The Relationship between the Levels of Sexual Health Literacy of Parents and Their Adolescent

ABSTRACT

Background and Objective: Children and adolescents are at risk of experiencing sexual behaviors, which can harm their physical and mental health. Parents must understand gender issues and distinguish between normal and abnormal sexual behaviors to prevent maladaptive behaviors. This study aimed to examine the sexual health literacy of parents and adolescents and their correlation.

Materials and Methods: The research conducted was correlational and focused on employees of Bushehr University of Medical Sciences. The sample size consisted of 87 parents and 33 children, selected through available sampling between 2020 and 2021. The researcher created questionnaires to measure the sexual health literacy of both parents and children. Data analysis was done using SPSS 23 software and the U-Man-Whitney test at a significance level of 0.5.

Results: The Results show that the total score of parents' sexual health literacy is equal to 117.05 and the standard deviation is 17.50. The highest average is related to an understanding with an average of 59.43 and the lowest is related to evaluation with an average of 16.89. It is 108.52 with a standard deviation of 25.56. The highest average is related to an understanding with an average of 54.97 and the lowest is related to evaluation with an average of 15.76. Also, the findings do not show a significant relationship between the level of sexual health literacy of parents and children.

Conclusion: The study found no notable correlation between parents' and children's sexual health. However, parents displayed a higher level of health literacy compared to their children. This could positively impact the education of adolescents, given the importance of family-oriented education. Therefore, it is crucial to empower parents to educate their teenagers.

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Introduction

Adolescent health and wellness is a key focus for experts and policymakers. Health literacy is crucial for acquiring health knowledge, adopting healthy habits, and accessing healthcare services, particularly during this stage of life (1, 2). Insufficient health literacy creates various issues in public health and is associated with unfavorable health consequences like STIs and unintended pregnancies. Hence, parents' understanding of gender concerns, like the differentiation between natural and abnormal sexual conduct, is crucial in avoiding children's maladaptive actions (3).

It's been reported that annually, over 113 million cases of sexually transmitted diseases affect individuals under 25 worldwide, with over half of the global population engaging in sexual activity during their adolescence. Additionally, there are approximately 4.5 to 9 million teenage pregnancies each year, resulting in 10 high-risk abortions and numerous complications, including death, every ten minutes for teenage girls (4). Adolescents in Iran also exhibit high-risk sexual behaviours, as supported by evidence (5). Teenage boys and girls are reportedly engaging in sexual intercourse more frequently, with the prevalence increasing from 12.8% to 20% (6-8) Unofficial stats reveal a surge in abortion, risky sexual activities, and a significant drop in the age of first sexual encounters among Iranian teens. Such behaviors put children and adolescents at great risk of physical and mental harm, whether they are victims of sexual abuse or willingly engage in dangerous activities (9). Studies indicate that a significant portion of school students possess inadequate health literacy (10) Further evidence highlights Iranian women's limited health literacy, while Shavad's research indicates that pregnant women have higher health literacy levels than those with chronic illnesses (11).

The initial social institution, family, has a crucial

responsibility in educating children on sexual matters (12). Research indicates that familyoriented prevention programs can effectively decrease negative behavioral health outcomes. Certain nations are prioritizing family-based primary care and allocating sufficient resources for family-centered prevention programs. Since families embody the culture of societies and parents bear the primary responsibility of caring for children and teenagers, it is crucial to prioritize family-focused sex education (13). Health is influenced by various factors such as social, economic, and environmental conditions, personal habits, and more. Among these, health literacy plays a crucial role in determining one's wellbeing (14) Health literacy involves the capacity to seek, comprehend, and assess health-related information and apply it to everyday choices and behaviors (15). The health literacy of parents and its impact on children's health is a prime illustration of health literacy (16). Research shows that parents' level of health literacy is closely linked to their children's health (17-19) Other studies reveal that there is a strong correlation between the educational level, socioeconomic status, cultural background, and family income of parents and their health literacy status (10) which ultimately affects their children's sexual behavior (20).

