



eISSN: 2281-7824

<https://www.pagepressjournals.org/index.php/hls/index>

**Publisher's Disclaimer.** E-publishing ahead of print is increasingly important for the rapid dissemination of science. The **Early Access** service lets users access peer-reviewed articles well before print / regular issue publication, significantly reducing the time it takes for critical findings to reach the research community. These articles are searchable and citable by their DOI (Digital Object Identifier).

The **Healthcare in Low-resource Settings** is, therefore, e-publishing PDF files of an early version of manuscripts that undergone a regular peer review and have been accepted for publication, but have not been through the typesetting, pagination and proofreading processes, which may lead to differences between this version and the final one. The final version of the manuscript will then appear on a regular issue of the journal.

E-publishing of this PDF file has been approved by the authors.

Healthc Low-resour S 2024 [Online ahead of print]

*To cite this Article:*

Mansur AR, Neherta M, Fajria L, et al. **Assessing sexual-abuse prevention knowledge and related factors among adolescent girls with intellectual disabilities in Padang: a cross-sectional study.** *Healthc Low-resour S* doi: 10.4081/hls.2024.12705

©The Author(s), 2024  
Licensee [PAGEPress](#), Italy

Note: The publisher is not responsible for the content or functionality of any supporting information supplied by the authors. Any queries should be directed to the corresponding author for the article.

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article or claim that may be made by its manufacturer is not guaranteed or endorsed by the publisher.

**Assessing sexual-abuse prevention knowledge and related factors among adolescent girls with intellectual disabilities in Padang: a cross-sectional study**

Arif Rohman Mansur,<sup>1</sup> Meri Neherta,<sup>1</sup> Lili Fajria,<sup>1</sup> Ira Mulya Sari,<sup>1</sup> Yelly Herien,<sup>1</sup> Mutia Farlina,<sup>1</sup> Putri Dwi Rusmayanti<sup>2</sup>

<sup>1</sup>Maternal and Child Health Nursing Department, Faculty of Nursing, Universitas Andalas, Padang;

<sup>2</sup>Nursing Graduate, Bachelor of Science in Nursing Program, Faculty of Nursing, Universitas Andalas, Padang, Indonesia

**Correspondence:** Arif Rohman Mansur, Maternal and Child Health Nursing Department, Faculty of Nursing, Universitas Andalas, Padang 25151, Indonesia.

Tel. +62 751 779233; +62 852 28892075.

E-mail: [arifrohmanmansurphd@nrs.unand.ac.id](mailto:arifrohmanmansurphd@nrs.unand.ac.id)

**Key words:** intellectual disabilities; sexual abuse prevention; adolescent health; educational interventions; vulnerability assessment.

**Contributions:** the study was designed and conceptualized by the entire team, with ARM leading the effort; MN and LF were responsible for identifying the study's population and managing the recruitment process; IMS translated and adapted the Illustrated Scale Measuring the Sexual Abuse Prevention Knowledge questionnaire; YH ensured its validity; MF obtained ethical approvals and permissions for the study; PDR led the data collection process; ARM and MN performed univariate and bivariate analyses. The manuscript was drafted by all authors, with ARM leading the writing and YH and MF reviewing and finalizing it for submission. All the authors have read and approved the final version of the manuscript and agreed to be held accountable for all aspects of the work.

**Conflict of interest:** the authors declare no potential conflict of interest.

**Funding:** none.

**Ethics approval and consent to participate:** the study received ethical approval from the Ethics Commission Team of Universitas Andalas under reference number 1098/UN.16.2/KEP-FK/2023, ensuring full adherence to ethical standards.

**Informed consent:** for participants under 18, parental assent was obtained, while those 18 and older provided informed consent themselves, unless legally incapable due to intellectual disabilities. This approach respects the autonomy of adolescents and adheres to ethical standards in human research.

**Availability of data and materials:** all data generated or analyzed during this study are included in this published article.

**Acknowledgments:** this study was supported by Research and Community Service Universitas Andalas for the grand research Indexed Publication Research (RPT) with contract number T/17/UN.16.17/PT.01.03/KO-RPT/2022. The authors would like to thank the five special schools in Padang City. We also thank all adolescent girls with intellectual disabilities for their participation in this study.

