

Midwifery Students' Attitudes Toward Sexual Health: A Cross-Sectional Study at a Turkish University

Sibel Karakoç^{1*} 

¹Niğde Ömer Halisdemir University, Zübeyde Hanım School of Health, Department of Midwifery, Niğde, Türkiye

ABSTRACT:

Purpose: Purpose: This study aimed to evaluate midwifery students' attitudes toward sexual health and explore their association with sociodemographic characteristics.

Material and Methods: This cross-sectional study was conducted among midwifery students enrolled in the Department of Midwifery, Faculty of Health Sciences at a state university in Türkiye during the fall semester of the 2025-2026 academic year. Data were collected online via Google Forms using the Personal Information Form and the Sexual Health Attitudes Scale for Youth (SHAS-Y). The data were analyzed using SPSS version 26.0 with descriptive statistics, the Mann-Whitney U test, and the Kruskal-Wallis test. **Results:** A total of 249 students participated in the study. The mean total SHAS-Y score was 145.43 ± 16.36 (possible range: 33-165). Among the subscales, the highest scores were observed in Decision-Making and Responsibility, Communication and Rights, and Sexual Rights, whereas the lowest scores were found in the Awareness and Self-Confidence subscales. The most frequently reported primary source of sexual information was the internet/TV/radio/newspapers, followed by school and healthcare institutions.

Conclusion: Midwifery students demonstrated high levels of positive attitudes toward sexual health; however, the Awareness and Self-Confidence dimensions require further improvement. Strengthening these areas through structured and comprehensive sexual health education within midwifery curricula may enhance students' personal sexual health competencies and support their future professional practice.

Keywords: Midwifery students; Sexual health; Attitude; Sexual education

*Corresponding author: Sibel Karakoç, email: sibel_krkrc@hotmail.com

INTRODUCTION

Sexual health is a state of physical, emotional, mental, and social well-being in relation to sexuality; it is not merely the absence of disease or dysfunction and requires a positive and respectful approach to sexuality and sexual relationships, with sexual rights respected, protected, and fulfilled for all individuals (WHO, 2025a). It is a multidimensional concept that encompasses access to comprehensive sexuality education and information, prevention of gender-based violence, access to support and care services, prevention and control of human immunodeficiency virus (HIV) and other sexually transmitted infections, as well as sexual function and psychosexual

counseling (WHO, 2025a; WHO, 2025b). From this perspective, sexual health contributes not only to individuals' overall well-being but also to the social and economic development of communities and countries (WHO, 2025b). Adolescence and young adulthood represent critical developmental periods during which individuals explore their sexual identities and shape their sexual knowledge, attitudes, and behaviors (Ventura-Miranda et al., 2023). Attitudes developed during this period directly influence sexual behaviors and health-related decisions in later life. Insufficient knowledge regarding sexual health may lead to adverse outcomes among university students, such

as engagement in risky sexual behaviors (e.g., inconsistent condom use, early sexual initiation) and delays in seeking healthcare services; these associations have been confirmed in several university-based studies (Saraçoğlu et al., 2014; Mahoto et al., 2025). Such risk behaviours significantly increase the likelihood of acquiring HIV/AIDS, STIs, human papillomavirus (HPV) infection, and cervical cancer, underscoring the need for effective sexual health education (WHO, 2025b). Healthcare professionals play a vital role in improving the sexual health status of society. Midwives, in particular, occupy a key position in providing sexual health education, counseling, and guidance within their responsibility to protect and promote the health of women, families, and communities. The ability of midwives to respond effectively to individuals' reproductive and sexual health needs throughout the life course requires adequate knowledge and positive attitudes in this field (ICM, 2024). Information acquired from unreliable sources during the student period may negatively influence midwives' attitudes toward sexual health in their professional practice. It has been reported that curriculum-based sexual health education is effective in meeting students' needs and enhancing their sexual well-being (Mueller et al., 2008; Saraçoğlu et al., 2014; Li et al., 2017). Indeed, students who receive school-based sexual health education have been shown to initiate sexual intercourse at a later age and to demonstrate higher rates of condom use compared with those who receive education outside the school setting (Wellings et al., 2013). In Türkiye, although some universities provide sexual health education within specific courses for students in health-related fields, this subject is still not offered as a separate and compulsory course in many institutions (Karakurt and Tuncer, 2022; Yalnız Dilcen et al., 2024). Sexual health education for midwifery students is generally delivered as part of existing course content. While studies examining attitudes toward sexual health among university students and health sciences students are available in the literature, research specifically focusing on midwifery students remains limited (Karakurt and Tuncer, 2022; Yalnız Dilcen et al., 2024). Moreover, there is a need for further