It is crucial for parents to be aware of gender issues, including distinguishing between normal and abnormal sexual behavior, dealing with a child's sexual issues appropriately, age-appropriate behavior, when to teach sexual issues, forming a sexual identity, maturity, communicating with peers, and controlling children's information sources, in order to prevent maladaptive behaviors in children (21). Parents' silence and neglect of sexual issues during puberty can pose challenges and problems for children (22). Puberty-related

issues, causing guilt and embarrassment, can result in isolation, introversion, and masturbation. Failing to educate and inform children correctly can lead to immoral and negative behaviors, leading to rebellious behavior during sexual maturity. Neglecting children during this phase can have detrimental effects on their development (23).

Parents who possess accurate information about health and sexual issues can positively impact their children's behavior, particularly when it comes to important sexual matters during adolescence. As this period is crucial for future health and well-being, this present study was conducted to examine the relationship between the level of sexual health literacy of parents and their adolescent.

Materials and Methods

This correlational study was conducted by the staff of Bushehr University of Medical Sciences from 2020 to 2021. The researcher introduced themselves to the employees and explained the purpose of the research. Those who met the criteria and were willing to participate were given a questionnaire, and parents were instructed on how to assist their children in completing it. The sample size of 87 parents and 33 children was determined using the Cochrane formula and available sampling. Eligibility criteria included being married and having a child between 12 and 18 years old.

The researcher utilized two questionnaires for data collection: one for adult sexual health literacy and one for adolescent sexual health literacy.

The adult sexual health literacy questionnaire was based on Hosni's questionnaire and Masoumi's questionnaire (24, 25). The present study led to modifications in some questions of the adult sexual health literacy measurement tool. The tool consists of 32 questions based on

a 5-point Likert scale, with 4 categories: access, understanding, evaluation, and application. The scale awards 1 point for completely disagreeing, 2 points for disagreeing, 3 points for having no opinion, 4 points for agreeing, and 5 points for completely agreeing. The highest possible score is 160, while the lowest is 32. The questionnaire's validity was assessed by 5 experts from Bushehr University of Medical Sciences, and its reliability was determined using Cronbach's alpha, which was found to be 87. The questionnaire was scored at weak levels (32-74.5), medium levels (74.6-117.5), and high levels (117.6-160).

To assess adolescent sexual health literacy, a researcher-created questionnaire was utilized due to irrelevance of some questions in existing questionnaires. The tool includes 32 questions based on a 5-point Likert scale, measuring access, understanding, evaluation, and application. Responses range from 1 (completely disagree) to 5 (completely agree). Expert opinions from Bushehr University of Medical Sciences were considered and the questionnaire's reliability was determined with a Cronbach's alpha score of 0.89. Questionnaire resulting was in a score range of 160-117.6.

The SPSS software was utilized to analyze the data, including both descriptive statistics (mean and standard deviation) and analytical statistics (Y-Man-Whitney) to determine the correlation between the health literacy level of parents and their adolescent offspring.

Results

Tables 1 display data on the frequency of gender and education level for parents and their children. The majority of parents held bachelor's or master's degrees, while most children were in 11th or 12th grade. Male participants were predominant among parents, and boys among children.

Table 1. Demographic information of the research participants

Variable		Number/percentage	Variable		Number/percentage	
children Gender	Girl	12 (54.022)	parents	Male	47 (54.022)	
	Boy	21(45.977)	Gender	Female	40(45.977)	
children Degree of Education	the seventh	3(9.09)		High school	9(10.34)	
	Eighth	2(6.06)		Diploma	10(11.49)	
	ninth	5(15.15)	parents education	Bachelor's Degree	32(36.78)	
	the tenth	6(18.18)		Master's degree	29(33.33)	
	the tenth	9(27.27)		Ph.D.	7(8.045)	
	twelfth	8(24.24)				

According to Table 2, parents' sexual health literacy had a medium total score of 117.05 \pm 17.50. Table 2 shows that adolescents' sexual

health literacy scored an average of 108.52 ± 25.56 , indicating their medium level of sexual health literacy.