## **Abstract**

Sexual abuse among adolescents With Intellectual Disabilities (ID) has been significantly under-researched despite their high vulnerability. This study aimed to assess the sexual abuse prevention knowledge of adolescent girls with ID in Padang and explore how various

respondents' characteristics relate to the risk of sexual abuse. Findings from this study may inform future prevention strategies and support services. A descriptive cross-sectional approach was utilized, and involved 50 adolescent girls from five special education schools in Padang. Respondents were assessed using the Illustrated Scale Measuring Sexual Abuse Prevention Knowledge, which covered five key domains. The study analyzed the risk of sexual abuse and related factors. The findings revealed significant knowledge disparities, especially in identifying abusive situations, with notably low scores. Statistical analysis showed a strong correlation between the disability category and additional mental or physical conditions, indicating an increased risk of sexual abuse. The results emphasize the urgent need for customized educational programs to address the specific challenges faced by adolescents with ID. Enhancing sexual abuse prevention knowledge is crucial for reducing their victimization risk. The study recommends comprehensive educational strategies and supportive interventions tailored to their cognitive and physical profiles.

## **Introduction**

The prevalence of sexual abuse among adolescent girls with Intellectual Disabilities (ID) is alarmingly high. Estimates indicate that 14% to 32% of these individuals experience abuse, which is 4 to 8 times higher than the rates among their peers without disabilities. This disparity underscores their significantly increased vulnerability to sexual victimization.<sup>1</sup> Additionally, studies reveal that one in three adults with ID has experienced sexual abuse, often perpetrated by other individuals with ID.<sup>2,3</sup> The vulnerability of this population is highlighted by prevalence rates: 32.9% of adults with ID in the UK experience sexual abuse, compared to 15.2% in the USA.<sup>4</sup> In a specific study, 2.67% of girls with mild ID were reported to have been abused.<sup>5</sup> In Padang, Indonesia, the population of children with disabilities in 2020 was recorded at 1,625.<sup>6</sup> This city has

seen a concerning rise in cases of sexual abuse among children, particularly those with ID, with cases increasing from 57 in 2016 to 78 in 2017.<sup>7</sup> Adolescent girls with ID in Padang are especially vulnerable due to their impaired cognitive and adaptive functioning, which limits their ability to recognize and respond to abuse.

ID is characterized by significant limitations in cognitive and adaptive functioning, and is classified into four levels - mild, moderate, severe, and profound - based on these functional limitations.<sup>8</sup> It involves impairments in various aspects of intelligence, including socialization, knowledge, speech, and motor function, affecting social, motor, and practical skills.<sup>9,10</sup> The diverse nature of ID is influenced by environmental factors, genetic mutations, or chromosome aberrations.<sup>11</sup> In Padang, these disabilities range from mild to moderate, with most affected children falling into these categories.

Several factors contribute to the increased risk of sexual abuse among girls with ID, including lack of adequate training, irrational reactions from families and communities, and the girls' own inadequate responses.<sup>5</sup> Familial risk factors include low education levels of parents, economic problems, early marriage of parents, and broken families.<sup>12</sup> Children with ID are at heightened risk due to lower sexual knowledge levels and inadequate sexual education.<sup>13</sup> They also face communication barriers that hinder their ability to report abuse effectively, further exacerbating their vulnerability.<sup>14</sup> Additionally, familial factors such as poverty, low parental education levels, and maternal unawareness limit the family's capacity to provide adequate protection and support.<sup>15</sup> In Padang, there are 44 special schools (SLB) in Sumatera Barat, with two (4.55%) being government-owned and the remaining 37 (84.09%) privately owned.<sup>16</sup> Most students are enrolled in the public SLBs and the three private SLBs used for this research. These special needs schools focus on enhancing various aspects of children's development, including cognitive skills, vocational training, adaptive behavior, and physical activity.<sup>17-19</sup>