studies investigating the relationship between sexual health attitudes, sociodemographic characteristics, and sources of sexual health information. Accordingly, this study was conducted to determine midwifery students' attitudes toward sexual health at both the scale and item levels and to examine whether these attitudes differ according to sociodemographic characteristics. The findings are expected to contribute to the improvement of midwifery education programs and the strengthening of sexual health education.

MATERIAL and METHODS

Study Design

This study was designed as a cross-sectional study to determine the attitudes of midwifery students toward sexual health.

Sampling and Participants

The study population consisted of 272 students enrolled in the Midwifery Department of Zübeyde Hanım Faculty of Health Sciences at Niğde Ömer Halisdemir University during the 2025-2026 academic year. The study sample included 249 students who agreed to participate and provided complete data, representing 91.5% of the total population.

Data Collection

Data were collected during the fall semester of the 2025–2026 academic year using an online questionnaire. The questionnaire was prepared using Google Forms and distributed to students via WhatsApp groups. The survey link remained active throughout the data collection period. Completing the questionnaire required approximately 10-15 minutes.

Data Collection Tools

Data were collected using a Personal Information Form and the Sexual Health Attitudes Scale for Youth.

Personal Information Form: This form was developed by the researchers based on the literature and included 11 items assessing students' sociodemographic characteristics and sexual health-

related variables. The form was reviewed for content validity by three experts in the field of midwifery and public health, and necessary revisions were made based on their feedback.

Sexual Health Attitudes Scale for Youth (SHAS-Y):

The SHAS-Y was developed by Köprülü and Güloğlu to assess young people's attitudes toward sexual health. It is a five-point Likert-type scale consisting of 33 items and seven subscales. Four items (items 13, 20, 27, and 30) are reverse-scored. Higher scores indicate more positive attitudes toward sexual health. The total score ranges from 33 to 165. In the original study, Köprülü (2022) reported a Cronbach's alpha reliability coefficient of 0.94. The subscale reliability coefficients were 0.91 for Decision Making and Responsibility, 0.86 for Communication and Rights, 0.81 for Safe Sex, 0.88 for Sexual Rights, 0.77 for Gender Roles, 0.72 for Awareness, and 0.86 for Self-Confidence. In the present study, the Cronbach's alpha coefficient for the total scale was 0.96. The subscale coefficients were 0.95 for Decision Making and Responsibility, 0.89 for Communication and Rights, 0.92 for Safe Sex, 0.85 for Sexual Rights, 0.76 for Gender Roles, 0.43 for Awareness, and 0.66 for Self-Confidence.

Statistical Analysis

Data were analyzed using SPSS version 26.0. Normality was assessed using the Shapiro-Wilk test. Descriptive statistics were presented as frequency, percentage, mean $\pm$ standard deviation, and median (min-max). Comparisons between sociodemographic variables and SHAS-Y total and subscale scores were performed using the Mann-Whitney U test and Kruskal-Wallis test. Internal consistency was assessed using Cronbach's alpha coefficient. A p -value of <0.05 was considered statistically significant.

Ethical Approval

Ethical approval was obtained from the Ethics Committee of Niğde Ömer Halisdemir University (Decision No. 15, dated September 4, 2025). Institutional permission was obtained from the relevant faculty. Written informed consent was obtained from all participants. The study was

conducted in accordance with the Declaration of Helsinki. Permission to use the SHAS-Y scale was obtained from the original authors via e-mail.

RESULTS

The mean age of the participating midwifery students ($n = 249$) was 20.77 ± 2.40 years (range: 17-39), and the mean number of siblings was 2.63 ± 1.68 (range: 0-10). A weak positive correlation was found between age and SHAS-Y total scores ($r = 0.093$, $p = 0.140$), while a weak negative correlation was observed for number of siblings ($r = -0.13$, $p = 0.830$). Of the participants, 33.3% were in their first year, 26.1% in their second year, 22.5% in their third year, and 18.1% in their fourth year. Most were single (97.6%), lived in nuclear families (89.2%), and resided in dormitories (84.7%). Nearly half reported an authoritarian family structure (47.0%), and 67.1% stated that sexuality-related topics were considered taboo within their families.