Table 2. The level of sexual literacy of parents and of adolescents

Component	Parents sexual literacy			Adolescents sexual literacy				
	Min	Mix	Mean	SD	Min	Mix	Mean	SD
Access	10	30	21.80	4.74	6	30	19.61	6.29
Understand	32	80	59.43	9.88	19	76	54.97	13.49
Appraise	9	23	16.89	3.51	8	21	15.76	3.96
Apply	13	25	18.93	2.66	9	25	18.18	4.34
total score	81	155	117.05	17.50	51	150	108.52	25.56

Upon analyzing the correlation between parents' sexual health literacy and their adolescent's sexual health literacy, it was found that there was no noteworthy association

between the two (P-Value < 0.05) (Table 3). Furthermore, the components of parents' sexual health literacy did not have a significant impact on their child's overall sexual health literacy.

Table 3. The relationship between the level of sexual literacy of parents and adolescent

Compone	Min	Mix	Mean	SD	P-value		
Access	Adolescents	6	30	19.61	6.29	0.075	
Access	Parents	10	30	21.80	4.74		
Understand	Adolescents	19	76	54.97	13.49	0.377	
	Parents	32	80	59.43	9.88		
Appraise	Adolescents	8	21	15.76	3.96	0.203	
Appraise	Parents	9	23	16.89	3.51	0.203	
Apply	Adolescents	9	25	18.18	4.34	0.461	
	Parents	13	25	18.93	2.66		
The total score of sexual	Adolescents	51	10	108.52	25.56	0.341	
health literacy	Parents	81	155	117.05	17.50	0.541	

Discussion

The sexual health literacy of parents and their adolescent children was moderate, with average scores of 117.05 and 108.52, respectively. Parents had higher sexual health literacy than their adolescent children, but the difference was not statistically significant (P < 0.05). These results can be compared to a 2018 study in Nicaragua, which found that although public awareness and knowledge of sexual and reproductive health among adolescent students was moderate, gaps in information and poor knowledge of contraceptive methods were identified (26). Benti Abdallah et al. (2020) found that parents who are wellinformed about sexual information are more likely to assist their children in obtaining such information as a preventative measure against sexual abuse (27).

A study conducted in 2017 evaluated the sexual and reproductive health literacy of students residing in both rural and urban regions of Laos. The results revealed that over 50% of the students exhibited inadequate levels of sexual health literacy (28). The evaluation of sexual and reproductive health literacy in Bandar Abbas, Iran, indicated a lack of adequate knowledge among adults in the city (29). In Ghana, a study found that the majority of parents felt responsible for educating their children about sexual and reproductive health, as it impacts their overall health and wellbeing (30).

Cultural variances may account for divergent outcomes in studies. Talking about sex in families is more feasible in certain nations. Other elements that can influence adolescents' sexual health literacy include parental education and awareness of unfamiliarity dangers. Educating people through various channels can enhance their comprehension of sexual topics.

This study is one of the first in Iran to investigate the sexual health literacy of

parents and their adolescent children, and its relationship between them. A strength of the study is the simultaneous examination of the health literacy levels of both parents and their children, allowing for feasible comparison of their answers. However, the study also faces potential limitations such as non-responsiveness and lack of interest from some parents, potentially due to their children's lack of familiarity with sexual issues. Another limitation concerns the survey, as both parents and their children may have experienced challenges in answering the questions. Additionally, the research was limited to a specific city and group of people, and to generalize the results, further studies in different regions and groups are needed to examine and compare differences from various dimensions. The results of such studies can inform decisions and policies to improve the current situation.

Conclusion

The study found no correlation between the sexual health literacy of parents and the sexual health of their children. However, parents had higher health literacy than their children. As parents play a crucial role in society, they can positively influence their children's sexual education and address any sexual problems they may have. Therefore, it is crucial to educate parents about sexual issues. Health and sex education policymakers should focus on improving the sexual literacy of parents, especially those with lower education levels, and teach them how to discuss this topic with their children and provide them with necessary information. Besides, Adolescents require tailored information and training based on factors such as family and societal awareness of sexual issues, cultural status, and religious practices.

