude data were collected via a five-term Likert scale questionnaire, yielding a Cronbach's alpha of 0.884 for internal reliability. Bivariable and multivariable logistic regression analyses were used to identify associations, with significance declared at  $p < 0.05$  with a 95% confidence interval (CI).

**RESULTS:** Among the participants, 59.7% (95% CI: 56.4%–63.0%) demonstrated a positive attitude toward SRH services. Factors significantly associated with favorable attitudes included being female (AOR = 1.64; 95% CI: 1.08–2.49), urban residency (AOR = 8.85; 95% CI: 5.54–14.1), lack of stigma (AOR = 1.60; 95% CI: 1.10–2.34), family awareness of the disease etiology (AOR = 2.16; 95% CI: 1.08–4.32), routine health service use (AOR = 3.32; 95% CI: 2.04–5.44), prior use of SRH services (AOR = 10.0; 95% CI: 5.93–16.98), ability to move from place to place (AOR = 2.75; 95% CI: 1.37–5.56), and living with the disease for 1–5 years (AOR = 0.41; 95% CI: 0.20–0.82).

**CONCLUSION:** The majority of participants exhibited a supportive attitude toward SRH services. Key drivers of positive attitude included sociodemographic factors, health-seeking behavior, stigma reduction, and access to health knowledge. Targeted interventions should prioritize rural outreach, gender-sensitive strategies, and early engagement of newly diagnosed patients to improve SRH outcomes among podoconiosis-affected populations.

**KEYWORDS:** Attitude; reproductive age; sexual and reproductive health; health services; South Ethiopia (The

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## INTRODUCTION

The concept of SRH encompasses a comprehensive view of individuals' health across the life span, incorporating access to family planning, maternal care, sexually transmitted infection (STI) prevention, and reproductive counseling<sup>1</sup>.

SRH extends beyond specific reproductive issues, encompassing the complete well-being of individuals in all matters related to sexuality and the reproductive system<sup>2</sup>.

Ensuring equitable access to SRH services is integral to realizing the Sustainable Development Goals (SDG Target 3.7), where reproductive rights are acknowledged as core to human dignity and global development<sup>3</sup>.

A holistic approach to SRH ensures that individuals' needs are met throughout their reproductive lives<sup>4</sup>. Even though SRH services are part of global health priorities and often included in national health systems, around 4.3 billion people remain without access to fundamental services such as antenatal care, contraception, and safe abortions, particularly in low-resource settings<sup>5</sup>.

Achieving universal access to SRH services is critical to meeting the Sustainable Development Goals (SDGs) by 2030, as SRH is recognized as a fundamental human right<sup>6,7</sup>. However, despite international commitments and agreements, significant gaps remain, and many men and women continue to face unmet SRH needs<sup>7-9</sup>. Among those most affected are people living with podoconiosis, who encounter multiple barriers in accessing SRH services<sup>10</sup>.

Podoconiosis is a non-infectious form of lower limb lymphoedema triggered by prolonged barefoot contact with mineral-rich volcanic soil<sup>11</sup>. Although preventable, it results in chronic swelling, pain, and deformity, often accompanied by social stigma and psychological distress<sup>12,13</sup>. Misconceptions about its origins, such as beliefs in heredity or contagion, compound the isolation of affected individuals, who may avoid seeking health services, including those related to SRH<sup>14</sup>. Physical disability and misconceptions about podoconiosis—such as beliefs

about contagion or heredity—often contribute to delays or avoidance in seeking healthcare, including SRH services. This avoidance increases vulnerability to poor reproductive health outcomes<sup>15</sup>.

Podoconiosis remains a significant public health issue, affecting over four million individuals across 32 endemic countries, primarily in Sub-Saharan Africa, but also in parts of Asia and Latin America<sup>16</sup>. Ethiopia bears the greatest burden, with more than 1.5 million confirmed cases and approximately 35 million people at risk, particularly in highland regions where barefoot exposure to irritant soil is common<sup>17</sup>. In these areas, where poverty is widespread, subsistence farming is the norm, and protective footwear is often unaffordable, prevalence rates can reach as high as 10%<sup>18,19</sup>.