The most common sources of sexual information were the internet/television/radio/newspapers (41.8%), followed by school (36.5%) and healthcare institutions (10.4%). The majority reported no sexual experience (90.4%) and no current romantic relationship (61.0%). No statistically significant differences were found in SHAS-Y total scores according to marital status, family type, year of study, place of residence, family structure, family attitude toward sexuality, sexual activity, or romantic relationship status (all $p > 0.05$) (Table 1).

When Table 2 is examined, the mean total score of the Sexual Health Attitudes Scale for Youth (SHAS-Y) was found to be 145.43 ± 16.36 , with a median score of 149 (min: 56, max: 165). This finding indicates that students' overall attitudes toward sexual health were high and positive. Regarding the subscales, the highest mean score was observed in the Decision-Making and Responsibility subscale (49.54 ± 5.91), followed by Communication and Rights (22.02 ± 2.87), Sexual Rights (17.92 ± 2.19), and Safe Sexuality (17.60 ± 2.59). These results suggest that students had stronger attitudes particularly in decision-making, taking responsibility, awareness of rights, and safe sexual practices. In contrast, the lowest mean scores were identified in the Awareness (8.16 ± 1.27) and Self-Confidence (13.49 ± 1.53) subscales.

Table 1. Sociodemographic and sexuality-related characteristics of midwifery students (n = 249)

Variables	n	%	$\bar{X} \pm SD$	Test statistic	p-value
Age (r/p)			20.77 ± 2.40	0.093	0.14
Number of siblings (r/p)			2.63 ± 1.68	-0.13	0.83
Marital status					
Married	6	2.4	139.33 ± 15.05	U = 528.500	0.250
Single	243	97.6	145.58 ± 16.39		
Family Type					
Nuclear family	222	89.2	145.19 ± 16.58	U = 2742.000	0.470
Others	27	10.8	147.44 ± 14.51		
Grade Level					
First year	83	33.3	143.78 ± 16.43	KW = 4.802	0.187
Second year	65	26.1	145.03 ± 16.67		
Third year	56	22.5	145.79 ± 14.19		
Fourth year	45	18.1	148.62 ± 18.26		
Place of residence					
Dormitory	211	84.7	145.03 ± 13.24	U = 3724.000	0.485
Family/relatives/friends	38	15.3	145.48 ± 16.88		
Family structure					
Authoritarian	117	47.0	144.53 ± 17.50	KW = 1.321	0.724
Democratic	72	28.9	145.57 ± 13.60		
Overprotective	34	13.7	147.18 ± 18.66		
Other/uncertain	26	10.4	146.65 ± 15.41		
Family attitude toward sexuality					
Closed	167	67.1	145.03 ± 17.14	U = 6664.000	0.732
Open	82	32.9	146.20 ± 14.69		
Sexual activity					
Yes	24	9.6	148.58 ± 16.17	U =2248.00	0.178
No	225	90.4	145.08 ± 16.37		
Romantic Relationship Status					
Yes	97	39.0	147.55 ± 15.28	U =6408.00	0.082
No	152	61.0	144.05 ± 16.91		
First source of sexual information (multiple response)					
Spouse	2	0.8	124.50 ± 9.19		
Mother	96	38.6	146.33 ± 14.97		
Father	2	0.8	156.00 ± 8.48		
Brother	24	9.6	145.38 ± 12.95		
Internet/TV/Radio/Newspaper	104	41.8	148.17 ± 15.77		
School	91	36.5	146.18 ± 17.48		
Healthcare facility	26	10.4	150.92 ± 16.41		
TOTAL	249	100.00			

*Note: r = Spearman correlation coefficient; U = Mann–Whitney U test statistic; KW = Kruskal–Wallis H test statistic; $\bar{X}$ = mean; SD = standard deviation. $p < 0.05$ indicates statistical significance.