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References

- Park A, Eckert TL, Zaso MJ, Scott-Sheldon LAJ, Vanable PA, Carey KB, et al. Associations Between Health Literacy and Health Behaviors Among Urban High School Students. J Sch Health. 2017;87(12):885-93. https://doi.org/10.1111/josh.12567 PMid:29096408 PMCid:PMC5669371
- Tavakoly Sany SB, Aman N, Jangi F, Lael-Monfared E, Tehrani H, Jafari A. Quality of life and life satisfaction among university students: Exploring, subjective norms, general health, optimism, and attitude as potential mediators. Journal of American College Health. 2021:1-8. https://doi.org/10.1080/07448481.2021.1920597 PMid:34242514
- 4. Roy S, Roy S, Rangari K. Comprehensive health care including sexual and reproductive health of adolescents and youths is of vital importance to the nation. Health Popul Perspect Issues. 2007;30(4):243-67.
- Hamzehgardeshi Z. Adolescent risk behaviors and strategies for improving the most common high-risk behaviors: A mixed methods explanatory sequential study. Tehran: Tehran University of Medical Science; 2012. [In Persian].
- 6. Ahmadi K, Khodadadi Sangdeh J, Aminimanesh S, Mollazamani A, Khanzade M. The role of parental monitoring and affiliation with deviant peers in adolescents' sexual risk taking: toward an interactional model. Int J High Risk Behav Addict. 2013;2(1):22-7.

- h tt ps://doi.org/10.5812/ijhrba.8554 PMid:24971267 PMCid:PMC4070135
- Gholam Reza Grarmaroudi, Jalil Makarem, Seyedeh Shohre Alavi, Zeinab Abbasi. Health related risk behaviors among high school students in Tehran, Iran. Health Monitor Journal of the Iranian Institute for Health Sciences Research. 2010;9(1):13-9. [In Persian].
- 8. Soleymani nia L, Jazayeri A, Mohamad khani P. The Role of Positive and Negative Mental Health in Adolescent's Health Risk Behaviors. Social Welfare. 2006;5(19):75-90. [In Persian].
- Memari S, Khanifar H, Mehran G, Yazdani H, Fereiduni S. Examining the Concept of Sexual Health of Adolescent Students from the Perspective of Experts with a Focus on Parent Education. Journal of qualitative Research in Health Sciences. 2019;8(3):247-59. [In Persian].
- 10. Jafari A, Tavakoly Sany SB, Peyman N. The Status of Health Literacy in Students Aged 6 to 18 Old Years: A Systematic Review Study. Iran J Public Health. 2021;50(3):448-58. https://doi.org/10.18502/ijph.v50i3.5584 PMid:34178792 PMCid:PMC8214623
- 11. Tavakoly Sany SB, Doosti H, Mahdizadeh M, Orooji A, Peyman N. The Health Literacy Status and Its Role in Interventions in Iran: A Systematic and Meta-Analysis. Int J Environ Res Public Health. 2021;18(8). https://doi.org/10.3390/ijerph18084260 PMid:33920508 PMCid:PMC8073744
- 12. Alquaiz AM, Almuneef MA, Minhas HR. Knowledge, attitudes, and resources of sex education among female adolescents in public and private schools in Central Saudi Arabia. Saudi Med J. 2012;33(9):1001-9.
- 13. Asgharinekah M SF, Amel Barez M. . The Need of FamilyBased Sexual Education: A Systematic Review. . Journal of Health Literacy. 2019;4(3).
- 14. Liu H, Zeng H, Shen Y, Zhang F, Sharma M, Lai W, et al. Assessment tools for health literacy among the general population: a systematic review. International journal of environmental research and public health. 2018;15(8):1711. https://doi.org/10.3390/ijerph15081711 PMid:30103386 PMCid:PMC6122038
- 15. Dadaczynski K, Okan O, Messer M, Leung AYM, Rosário R, Darlington E, et al. Digital Health Literacy and Web-Based Information-Seeking Behaviors of University Students in Germany During the COVID-19 Pandemic: Cross-sectional Survey Study. J Med Internet Res. 2021;23(1):e24097. h tt p s : / / d o i . o r g / 1 0 . 2 1 9 6 / 2 4 0 9 7 PMid:33395396 PMCid:PMC7813561
- 16. de Buhr E, Tannen A. Parental health literacy and health knowledge, behaviours and outcomes in children: a cross-sectional survey. BMC Public Health. 2020;20(1):1096. https://doi.org/10.1186/s12889-020-08881-5 PMid:32660459 PMCid:PMC7359277
- 17. Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Crotty K. Low health literacy and health outcomes: an updated systematic review. Annals of internal medicine. 2011;155(2):97-107.