The significance of this study lies in the critical need to enhance sexual abuse prevention knowledge and strategies, particularly among high-risk groups like adolescent girls with ID in

Padang. These individuals face increased vulnerability due to their cognitive limitations, underscoring the importance of tailored educational programs. By focusing on this demographic, the research aims to mitigate risks and promote safer developmental environments through informed, effective interventions. This cross-sectional study assesses the sexual abuse prevention knowledge within this group and explores how various characteristics related to their disability impact their risk of sexual abuse. Conducted in five special schools in Padang, the study offers detailed insights into the educational deficiencies these students face. The findings are intended to lay the groundwork for future strategies that address these educational gaps, thereby reducing the incidence of sexual abuse among these youths and improving their overall safety and well-being. This approach not only addresses an urgent local need but also contributes to the broader goal of protecting vulnerable populations from sexual abuse.

## **Materials and Methods**

### ***Study participants***

The study population consisted of all students with ID attending five special schools in Padang. A total sampling method was employed to ensure comprehensive coverage, incorporating all eligible students with ID from these schools. The sample size for this study was 50 adolescents with ID. The inclusion criteria were adolescents with mild or moderate ID, aged 12 to 22 years, who were cooperative and willing to participate. The study focused on the critical transitional period from 12 to 22 years, examining developmental trajectories and educational outcomes in individuals with ID, aligning with developmental psychology. Exclusion criteria included: adolescents with severe ID or other co-existing disabilities such as quadriplegia, deafness, blindness, autism, or those who were ill at the time of the study.

### ***Research instruments***

The measurement tools used in this study were carefully designed to suit the intellectual abilities of

participants. These included a demographic data questionnaire and the Illustrated Scale Measuring Sexual Abuse Prevention Knowledge.<sup>20</sup> The scale consists of 30 items, divided into 20 true/false items and 10 multiple-choice items, covering five main domains: Puberty Physiology (PP), Body Boundaries (BB), identification of Improper Sexual Relationships (ISR), Identification of Abusive Situations (IAS), and Coping Methods when facing abusive situations (CM). The scale assesses various aspects, such as understanding physical changes during puberty, knowledge of private body parts and the right to protect one's own body, awareness of inappropriate sexual relationships, ability to recognize abusive situations, and strategies for coping with abuse. Each correct response receives a score of 1, and each incorrect response receives a score of 0, with total possible scores ranging from 0 to 30. Higher scores indicate better knowledge of sexual abuse prevention. The internal consistency reliability of the scale was satisfactory, with Cronbach's alpha values of 0.81 for true/false items, 0.74 for multiple-choice items, and 0.84 for the entire scale. Subscale reliabilities varied: PP ( $\alpha=0.82$ ), BB ( $\alpha=0.63$ ), ISR ( $\alpha=0.92$ ), IAS ( $\alpha=0.75$ ), and CM ( $\alpha=0.54$ ). The reliability of multiple-choice items ranged from 0.51 to 0.65. The effectiveness of these adapted instruments was previously verified through a validation study involving ten children with mild ID.<sup>21</sup>

### ***Procedure***

After securing the necessary research permits and passing ethical review, the researcher created a total sampling frame to identify and enumerate all eligible participants. This involved identifying every adolescent girl with ID across the five special schools in Padang City who met the study's inclusion criteria. The total identified population was 50 individuals. Each participant was informed about the study's objectives, and informed consent was obtained from parents for those under 18, while those 18 and older gave consent themselves, unless legally incapable due to ID. This complete enumeration ensured the sample's representativeness, allowing comprehensive data collection through subsequent questionnaire administration.

### ***Data analysis***

Univariate analysis focused on the distribution of frequency for various demographic characteristics, including age, method of questionnaire completion, age at diagnosis of ID, presence of other mental or physical conditions, disability category, type of residence, access to sex education, and instances of reported sexual abuse. Data were processed using standard techniques to ensure accuracy and reliability, with variables presented in detailed tables. The five domains of the Illustrated Scale Measuring Sexual Abuse Prevention Knowledge were analyzed for central tendencies (mean, standard deviation, minimum, and maximum).