Table 2. Total and Subscale Scores of the Sexual Health Attitudes Scale for Youth (SHAS-Y)

Scale/Subscale	$\bar{X} \pm SD$	Median (Min- Max)
SHAS-Y Total Score	145.43 $\pm$ 16.36	149 (56-165)
Decision-Making and Responsibility	49.54 $\pm$ 5.91	52 (14-55)
Communication and Rights	22.02 $\pm$ 2.87	23 (9-25)
Safe Sex	17.60 $\pm$ 2.59	18 (4-20)
Sexual Rights	17.92 $\pm$ 2.19	18 (7-20)
Gender Roles	16.71 $\pm$ 3.06	17 (4-20)
Awareness	8.16 $\pm$ 1.27	8 (4-10)
Self-Confidence	13.49 $\pm$ 1.53	14 (6-15)

Note: $\bar{X}$ = mean; SD = standard deviation; Min= Minimum; Max=Maximum

Table 3. Distribution of students' participation rates regarding the items of the sexual health attitudes scale

Articles	I absolutely disagree	I disagree	I'm undecided	I agree	I absolutely agree
1. Sub-Dimension- Decision Making and Responsibility					
3. In a healthy relationship, the decision to become pregnant should be made by both partners.	1.6	0	1.6	32.5	64.3
7. Partners have the right to refuse sexual intercourse when they don't want to.	0.8	0.4	3.6	39.4	55.8
10. In a healthy sexual relationship, both partners are equally responsible for preventing STIs.	0.8	0.8	10.4	39.4	48.6
12. Sexually active individuals who do not want to become pregnant should use a method of contraception.	0.8	0.4	2.8	33.7	62.2
15. Partners have equal rights in relationships.	0.8	1.2	6.0	36.9	55.0
16. Partners must consent to have sexual intercourse.	0.8	0.4	1.6	39.0	58.2
18. Partners need to respect each other's sexual boundaries (what they want/don't want).	0.4	0	2.4	33.3	63.9
19. In relationships, partners should respect each other's privacy.	0.4	0.8	3.2	39.4	56.2
21. Partners should be able to freely express their feelings in their relationships.	0.4	0	3.2	41.0	55.4
23. Sexual health education is necessary to protect against STIs.	0.4	0.4	3.6	39.8	55.8
24. Partners need to be able to discuss their sexual desires and expectations with each other.	0	1.2	3.2	42.6	53.0
2. Sub-Dimension- Communication and Rights					
2. Partners should be able to express their satisfaction in their sexual relationships.	1.2	0.8	13.3	49.8	34.9
8. Both men and women should share responsibility for any negative consequences that may arise from relationships.	0	0.8	3.2	33.7	62.2
25. Healthy sexual intercourse should make a person feel good physically, psychologically, emotionally, and socially.	0.8	0.4	4.4	43.0	51.4
31. Young people have the right to receive care regarding their sexual health.	0.4	1.2	4.8	43.0	50.6
32. Partners should be able to talk comfortably about sex.	0.4	1.6	4.4	42.2	51.4
3. Sub-Dimension- Safe Sex					
6. Safe and healthy sexual intercourse fosters mutual trust.	1.2	0.4	4.8	39.0	54.6
17. Safe and healthy sexual intercourse fosters love between partners.	1.2	1.2	4.0	41.8	51.8
26. Safe and healthy sexual intercourse strengthens relationships and makes people happier.	0.8	0.8	7.2	44.6	46.6
29. Safe and healthy sexual intercourse strengthens communication and the relationship between partners.	0.4	1.2	7.2	42.6	48.6
4. Sub-Dimension- Sexual Rights					
4. Individuals should choose their own sexual partners/spouses.	0.8	0.4	2.8	35.3	60.6
5. Young people have the right to comprehensive and gender-neutral sexual health services.	0.4	0.4	6.4	44.2	48.6
9. Healthy sexual intercourse should be based on mutual respect, make both individuals happy, and be satisfying.	0.8	0.8	5.2	41.4	51.8
14. Every person has the right to access and receive accurate information about sexuality.	0.8	0.4	2.0	39.0	57.8
5. Sub-Dimension- Gender Roles					
13. In relationships, it is sufficient for one party to want sexual intercourse.	1.6	3.6	3.6	29.3	61.8
20. Men should primarily take responsibility for any negative consequences that may arise from relationships.	4.8	11.2	27.3	41.0	15.7
27. In relationships, a partner's refusal to have sexual intercourse is a justifiable reason for resorting to violence.	3.2	6.0	3.6	8.0	79.1
30. It is not appropriate for partners to discuss their sexual desires and expectations with each other.	4.0	6.4	4.4	36.5	48.6
6. Sub-Dimension- Awareness					
22. I am confident in all my decisions.	0.4	6.8	33.3	39.0	20.5
28. I know that all my thoughts are important to me.	0.8	0.4	6.0	39.8	53.0
7. Sub-Dimension- Self-confidence					
1. I take responsibility for my actions.	1.6	0.8	4.4	53.8	39.4
11. I respect myself and my body.	0.4	0	4.0	32.1	63.5
33. Mutual trust is important in my relationship(s).	0.4	0.8	2.8	28.5	67.5