Comprehensive SRH services include education, counseling, family planning, antenatal and postnatal care, safe delivery and abortion services, and testing and treatment of STIs including HIV<sup>20</sup>. However, the use of these services is closely tied to individuals' attitudes, how they perceive their need for care, their trust in the healthcare system, and the cultural beliefs they hold<sup>21</sup>. Attitudes, shaped by both personal experience and community norms, strongly influence whether individuals choose to engage with available health sources<sup>22,23</sup>.

A favorable outlook tends to correlate with greater utilization of SRH services, while negative perceptions can lead to avoidance or delay in seeking care, increasing the risk of negative outcomes<sup>24</sup>. For podoconiosis patients, these challenges are compounded by physical disability and stigma, creating significant hurdles to SRH service access.

Despite the critical role of individual attitudes in SRH service utilization, little is known about attitudes and their determinants among podoconiosis patients in Ethiopia. Understanding these factors is essential to inform interventions that promote equitable access to SRH services and improve reproductive health outcomes in this vulnerable population. Therefore, this study aimed to assess attitudes and their predictors regarding SRH service utilization among podoconiosis patients in Wolaita Zone, South Ethiopia.

## Methods and Materials

### Study setting

The study was conducted in Wolaita Zone, one of six administrative zones in South Ethiopia, located about 324 km from Addis Ababa. The zone comprises 22 districts and 7 town administrations, with Wolaita Sodo as its administrative center. It is highly endemic for podoconiosis. Geographically, Wolaita is bordered by Gamo and Gofa zones (south), the Omo River and Dawuro (west), Kembata (northwest), Hadiya (north), Oromia (northeast), Lake Abaya (southeast), and the Bilate River separating it from Sidama (east). Covering approximately 451,171 hectares, it has a population of 2.86 million (1.4 million males and 1.45 million females) across 414,192 households in 369 kebeles (290 rural, 79 urban). The health infrastructure includes 362 health posts, 69 health centers, and 11 hospitals (8 government primary, 2 NGO primary, 1 NGO general, and 1 comprehensive specialized hospital). Currently, 14,888 podoconiosis cases are registered in the zone<sup>25</sup>.

### Study design

A community-based cross-sectional study was employed from November 12 to December 20, 2024.

### Source population and eligibility

The source population consisted of reproductive-age podoconiosis patients, women aged 15–49 and men aged 15–64, who had resided in the selected districts for at least six months. Those who were severely ill, unable to communicate, or suffering from mental illness that hindered participation were excluded.

### Sample size and sampling procedure

A sample size of 845 was determined using a single population proportion formula, assuming a 50% prevalence of SRH service utilization (due to lack of prior data), a 5% margin of error, 95% confidence level, and a design effect of 2, with an added 10% non-response rate. Five districts with the highest podoconiosis prevalence—Damot Gale, Sodo

Zuria, Humbo, Hobicha, and Offa—were randomly selected. Eligible participants were then chosen via simple random sampling from registration lists at health posts, with household-level interviews conducted accordingly.

### Data collection procedure

Data were collected using an interviewer-administered, semi-structured questionnaire through the Kobo Collect application on smartphones. Trained public health professionals conducted face-to-face interviews under close supervision. Data collectors were guided to participants' homes by community health workers. In households with multiple eligible individuals, one was selected via lottery.

### Data quality management

A pre-test was conducted on 5% of the sample in a non-study district to refine the tool. Data collectors and supervisors received training on ethical procedures, question interpretation, and use of Kobo Collect. Supervisors and the principal investigator reviewed data daily for accuracy, completeness, and response time. Regular debriefing addressed field-level issues promptly.

### Data analysis procedures

The collected data were exported to STATA version 14 for cleaning, recoding, and analysis. Descriptive statistics such as median, standard deviation, and percentages summarized the demographic and clinical characteristics. Bivariable logistic regression identified candidate variables at  $p$ -value  $< 0.25$ , which were then included in the multivariable model to control for confounding. Adjusted odds ratios (AORs) with 95% confidence intervals were calculated. A  $p$ -value  $< 0.05$  was considered statistically significant. Model fitness was checked using the Hosmer-Lemeshow test.