Bivariate analysis explored the relationships between demographic characteristics and sexual abuse prevention knowledge. Correlation analyses assessed the strength and significance of these relationships. Pearson correlation quantified the degree of correlation between continuous variables, identifying linear relationships between factors such as age and sexual abuse prevention knowledge. Point biserial correlation examined relationships between binary and continuous variables, analyzing the impact of binary demographic characteristics (*e.g.*, presence of other conditions) on sexual abuse prevention knowledge. Statistical tables and figures accompanied each analysis, aiding in data interpretation. Findings were discussed in relation to p-values, with a significance level set at  $p < 0.05$ , indicating robust relationships between studied variables.

### ***Ethics approval***

The study received ethical approval from the Ethics Commission Team of Universitas Andalas under the reference number 1098/UN.16.2/KEP-FK/2023, ensuring full adherence to ethical standards. For participants under 18, parental assent was obtained, while those 18 and older provided informed consent themselves, unless legally incapable due to ID. This approach respects the autonomy of adolescents and adheres to ethical standards in human research.



## **Results**

### ***Demographic characteristic of respondents***

A total of 50 children participated in the study by filling out the research questionnaire. Table 1 presents the demographic characteristics of the respondents, detailing various attributes including age, method of questionnaire completion, age at diagnosis of ID, presence of other mental/physical conditions, disability category, residence type, access to sex education, and reported instances of sexual abuse. The majority of respondents (54%) were in late adolescence (18-22 years), and similarly, 54% of the respondents filled out the questionnaire themselves. Most respondents (74%) were diagnosed with ID between the ages of 9 and 18. A significant number (66%) reported no other mental or physical conditions. The predominant disability category was mild, with 84% of respondents falling into this group. All respondents lived with relatives or parents. Regarding sex education, 86% had received it at least once. Additionally, 4% had experienced sexual abuse reported by teachers or health workers. This data reflects a population primarily consisting of late adolescents with mild disabilities, living in supportive family environments, and having access to sex education, although a small but significant portion has encountered sexual abuse.

### **Five domains of the Illustrated Scale Measuring Sexual Abuse Prevention Knowledge**

Table 2 presents the descriptive statistics analysis of the five domains measuring sexual abuse prevention knowledge among respondents: Puberty Physiology (PP), Body Boundaries (BB), identification of Improper Sexual Relationships (ISR), Identification of Abusive Situations (IAS), and Coping Methods when facing abusive situations (CM). Respondents demonstrated the highest proficiency in BB, with a mean score of 5.7, indicating strong and consistent knowledge. They also scored highly in Identification of ISR and CM, reflecting good understanding, although there was some variability, particularly in coping methods. PP showed moderate knowledge with more variation in responses. IAS had the lowest mean score of 3.72 and the highest standard deviation, highlighting significant discrepancies in respondents' ability to recognize abusive situations. These

findings suggest that while knowledge is generally strong in some areas, there are critical gaps, particularly in identifying abusive situations, that need to be addressed through targeted educational interventions to ensure a comprehensive understanding of sexual abuse prevention.

### **Factors related to sexual abuse prevention knowledge among adolescent girls with intellectual disabilities**

The analysis revealed that the presence of other mental/physical conditions had a statistically significant moderate positive correlation ( $r=0.326$ ,  $p=0.021$ ) with sexual abuse prevention knowledge, suggesting that as the number of other mental/physical conditions increases, the level of knowledge also increases. Conversely, the disability category showed a statistically significant moderate negative correlation ( $r=-0.279$ ,  $p=0.05$ ), implying that different disability categories are associated with variations in knowledge, with certain categories potentially linked to a decrease in knowledge levels. These findings indicate the need for tailored educational interventions that address the specific needs of different disability categories to improve sexual abuse prevention knowledge among adolescent girls with ID.

### **Discussion**

This study's univariate analysis of the central tendency of the five domains of sexual abuse prevention knowledge reveals significant insights into the vulnerabilities faced by adolescent girls with ID. The mean scores for the five dimensions - PP (4.92), BB (5.7), ISR (5.1), IAS (3.72), and CM (5.18) - highlight critical areas of concern. The most concerning area is IAS, which has the lowest mean score (3.72) and the highest Standard Deviation (SD), indicating significant discrepancies in respondents' ability to recognize abusive situations.