According to the findings in Table 3, students' attitudes toward sexual health were generally positive across all sub-dimensions. In the Decision-Making and Responsibility sub-dimension, a high proportion of students agreed or strongly agreed (32-64%) with statements emphasizing equality, mutual consent, privacy, communication, and shared responsibility in sexual health outcomes. In the Communication and Rights sub-dimension, students similarly supported open communication in relationships and shared responsibility for negative outcomes (34-63%).

In the Safe Sex sub-dimension, participants predominantly agreed that safe sexual relationships enhance trust, love, communication, and overall relationship quality (39-55%).

In the Sexual Rights sub-dimension, students strongly supported individual autonomy in partner selection, access to accurate sexual health information, and the right to comprehensive sexual health services (35-61%). In the Gender Roles sub-dimension, responses indicated a more heterogeneous pattern (29-79%). It should be noted that items 13, 20, 27, and 30 in this sub-dimension were reverse-scored; therefore, agreement with these items reflects more negative or traditional attitudes toward sexual health. When interpreted accordingly, the findings suggest that while most students demonstrated egalitarian attitudes, a smaller proportion may still endorse traditional gender norms or beliefs related to violence justification and responsibility distribution. In the Awareness sub-dimension, 20-53% of students reported confidence in their thoughts and decision-making abilities, while in the Self-Confidence sub-dimension, 28-67% of students indicated positive self-regard, responsibility for actions, and valuing mutual trust in relationships.

According to the findings in Table 3, students' attitudes toward sexual health were generally positive across all sub-dimensions. In the Decision-Making and Responsibility sub-dimension, a high proportion of students agreed or strongly agreed (32-64%) with statements emphasizing equality, mutual consent, privacy, communication, and shared responsibility in sexual health outcomes. In the Communication and Rights sub-dimension,

students similarly supported open communication in relationships and shared responsibility for negative outcomes (34-63%). In the Safe Sex sub-dimension, participants predominantly agreed that safe sexual relationships enhance trust, love, communication, and overall relationship quality (39-55%). In the Sexual Rights sub-dimension, students strongly supported individual autonomy in partner selection, access to accurate sexual health information, and the right to comprehensive sexual health services (35-61%). In the Gender Roles sub-dimension, responses indicated a more heterogeneous pattern (29-79%). It should be noted that items 13, 20, 27, and 30 in this sub-dimension were reverse-scored; therefore, agreement with these items reflects more negative or traditional attitudes toward sexual health. When interpreted accordingly, the findings suggest that while most students demonstrated egalitarian attitudes, a smaller proportion may still endorse traditional gender norms or beliefs related to violence justification and responsibility distribution. In the Awareness sub-dimension, 20-53% of students reported confidence in their thoughts and decision-making abilities, while in the Self-Confidence sub-dimension, 28-67% of students indicated positive self-regard, responsibility for actions, and valuing mutual trust in relationships.

DISCUSSION

This study evaluated the attitudes of midwifery students studying in the Midwifery Department of the Faculty of Health Sciences at a university in the Central Anatolia region of Türkiye towards sexual health and examined the differences according to sociodemographic characteristics. The findings indicate that midwifery students generally have positive attitudes toward sexual health. In particular, high scores in the Decision-Making and Responsibility, Communication and Rights, and Sexual Rights subscales indicate strong sexual health awareness among participants. These findings are consistent with previous studies conducted among students in other health-related disciplines (Karakurt and Tuncer, 2022; Russell et al., 2023; Yalnız Dilcen et al., 2024). The item-level findings presented in Table 3 further support these results, demonstrating consistently high agreement across most