### Measurement and operational definitions

Attitude towards SRH: Measured by a seven-item Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). A score

above the mean indicated a favorable attitude; below indicated unfavorable (26). Internal consistency was strong with Cronbach's alpha at 0.884.

#### Sexual and reproductive health service utilization:

The use of one or more comprehensive SRH services such as family planning, antenatal care, delivery service, postnatal care, post-abortion service, HIV testing and counseling service, STI and HIV treatment service, etc.<sup>27</sup>.

**Accessibility:** Refers to non-discrimination in access, physical accessibility of health facilities, economic accessibility (affordability), and information accessibility<sup>28</sup>.

**Wealth index:** Principal Component Analysis (PCA) was employed to generate a composite variable representing household wealth status. Household asset ownership was assessed using tools

adapted from the Ethiopian Demographic and Health Survey (EDHS), with adjustments made to reflect both rural and urban contexts. To account for contextual differences in asset ownership, wealth scores were calculated separately for rural and urban households. These scores were then combined, and households were classified into three wealth categories: poor, middle, and rich.

## Result

### Socio-demographic and economic characteristics of Podoconiosis patients

Out of 845 podoconiosis patients identified for the study, 836 participated, resulting in a response rate of 98.93%. Among the included patients 306(36.6%) were male and 530(63.4%) were female. Regarding the age of participants, 401(48%) were under the age category of 35-44 and 185(22.1%) were between the age 25-34. Majority of the study participants 454(54.3%) had no formal education and 639(76.4%) were married (Table 1).

**Table1: Socio-demographic Characteristics of podoconiosis patients in Woliata Zone, South Ethiopia, 2024 (n=836).**

Socio-demographic characteristics	Description	Frequency (%)
Sex of the participant	Male	306(36.6)
	Female	530(63.4)
Age of the participants	18-29	117(14)
	30-34	115(13.7)
	35-39	226(27.03)
	40-44	196(23.44)
	≥45	182(21.77)
Educational status of respondent	No formal education	454(54.3)
	Primary education	297(35.5)
	Secondary and above	85(10.2)
Occupational status of the respondent	Farmer	755(90.3)
	Merchant	51(6.1)
	Government & private worker	30(3.59)
Marital status of the respondent	Married	639(76.4)
	Single	58(6.9)
	Divorce	22(2.6)
	Widowed	117(14)
Educational status of the partner	No formal education	392(46.9)
	Primary	181(21.7)
	Secondary and above	66(7.9)
Occupational status of the partner	Farmer	597(93.43)
	Merchant	21(3.29)
	Government and private worker	21(3.29)
Wealth index	Poor	335(40)
	Middle	336(40.2)
	Rich	165(19.7)
Residence	Rural	503(60.2)
	Urban	333(39.8)

### Disease related characteristics among podoconiosis patients

From the total 836 respondents included in this study, 194(23.2%) lived for 1-5 years with the disease, 266(31.82%) lived with the disease 6-10 years. Majority of the respondents 488(57.5%) had more than one acute attack in the last 12 months and 169(20.2%) of the participants had at least one family member with the disease. Majority of the participants families 482(57.7%) had awareness about the cause the disease (Refer Table 2).

Table 2: Disease related characteristics podoconiosis patients in Wolaita Zone, South Ethiopia, 2024

Characteristics	Description	Frequency	Percent (%)
Years lived with the disease	1-5 years	194	23.2
	6-10 years	266	31.82
	11-15	160	19.14
	16-20	117	14
	≥20	99	11.84
Acute attack more than 1 in a year	Yes	481	57.5
	No	355	42.5
Family members with the disease	Yes	169	20.2
	No	667	79.8
Fear of stigma	Yes	306	36.6
	No	530	63.4
Support from the family	Yes	408	48.8
	No	428	51.2
Support from the Government	Yes	252	30.1
	No	584	69.9
Presence of any other supporting organization	Yes	206	24.6
	No	630	75.4
Involvement in community affairs	Yes	709	84.8
	No	127	15.2
Wash feet regularly with soap and water	Yes	739	88.4
	No	97	11.6
Use of foot shoes	Yes	756	90.4
	No	80	9.6
Able to move from place to place	Yes	690	82.5
	No	146	17.5
Able to go to health facility whenever sick	Yes	758	90.7
	No	78	9.3
Awareness of the family that the disease is not transmitted	Yes	482	57.7
	No	354	42.3
Awareness of the community that the disease is not transmitted	Yes	467	55.9
	No	369	44.1
Presence of other disease	Yes	236	28.2
	No	600	71.8
Use health services when needed	Yes	655	78.4
	No	181	21.6
SRH service use experience	Yes	288	34.4
	No	548	65.6