These findings align with previous research, which underscores the heightened vulnerability of intellectually disabled adolescents to abusive situations. Factors such as delays in cognitive skills, difficulty recognizing bad intentions, challenges in self-defense, and a lack of knowledge and

skills regarding relationships and sexuality contribute to this vulnerability.<sup>22,23</sup> Additionally, personal and family risk factors create an imbalance of power, increasing the likelihood of becoming victims of sexual abuse.<sup>24</sup> Studies have shown that adolescents with ID are more likely to be sexually abused by family members, caregivers, and others in the community.<sup>25</sup> Impaired social skills also make individuals with ID more susceptible to abuse.<sup>26</sup> The lack of research, information, and education on the sexuality of people with ID further contributes to their vulnerability.<sup>27</sup>

The study contributes novel insights into the specific need for education on identifying abusive situations. Respondents exhibited the lowest mean score in this domain, indicating an urgent need for targeted educational interventions to enhance knowledge and awareness. By focusing on this area, interventions can directly address the most pronounced deficiencies, ensuring a comprehensive understanding of sexual abuse prevention among the respondents. Educational interventions that empower individuals to recognize abuse situations, particularly in group settings, can be effective in enhancing knowledge and awareness.<sup>28</sup> An educational intervention using an information package was effective in improving parents' knowledge regarding Child Sexual Abuse (CSA).<sup>29</sup> A digital application designed to refresh knowledge of abuse for individuals with ID showed promising results in reinforcing understanding and confidence in reporting abuse over the long term.<sup>30</sup> Programs involving film screenings and interactive discussions can enhance protective decision-making capabilities for adolescent girls with ID.<sup>31</sup>

The findings reiterate the necessity for robust prevention strategies and policies tailored to the needs of adolescents with ID. Comprehensive sexual health education aimed at improving self-image, self-confidence, and empowering individuals to make informed choices can help protect them from exploitation.<sup>25,32</sup> Effective prevention strategies may include education on boundaries, relationships, and sexuality tailored to cognitive abilities, promoting self-advocacy skills, and providing access to support services.<sup>33</sup> Providing inclusive Healthy and Respectful Relationship (HRR) education may help reduce the risk of sexual abuse and address health disparities affecting

youth with disabilities.<sup>34</sup>

This study highlights the statistically significant relationship between the presence of additional mental or physical conditions and the risk of sexual abuse ( $p=0.021$ ). Our findings align with previous research, which indicates that co-occurring conditions exacerbate the vulnerability of children with ID to sexual abuse.<sup>35</sup> Other research supports this by demonstrating that ID, communication disorders, and behavioral disorders contribute to high-risk levels, with multiple disabilities further increasing susceptibility.<sup>14</sup>

Our findings are consistent with those of Amborski *et al.*<sup>36</sup> in reporting that individuals with disabilities are at a significantly higher risk of sexual victimization, with sensory impairments posing the highest risk. These vulnerabilities predispose individuals not only to immediate harm but also to long-term mental health issues and a perpetuated cycle of abuse, as noted by Bates *et al.*<sup>37</sup> The urgent need for specialized protective measures and interventions is further highlighted by Amelink.<sup>22</sup> Reflecting the critical importance of ensuring tailored support and protection for adolescents with ID to safeguard their rights to safety and informed agency in personal health decisions. This study contributes to the field by emphasizing the need for a nuanced understanding and targeted interventions to address the heightened risk of sexual abuse in individuals with multiple disabilities.