statements. In the Decision-Making and Responsibility sub-dimension, a large proportion of students (32-64%) agreed or strongly agreed with statements emphasizing mutual consent, equality in relationships, shared responsibility for sexual health outcomes, and respect for sexual boundaries. Similarly, in the Communication and Rights sub-dimension, students largely supported open communication in relationships and shared emotional and behavioral responsibility (33-63%). In the Safe Sex sub-dimension, participants predominantly agreed that safe sexual relationships enhance trust, love, communication, and overall relationship quality (39-55%). In the Sexual Rights sub-dimension, students strongly endorsed individual autonomy in partner selection, access to accurate sexual health information, and the right to comprehensive sexual health services (35-61%). These item-level findings reinforce the overall positive attitude pattern observed in scale scores. It should also be noted that items 13, 20, 27, and 30 in the Gender Roles subscale were reverse-coded in this study. Therefore, the consensus regarding these items reflects more traditional or less positive attitudes toward sexual health. Interpreted accordingly, the findings suggest that although the majority of students exhibited egalitarian attitudes, a smaller percentage may still support traditional gender norms and beliefs about violence in relationships. Another important point is that the Awareness and Self-Confidence subscales showed relatively low internal consistency (Cronbach's $\alpha = 0.43$ and 0.66 , respectively). This suggests that these subscales may have limited reliability in capturing the more subjective and self-perceived aspects of sexual health attitudes in this sample. Therefore, the findings regarding these subscales should be interpreted with caution.

This study found that most students (41.8%) obtained sexual health information from the internet/television/radio/newspapers. Similarly, Karakurt and Tuncer (2022) reported that the majority of students accessed sexual health information via the internet, while Yalnız Dilcen et al. (2024) found that approximately one-quarter of students had received formal sexual health education and that most sought support from

healthcare professionals. Karabulutlu and Kılıç (2011) reported that discussions on sexuality-related issues within families were limited. In Türkiye, sexuality remains a sensitive topic in many families, and sociocultural norms may restrict access to accurate information within close social environments. This study found no statistically significant difference between attitudes towards sexual health and sociodemographic variables such as marital status, family type, years of education, place of residence, family structure, or sexual experience. This finding is supported by several national studies (Karakurt and Tuncer, 2022; Yalnız Dilcen et al., 2024). However, existing literature also indicates that students who have open communication with their families and who receive comprehensive sexuality education tend to demonstrate more positive sexual health attitudes (Mueller et al., 2008; Saraçoğlu et al., 2014; Li et al., 2017). This inconsistency highlights the importance of considering contextual and educational differences when interpreting such associations. One of the most notable findings of this study is that the Awareness and Self-Confidence subscales yielded lower scores compared to other dimensions. This suggests that although midwifery students possess knowledge about sexual health, they may not sufficiently internalize this knowledge at the level of self-efficacy and awareness. Therefore, structured sexual health education programs integrated into midwifery curricula and delivered by subject experts may contribute to improving students' awareness and self-confidence, thereby strengthening their professional preparedness in sexual health counseling.

Limitations

This study was conducted among midwifery students at a single university, which limits the generalizability of the findings. The cross-sectional design does not allow for the assessment of causal relationships. Additionally, data were collected using a self-report online questionnaire, which may have introduced social desirability bias and other response-related limitations. Another important limitation is the relatively low internal consistency of the Awareness (Cronbach's $\alpha = 0.43$) and Self-Confidence

(Cronbach's $\alpha = 0.66$) subscales of the Sexual Health Attitudes Scale for Youth (SHAS-Y). These lower reliability coefficients may be related to the limited number of items in these subscales and the subjective nature of the constructs. Therefore, findings related to these sub-dimensions should be interpreted with caution.

CONCLUSION

The findings of this study indicate that midwifery students demonstrated overall positive attitudes toward sexual health. Students showed particularly strong attitudes in the domains of decision-making and responsibility, communication and rights, sexual rights, and safe sexuality. However, relatively lower scores in the awareness and self-confidence dimensions suggest that these areas require further improvement. In terms of sexual health information sources, the most frequently reported primary source was the internet/TV/radio/newspapers, followed by school and healthcare institutions. The findings suggest that although students have adequate knowledge regarding sexual health, this knowledge may not fully translate into self-efficacy and awareness. Based on these results, it is recommended that structured and comprehensive sexual health education programs aimed at strengthening awareness and self-confidence be incorporated into the midwifery curriculum. Such educational interventions are expected to enhance students' personal sexual health competencies and contribute to the quality of care and counseling services they will provide in their future professional practice.