### Sexual and reproductive health services utilization status

Out 836 podoconiosis patients participated in this study, 154(18.4%) patients utilized SRH services in the last 12 months. The SRH services utilized by the patients were family planning and counseling services 82(53.3%), HIV and STI testing and counseling services 42(27.3%), ANC services 14(9.2%) and delivery service 15(7.8%) (Figure 1)

#### Attitude towards SRH services

This study revealed that, 59.7 % (95 % CI: 56.4%-63%) had favorable attitude towards SRH services whereas 337(40.31%) of the respondents had unfavorable attitude towards SRH services. ( Figure 1).

a favorable attitude compared to male respondents and respondents residing in urban are 8.85(5.54-14.1) times more likely to have favorable attitude compared to respondents in rural areas.

The current study also showed that individuals who had lived with the disease for 1–5 years were 41% less likely (95% CI: 0.20–0.82) to have a favorable attitude toward SRH services compared to those who had lived with the disease for more than 5 years.

The finding of this study revealed that respondents who don't fear stigma related to the disease are 1.61(1.12-2.34) times more likely to have favorable attitude towards SRH services than those who fear stigma.

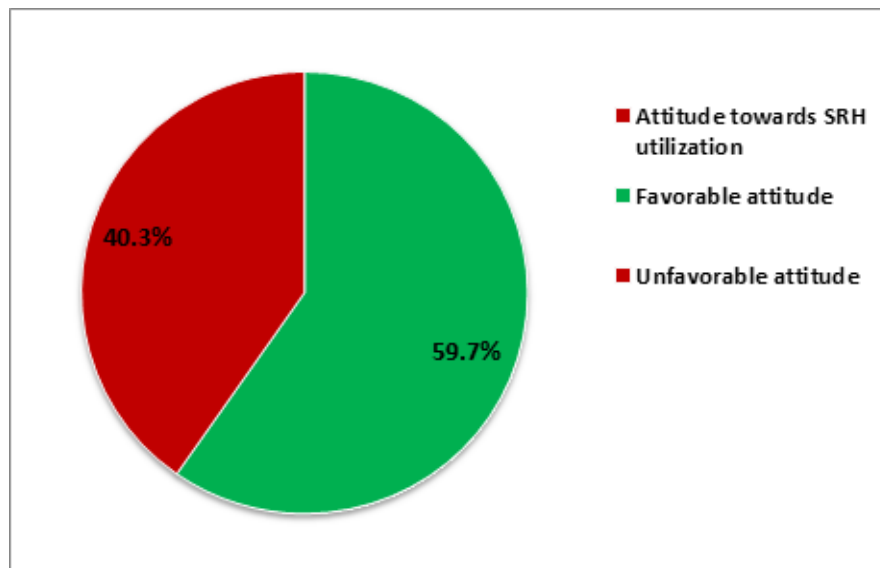


Figure1: Attitude towards SRH services among podoconiosis patients

### Predictors of attitude towards SRH services among podoconiosis patients

The multivariable logistic regression analysis showed that variables: sex of the respondent, residence, years lived with the disease, fear of stigma, family awareness about the disease cause, use of health services when needed, SRH services use experience and community awareness about the cause of the disease were statistically significantly associated with attitude towards SRH services.