This study also explored the association between ID categories (mild or moderate) and the risk of sexual abuse. The findings indicate a significant moderate negative correlation ( $r=-0.279$ ,  $p=0.05$ ), suggesting that different disability categories are associated with variations in the risk of sexual abuse. Individuals with mild ID are at higher risk of becoming victims and more vulnerable to the disruptive effects of sexual abuse.<sup>34</sup> This is consistent with findings that individuals with mild or borderline intellectual functioning face an increased risk of sexual abuse compared to those with moderate or severe ID.<sup>38</sup> Furthermore, Tomsa *et al.* reported that the prevalence of sexual abuse increases from mild to severe levels of ID and decreases at profound levels.<sup>4</sup> This pattern is

reflected in our study, where the correlation suggests that as the severity of ID increases, the risk of sexual abuse decreases, particularly at the profound level.

This study offers a detailed examination of the risk of sexual abuse among individuals with mild and moderate ID, providing a nuanced understanding crucial for developing tailored interventions. It identifies a moderate negative correlation between disability category and risk, quantifying this relationship and offering insights valuable for policymakers and practitioners. Additionally, the study highlights the need for focused protective measures and educational programs for individuals with mild ID, emphasizing targeted interventions to prevent abuse and mitigate its effects.

### ***Study limitations***

The study's reliance on self-reported data for assessing knowledge and coping strategies among adolescent girls with ID could introduce inaccuracies due to potential cognitive biases or misunderstandings inherent to this population. Additionally, the cross-sectional design limits the ability to determine causality and observe long-term effects of interventions, necessitating longitudinal studies for more definitive conclusions. These limitations highlight the need for enhanced methodological approaches in future research to ensure more accurate and applicable findings.

### **Conclusions**

This study reveals a complex relationship between ID, the presence of other mental or physical conditions, and the risk of sexual abuse among adolescent girls. It highlights significant disparities in sexual abuse prevention knowledge, particularly in recognizing abusive situations, underscoring the urgent need for tailored educational programs to address these unique challenges.

The findings emphasize the critical importance of comprehensive sexual education and targeted prevention strategies for adolescent girls with ID. Ongoing support and the development of

intervention strategies are essential to mitigate the risks of sexual abuse. Policymakers, educators, and healthcare providers must ensure these adolescents receive the necessary protection and education to navigate their vulnerabilities safely and effectively.

## References

1. Toren SJ, Haas S, Dalmijn EW, et al. A mixed methods evaluation of girls' talk: a sexuality education programme for girls with mild intellectual disabilities. *J Appl Res Intellect Disabil* 2021;35:1009-18.
2. Svae GB, Blixt L, Søndena E. Personal and sexual boundaries: the experiences of people with intellectual disabilities. *BMC Public Health* 2022;22:1773.
3. Svae GB, Hassel B, Søndena E. People with intellectual disabilities and harmful sexual behaviour: professionals' views on the barriers to prevent harm. *J Appl Res Intellect Disabil* 2022;36:176-85.
4. Tomsa R, Gutu S, Cojocaru D, et al. Prevalence of sexual abuse in adults with intellectual disability: systematic review and meta-analysis. *Int J Environ Res Public Health* 2021;18:1980.
5. Mahmoodabadi HZ, Akrami L. Sexual abuse in adolescent girls and boys with mild intellectually disable. *J Community Health Res* 2021;10:128-35.
6. Divelino Y. Buku Data PPKS dan PSKS Sumatera Barat. 2020. Available from: [https://dinsos.sumbarprov.go.id/images/2020/12/file/Buku\\_Data\\_PPKS\\_dan\\_PSKS\\_Tahun\\_2020Compressed.pdf](https://dinsos.sumbarprov.go.id/images/2020/12/file/Buku_Data_PPKS_dan_PSKS_Tahun_2020Compressed.pdf)
7. Shartika NP, Yetti H, Yusda I. Analisis penyelenggaraan Puskesmas tatalaksana kekerasan terhadap anak (KtA) dalam penanganan kekerasan anak di Kota Padang. *J Kesehat Andalas*

2019;8:245-53.