Acknowledgment

This study was presented as an oral presentation at the 2nd National Western Black Sea Health Sciences Symposium (October 10, 2025, Karabük, Turkey). The author would like to thank all the students who participated in this study. We also extend our gratitude to the staff of the Niğde Ömer Halisdemir University Midwifery Department for their support in facilitating data collection. This study did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of Interest

The authors declare that there is no conflict of interest.

Authors Contributions

Sibel Karakoç: Conceptualization, study design, data collection, data analysis, manuscript drafting, and final approval of the manuscript.

REFERENCES

- International Confederation of Midwives (ICM). (2024). ICM Essential competencies for midwifery practice. Available from https://internationalmidwives.org/wp-content/uploads/EN_ICM-Essential-Competencies-for-Midwifery-Practice-1.pdf-recommendations
- Karabulutlu, Ö., & Kılıç, M. (2011). Determining university students' knowledge levels regarding sexual and reproductive health. *Journal of Anatolia Nursing and Health Sciences*, 14(2), 39–45.
- Karakurt, P., Tuncer, S. K. (2022). Determining university students' attitudes towards sexual health: The case of nursing students. *Gevher Nesibe Journal of Medical & Health Sciences*, 7(20), 131–139. <https://doi.org/10.5281/zenodo.7133596>
- Köprülü, M. H. (2022). Development of a Sexual Health Attitude Scale for Young People (Thesis no. 753116). Institute of Health Sciences, Department of Nursing. Master's Thesis: Marmara University, Istanbul-Turkey.
- Li C, Cheng Z, Wu T. et al. (2017). The relationships of school-based sexuality education, sexual knowledge and sexual behaviors-a study of 18,000 Chinese college students. *Reproductive Health Research*, 14(1), 103. <https://doi.org/10.1186/s12978-017-0368-4>
- Mahoto, S. K., Mitonga, H. K., & Likando, E. S. (2025). Risky sexual behaviors and associated factors among university young adults in Zambezi, Namibia. *Health SA*. 2025 Mar 28; 30:2725. <https://doi.org/10.4102/hsag.v30i0.2725>
- Mueller T. E, Gavin L. E, & Kulkarni A. (2008). The association between sex education and youth's engagement in sexual intercourse, age at first intercourse, and birth control use at first sex. *Journal of Adolescent Health*, 42(1), 89–96. <https://doi.org/10.1016/j.jadohealth.2007.08.002>
- Russell, J., Chen, H., Jensen, F., & Nichols, N. (2023). Nursing students' perceived attitudes toward addressing sexual health in their future profession: A longitudinal quantitative study. *Nurse Education Today*, 130, 105953. <https://doi.org/10.1016/j.nedt.2023.105953>
- Saraçoğlu, G. V., Erdem, İ., Doğan, S. et al. (2014). Youth Sexual Health: Sexual Knowledge, Attitudes, and Behavior Among Students at a University in Turkey. *Nöropsikiyatri Arşivi*, 51(3), 222–228. <https://doi.org/10.4274/npa.y6768>
- Ventura-Miranda, M., Alcaraz-Córdoba, A., Alcaraz-Córdoba, T. et al. (2023). Adolescents' perceptions of

- sexuality: A qualitative study. *Healthcare*, 11(20), 2757. <https://doi.org/10.3390/healthcare11202757>
- Wellings, K., Jones, K. G., Mercer, C. H. et al. (2013). The prevalence of unplanned pregnancy and associated factors in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). *The Lancet*, 382(9907), 1807-1816.
- World Health Organization (WHO). Sexual and reproductive health and rights in health emergencies: sexual health and well-being [online]. Available from: [https://www.who.int/teams/sexual-and-reproductive-health-and-research-\(srh\)/areas-of-work/sexual-health-recommendations](https://www.who.int/teams/sexual-and-reproductive-health-and-research-(srh)/areas-of-work/sexual-health-recommendations) Accessed June 19, 2026.
- World Health Organization (WHO). Sexual health [online]. Available from: <https://www.who.int/health-topics/sexual-health-recommendations>. Accessed June 19, 2026.
- Yalnız Dilcen, H., Bulut, E., Mutlu, G., & Güngör, A. (2024). The knowledge need of college students on sexual health and their attitude toward sexual education. *Journal of Midwifery and Health Sciences*, 7(2), 228–238. <https://doi.org/10.62425/esbder.1509078>