This study showed that female respondents are 1.64(95% CI: 1.08-2.49) times to more likely to have

This study also showed that respondents whose families are aware of the disease cause are 2.16(1.08-4.32) times more likely to have favorable attitude towards SRH services than respondents whose families are not aware of the disease cause. Moreover, respondents whose use health services regularly are 3.32(2.04-5.44) times more likely to have favorable attitude towards SRH services compared to those who don't use health services regularly. Furthermore, respondents who have ever used SRH services are 10(5.93-16.98) times more likely to have favorable attitude towards SRH services than those



who haven't used SRH services and individuals who can move from place to place are 2.75(1.37-5.56) time more likely to have favorable attitude towards SRH services than those who are unable to move easily from place to place ( Table 3)

**Table 3: Factors associated with Attitude towards SRH services among podoconiosis patients in Wolaita Zone, South Ethiopia, 2024(n=836)**

Characteristics		Attitude Favorable	Not favorable	COR (95%CI)	AOR (95%CI)	Corresponding p-value
Age of respondents	18-29	85	32	2.76(1.68-4.57)	1.33(0.64-2.74)	0.446
	30-34	82	33	2.59(1.58-4.27)	1.05(0.53-2.11)	0.88
	35-39	145	81	1.87(1.26-2.78)	1.09(0.62-1.93)	0.75
	40-44	98	98	1.04(0.69-1.56)	1.19(0.69-2.05)	0.52
	> 45	89	93	Ref.	Ref.	
Sex of the respondent	Female	347	183	1.92(1.44-2.56)	1.64(1.08-2.49)	0.02***
	Male	125	154	Ref.	Ref.	
Educational status of the respondent	No formal education	242	212	Ref.	Ref.	
	Primary education	201	96	1.8(1.35-2.49)	1.55(0.99-2.4)	0.056
	Secondary and above	56	29	1.69(1.04-2.71)	1.04(0.53-2.11)	0.913
Residence	Urban	276	57	6.08(4.35-8.49)	8.85(5.54-14.1)	<0.001***
	Rural	223	280	Ref.	Ref.	
Years lived with the disease in years	1-5	127	67	0.99(0.59-1.65)	0.41(0.21-0.82)	0.011***
	6-10	166	100	0.87(0.54-1.41)	0.6(0.32-1.13)	0.116
	11-15	89	71	0.66(0.39-1.1)	0.67(0.32-1.16)	0.129
	16-20	52	65	0.42(0.24-0.72)	0.53(0.27-1.04)	0.063
	> 20	65	34	Ref.	Ref.	
Own monthly income	Yes	22	8	1.89(0.83-4.3)	1.09 (0.37-3.25)	0.871
	No	477	329	Ref.	Ref.	
Fear of Stigma	Yes	148	158	Ref.	Ref.	
	No	351	179	2.09(1.57-2.79)	1.61(1.12-2.34)	0.012***
Able to move from place to place	Yes	425	265	1.56(1.1-2.2)	0.83(0.52-1.31)	0.416
	No	74	72	Ref.	Ref.	
Family awareness of the disease cause	Yes	320	162	1.93(1.46-2.56)	2.16(1.08-4.32)	0.03***
	No	179	175	Ref.	Ref.	
Presence health facility near to home	Yes	420	230	2.47(1.77-3.45)	1.32(0.86-2.03)	0.201
	No	79	107	Ref.	Ref.	
Use health services when needed	Yes	417	238	2.11(1.52-2.95)	3.32(2.04-5.44)	<0.001***
	No	82	99	Ref.	Ref.	
SRH services use experience	Yes	258	30	10.96(7.24-16.57)	10(5.93-16.98)	<0.001***
	No	241	307	Ref.	Ref.	
Community awareness about the disease.	Yes	304	163	1.67(1.26-2.2)	2.75(1.37-5.56)	0.005***
	No	195	174	Ref.	Ref.	
Involvement in community affairs	Yes	173	78	1.76(1.29-2.4)	0.73(0.46-1.13)	0.157
	No	326	259	Ref.	Ref.	
Presence of other disease	Yes	167	69	1.95(1.41-2.7)	1.13(0.73-1.75)	0.595
	No	332	268	Ref.	Ref.	
Self-stigma	Yes	16	19	Ref.	Ref.	
	No	483	318	0.55(0.28-1.09)	0.61(2.57-1.47)	0.273

## Discussion

This study showed that sex of the respondents, residence, years lived with the disease, fear of stigma, family awareness about the disease cause, use of health services when needed, SRH services use experience, and community awareness about the cause of the disease were factors associated with attitude towards SRH services.