- https://doi.org/10.7326/0003-4819-155-2-201107190-00005 PMid:21768583
- 18. Wood MR, Price JH, Dake JA, Telljohann SK, Khuder SA. African American parents'/guardians' health literacy and self-efficacy and their child's level of asthma control. Journal of pediatric nursing. 2010;25(5):418-27. https://doi.org/10.1016/j.pedn.2009.05.003 PMid:20816565
- 19. Yin HS, Forbis SG, Dreyer BP. Health literacy and pediatric health. Current problems in pediatric and adolescent health care. 2007;7(37):258-86. https://doi.org/10.1016/j.cppeds.2007.04.002 PMid:17656324
- 20. Chehri M, Najafi mehri S, Ebadi A, Sarhangi F. Assessing the health literacy level of parents of preschool children. Iranian Journal of Pediatric Nursing. 2015;1(4):1-10. [In Persian].
- Rashid K, Hosseini Nazarlou M. Investigating the Effect of Sex Education on Enhancing Parents' Sexual Knowledge and their Sense of Competence. Journal of Instruction and Evaluation. 2017;10(37):143-62. [In Persian].
- 22. Sabet H. Sex Education in Islam. Qom: Imam Khomeini Educational and Research Institute Publication; 2011. [In Persian].
- 23. Pazang M. The feasibility of the use of sexual education components in elementary school curricula: sexual education as Null curriculum. Tehran: Allameh Tabatabai University; 2018. [In Persian].
- 24. Ghobadzadeh S, Hasani J, Mohammadkhani S, Akbari M. A multidimensional model of sexual health scale for men;

- Design and Psychometrically Evaluation of Iranian version. Journal of Nursing Education. 2019;7(2):15-22. [In Persian].
- 25. Maasoumi R, Tavousi M, Zarei F. Development and psychometric properties of sexual health literacy for adults (SHELA) questionnaire. Hayat. 2019;25(1):56-69. [In Persian].
- 26. Bergström A, Ugarte Guevara WJ, Eustachio Colombo P. Knowledge about sexual and reproductive health among school enrolled adolescents in Tololar, Nicaragua, a cross-sectional study. Journal of Public Health International. 2018;1(2):27-38. https://doi.org/10.14302/issn.2641-4538.jphi-18-2464
- 27. Binti Abdullah NAF, Muda SM, Mohd Zain N, Abdul Hamid SH. The role of parents in providing sexuality education to their children. Makara Journal of Health Research. 2020;24(3):2.
- 28. Vongxay V, Albers F, Thongmixay S, Thongsombath M, Broerse JEW, Sychareun V, et al. Sexual and reproductive health literacy of school adolescents in Lao PDR. PLoS One. 2019;14(1):e0209675-e. https://doi.org/10.1371/journal.pone.0209675 PMid:30650100 PMCid:PMC6334956
- 29. Dabiri F, Hajian S, Ebadi A, Zayeri F, Abedini S. Sexual and reproductive health literacy of the youth in Bandar Abbas. AIMS Medical Science. 2019;6(4):318-25. https://doi.org/10.3934/medsci.2019.4.318
- 30. Adjei ES, Baah KA. Assessing the Impact of Parents' Adolescent Reproductive and Sexual Health Knowledge on Sexual Health Education by Parents in the Asutifi (North and South) Districts of Ghana. International Journal of Scientific Research and Management. 2020;8(09):1626-33. https://doi.org/10.18535/ijsrm/v8i09.el01