8. Naz S, Ibrahim N, Sharif S, et al. Prevalence and association of different levels of intellectual disability with prenatal, perinatal, neonatal and postnatal factors. *Proc Pak Acad Sci B Life Environ Sci* 2022;58:75-82.
9. Anjum R, Rehman A, Maqsood H, et al. Intellectual disability classification, causes, epigenetic mechanisms and treatment. *Biol Clin Sci Res J* 2023;2023:245.
10. Ungurean B. Theoretical aspects of intellectual disability - definition, classification. *Bull "Transilvania" Univ Braşov Ser IX Sci Hum Kinet* 2021;14:247-52.
11. Dobosiewicz AM, Litwa E, Zmaczyńska T, Badiuk N. The etiology and psychomotor characteristics of intellectual disability. *Pedagogy Psychol Sport* 2020;6:159-64.
12. Koçtürk N, Yüksel F. Individual and familial characteristics of sexual abuse victims with intellectual disability. *Curr Psychol* 2021;42:2006-13.
13. Pedgrift K, Sparapani N. The development of a social-sexual education program for adults with neurodevelopmental disabilities: starting the discussion. *Sex Disabil* 2022;40:503-17.
14. Hinton J. Identifying sexual trauma in children with intellectual and developmental disorders. *J Am Acad Child Adolesc Psychiatry* 2022;61:36-7.
15. Hossain MK, Islam MN, Rahman MH, et al. Parental and community views on determinants of sexual abuse of adolescent girls with disabilities in Bangladesh. 2022. Available from: <https://doi.org/10.21203/rs.3.rs-2003688/v1>
16. Sekolah D. Daftar Sekolah SLB di Kota Padang Sumatera Barat Tahun 2024. 2024. Available from: <https://daftarsekolah.net/>
17. Kalgotra R, Warwal JS. Effect of an aerobic fitness programme intervention on the motor

proficiency of children with mild and moderate intellectual disabilities in india. *Disabil CBR Amp Incl Dev* 2019;29:48.

18. Nugraha AK, Mumpuniarti M. Cognitive development of mild intellectual disability for vocational training. 2019. Available from: <https://doi.org/10.2991/icsie-18.2019.12>
19. Pierce SR, Maher A. Physical activity among children and young people with intellectual disabilities in special schools: teacher and learning support assistant perceptions. *Br J Learn Disabil* 2019;48:37-44.
20. Liou WY. An Illustrated Scale Measuring the Sexual Abuse Prevention Knowledge of female high school students with intellectual disabilities in Taiwan. *Sex Disabil* 2014;32:135-51.
21. Dhestiana M. Content validity and trial test An Illustrated Scale Measuring The Sexual-abuse Prevention Knowledge-Indonesian version for Female Teenager with Mild Intellectual Disability. 2021. Available from: <https://lib.ui.ac.id/detail?id=9999920521991&lokasi=lokal>
22. Amelink Q, Roozen S, Leistikow I, Weenink J. Sexual abuse of people with intellectual disabilities in residential settings: a 3-year analysis of incidents reported to the Dutch Health and Youth Care Inspectorate. *BMJ Open* 2021;11:053317.
23. Kaya A, Yıldız G. "I think they do not know how to lie": the perceptions of legal support staff about person with intellectual disabilities/autism in Turkish legal system. *J Appl Res Intellect Disabil* 2023;36:516-28.
24. Christoffersen M. Sexual crime against schoolchildren with disabilities: a nationwide prospective birth cohort study. *J Interpers Violence* 2020;37:2177-205.
25. Goli S, Rahimi F. Experiences of teachers, educators, and school counselors about the sexual and reproductive health of educable intellectually disabled adolescent girls: a qualitative study.



Reprod Health 2022;19:96.