This study revealed that, from the total respondents included in the study, 499 (59.7%) had a favorable attitude towards SRH services. This finding is in line with studies conducted in Ethiopia, Guji Zone<sup>29</sup>, which reported 60%. This finding is higher than studies conducted in Ethiopia, Kombolcha town<sup>30</sup>, which showed 52.4%, and North West Ethiopia<sup>31</sup>, which reported 53.4%, Guji Zone<sup>29</sup>, 46.1%, and Jimma Zone<sup>32</sup>, 49.3% of respondents had a good attitude towards SRH services. This difference might be due to differences in population, since the majority of participants in our study were married, and in the cited study, the majority of the respondents were single—that is, married people have more exposure to the services than single individuals.

Moreover, this finding is lower than other studies conducted in Ethiopia, which reported 69.3%<sup>33</sup>. This variation might be due to differences in study population and study area.

This study showed that female respondents are 1.64 (AOR = 1.64; 95% CI: 1.08–2.49) times more likely to have a favorable attitude compared to male respondents. This finding is similar to a study conducted in Iran<sup>34</sup>, which revealed that sociodemographic characteristics significantly affected the attitude towards SRH services among adults. This may be due to women's higher utilization of reproductive health services and their involvement in maternal health programs, which often serve as entry points for SRH education. Conversely, men may be less exposed to SRH information and more influenced by cultural norms that discourage their active participation in SRH matters.

The respondents residing in urban areas are 8.85 (5.54–14.1) times more likely to have a favorable attitude compared to respondents in rural areas. This finding is similar to the study conducted elsewhere in Bangladesh, which showed that urban residence significantly predicted the attitude towards SRH health services<sup>35</sup>. The possible explanation is that education and information on SRH services are generally easier to obtain in urban areas. The media, educational initiatives, and health promotion activities that spread knowledge about SRH are more likely to reach urban dwellers. Rural communities, on the other hand, frequently lack access to this kind of information, which results in decreased knowledge and comprehension of SRH services<sup>36</sup>. Furthermore, there are typically more healthcare institutions, especially those providing SRH services, in urban areas. Urban dwellers can more easily access and make use of these services because of their greater availability. In contrast, rural areas might have a shortage of medical facilities, which would make it more difficult to get SRH treatments<sup>37</sup>.

The current study also showed that individuals who lived with the disease for 1–5 years are 41% (95% CI: 0.2–0.82) less likely to have a favorable attitude towards SRH services than those who lived with the disease for more years. The possible justification is that podoconiosis is a highly stigmatized condition, particularly in the early years after diagnosis. Internalized stigma, discrimination, and social isolation are common experiences for affected people, and they can have a negative impact on their self-esteem and motivation to seek out SRH and other health services. The effects of stigma are more severe in the early years; people may eventually learn coping skills to deal with it in later years<sup>38</sup>.

The findings of this study revealed that respondents who don't fear stigma related to the disease are 1.6 (1.1–2.34) times more likely to have a favorable attitude towards SRH services than those who fear stigma. This finding is in line with a study conducted among Sub-Saharan countries, which showed that cultural hurdles include the stigma and restrictive



standards around SRH, unfair or damaging gender norms, and prejudice and condemnation from families, partners, communities, and providers<sup>39</sup>.

This study also showed that respondents whose families are aware of the disease cause are 2.16 (1.08–4.32) times more likely to have a favorable attitude towards SRH services than respondents whose families are not aware of the disease cause. The possible justification is that podoconiosis stigma and misconceptions are lessened when people are aware of the disease. The stigma associated with podoconiosis has a negative impact on reproductive health, including decreased chances of marriage and discrimination in medical care, according to a systematic review<sup>10</sup>. Moreover, families with better knowledge are more aggressive in pursuing medical care. According to a study assessing a podoconiosis intervention in Ethiopia, health education enhanced attitudes and behaviors related to health. Given that families are more likely to use SRH services because they are aware of its advantages, this proactive approach probably applies to SRH services as well<sup>40</sup>.

This study also showed that respondents whose communities are aware of the cause of podoconiosis are 2.75 (1.37–5.56) times more likely to have a favorable attitude towards SRH services than respondents whose communities are not aware of the disease cause. The possible reason is that when communities are aware of podoconiosis, they are more likely to use SRH programs and other preventative health practices. Raising awareness can result in more people taking part in health education programs, which encourage the usage of different health services<sup>40</sup>.

Moreover, respondents who use health services regularly are 3.32 (2.04–5.44) times more likely to have a favorable attitude towards SRH services compared to those who don't use health services regularly. The possible justification is that frequent healthcare consumers are more comfortable talking about SRH and other health issues. This normalization fosters a more positive attitude toward using SRH services and lessens stigma<sup>41</sup>.

Furthermore, respondents who have ever used SRH

services are 10 (5.93–16.98) times more likely to have a favorable attitude towards SRH services than those who haven't used SRH services. The possible explanation is that interactions with healthcare professionals who provide instruction on many facets of SRH are usually required when using SRH services. People's knowledge and awareness are increased by this education, which results in better-informed and favorable views regarding SRH services<sup>39</sup>. In addition, a firsthand encounter with SRH services might help debunk widespread misconceptions and lessen the stigma that society attaches to obtaining such care. As people get more accustomed to these services, they feel more at ease and have fewer negative opinions, which leads to a more positive attitude<sup>42</sup>.

Furthermore, this study showed that individuals who can move from place to place are 2.75 (1.37–5.56) times more likely to have a favorable attitude towards SRH services than those who are unable to move easily from place to place. The possible explanation is that mobility makes social relationships easier, enabling people to access support systems and take part in community events. Positive attitudes toward SRH services can be strengthened by these exchanges, which can offer knowledge and encouraging feedback.

### **Strengths and Limitations of the Study**

It is among the first to assess attitudes and their predictors toward SRH services among podoconiosis patients—a marginalized and neglected population in Ethiopia. The community-based design allowed inclusion of both rural and semi-urban residents, enhancing the representativeness and generalizability of the findings. Despite the strengths of the study, there are also some limitations that need to be considered while interpreting these findings. First: self-report bias—relying on self-reported data for attitude towards service may result in recall bias or social desirability bias. Second: because this is a cross-sectional study, data is collected at a single point in time, which limits the capacity to prove causality between variables.

## Conclusion

The favorable attitude towards SRH services among podoconiosis patients in this study was 59.7%. Targeted strategies should address gender disparities by engaging men in SRH programs, reduce urban-rural gaps through community-based outreach in rural areas, and provide early counseling for newly diagnosed patients to counter stigma and misconceptions. Enhancing community and family awareness about podoconiosis can foster supportive environments that encourage SRH service uptake. Moreover, integrating SRH services into podoconiosis care programs and strengthening the accessibility and quality of these services could promote positive attitudes and sustained utilization among this vulnerable population.

## Abbreviations (acronyms and abbreviations)

CI – Confidence Interval;  
FP – Family Planning;  
HIV – Human Immune Virus;  
ICC – Intra-Class Correlation;  
MOR – Median Odds Ratio;  
NGO – Non-Governmental Organization;  
NTDs – Neglected Tropical Diseases;  
PCV – Proportional Change in Variance;  
PNC – Postnatal Care;  
SRH – Sexual and Reproductive Health;  
STIs – Sexually Transmitted Infections;  
SDGs – Sustainable Development Goals;  
VIF – Variance of Inflation Factors;  
UHC – Universal Health Coverage;  
WHO – World Health Organization

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## Availability of Data & Materials

The original contributions presented in the study are included in the article/supplementary material. Any enquiries can be directed to the corresponding author.

## Ethical Clearance

Ethical clearance and approval letter to conduct the study was obtained from the Wolaita Sodo University Institutional Review Board with the Ref. No: WSU-IRRC/011/2024. A letter of cooperation was taken from the Wolaita Sodo University College of Health Sciences and Medicine to selected districts. Informed consent was obtained from each study participant after explaining the study objectives and procedures, and their right to refuse to participate in the study at any time was assured. Confidentiality of the information was ensured by coding.

## Consent for Publication

Not applicable.

## Competing Interests

The authors have declared that no competing interests exist

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