26. Moen K. Legal vulnerability – police officers’ stories in their meeting with people with intellectual disabilities. *Scand J Disabil Res* 2024;26:159-72.
27. Beltran-Arreche M. Perspectives of women with intellectual disabilities regarding affective sexual relationships: a systematic literature review. *Sex Res Soc Policy* 2023;21:263-78.
28. Reis O, Häbler F, Daubmann A, Chodan W. Knowledge hardly translates to reality—A randomized controlled trial on sexual abuse prevention for girls with intellectual disabilities. *Front Psychiatry* 2022;13:886463.
29. Balakrishna NBB, Joseph NV. Effectiveness of educational intervention regarding child sexual abuse on knowledge and attitude of parents. *Indian J Forensic Med Toxicol* 2022;16:180-90.
30. Howard T. Using a digital application to refresh knowledge of abuse for individuals with intellectual/developmental disabilities. 2022. Available from: <https://doi.org/10.23860/thesis-howard-thomas-2021>
31. Aprianti A, Anggraini FDP, Mubarokah K, Dewi MP. Assistance for intellectual disability teenager to prevent sexual harassment with educational films at SLB N Semarang. *Community Empower* 2022;7:1945-51.
32. Smit M. Policy on sexual abuse: a survey study amongst managers of care facilities for individuals with intellectual disability in the netherlands. *J Policy Pract Intellect Disabil* 2023;20:289-97.
33. Stobbe KJ, Scheffers M, van Busschbach JT, Didden R. Prevention and intervention programs targeting sexual abuse in individuals with mild intellectual disability: a systematic review. *J Ment Health Res Intellect Disabil* 2021;14:135-58.

34. Newby-Kew A, Horner-Johnson W. Healthy and respectful relationship education: differences by disability status and associations with sexual abuse. *J Sch Health* 2023;93:565-72.
35. Daigneault I, Paquette G, Sablonnière-Griffin M, Dion J. Childhood sexual abuse, intellectual disability, and subsequent physical and mental health disorders: a matched cohort study. *Am J Intellect Dev Disabil* 2023;128:134-44.
36. Amborski AM, Bussi eres EL, Vaillancourt-Morel MP, Joyal CC. Sexual violence against persons with disabilities: a meta-analysis. *Trauma Violence Abuse* 2021;23:1330-43.
37. Bates C, McCarthy M, Skillman K, et al. "Always trying to walk a bit of a tightrope": the role of social care staff in supporting adults with intellectual and developmental disabilities to develop and maintain loving relationships. *Br J Learn Disabil* 2020;48:261-8.
38. Smith DK, Sadler KP, Benedum M. Febrile seizures: risks, evaluation, and prognosis. *Am Fam Physician* 2019;99:445-50.

**Table 1.** Demographic characteristics of respondents.

<b>Variable</b>	<b>Frequency</b>	<b>%</b>
<b>Age (years)</b>		
Early adolescence (12-14 years)	10	20
Middle adolescence (15-17 years)	13	26
Late adolescence (18-22 years)	27	54
<b>How was the questionnaire filled out?</b>		
By the respondent herself	27	54
By interview	23	46
<b>Age at diagnosis of intellectual disability</b>		
From birth		
Between 1 and 8 years	1	2
Between 9 and 18 years	37	74
Older than 19 years	12	24
<b>Other mental/physical conditions</b>	0	0
Yes	17	34
No	33	66
<b>Disability category</b>		
Light disability	42	84
Moderate disability	8	16
<b>Residence type</b>		
With relatives/parents	50	100
<b>Sex education</b>		
Not yet	7	14

Once	43	86
<b>Sexual abuse (reported by teachers/health workers)</b>	2	4

**Table 2.** Descriptive statistics of five domains measuring sexual abuse prevention knowledge.

<b>Domain</b>	<b>Means (SD)</b>	<b>Min</b>	<b>Max</b>
Puberty Physiology (BP)	4,92 (0.944)	3	6
Body Boundaries (BB)	5,7 (0.544)	4	6
Identification of Improper Sexual Relationships (ISR)	5,10 (0.678)	3	6
Identification of Abusive Situations (IAS)	3,72 (1,526)	1	6
Coping Methods when facing abusive situations (CM)	5,18 (1.304)	1	6

SD, Standard Deviation

**Table 3.** Correlation between demographic characteristics of children with Intellectual Disabilities (ID) and sexual abuse prevention knowledge.

Demographic characteristic variables	Correlation coefficient (r)	p-value
Age	0.084	0.562
Age at diagnosis of Intellectual Disability	0.053	0.716
Other mental/physical conditions	0.326	0.021*
Disability category	-0.279	0.05*

The significance level for the p-value is set at  $<0.05$ .

Submitted: 2 June 2024

Accepted: 10 July 2024

Early access: 8 August 2024