



Norwegian Health Professionals' Attitudes Toward Addressing Sexual Health with People with Intellectual Disabilities

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Accepted: 3 July 2024
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Abstract

Introduction Staff working with individuals with intellectual disabilities face challenges addressing sexual health. Professionals in this context have diverse backgrounds and education, and little is known about their attitudes and skills in providing support for a healthy sexual life and preventing abuse. Moreover, this topic has not been explored in the Norwegian context. The current study examined health professionals' attitudes toward addressing sexual health with individuals with intellectual disabilities in Norwegian municipal health and care services.

Methods A cross-sectional study was conducted using the Norwegian version of the professionals' attitudes toward addressing sexual health among 72 health professionals working in municipal services for people with intellectual disabilities in Mid-Norway. The data was collected from November 2022 to January 2023.

Results The professionals reported feeling partially comfortable and prepared to address sexual health issues with clients. They consistently expressed a need for more basic knowledge about sexual health and training in communicating about sexuality. Attitudes toward addressing sexual health varied based on the professionals' education, gender, age, and work experience.

Conclusions More targeted training on sexual health is needed within the educational programmes in health and social sciences. Sexual health should also be continuously addressed in the workplace and among colleagues. The differences in attitudes between professionals indicate that the composition of the staff benefits from diversity.

Policy Implications Healthcare managers are responsible for ensuring greater openness and reflection on attitudes toward sexuality among individuals with intellectual disabilities in workplaces. Educational institutions must provide the necessary skill development and training in communication about sexual health for this client group.

Keywords Attitudes · Community care (municipal healthcare services) · Competence · Cross-sectional study · Intellectual disabilities · Sexual issues

Introduction

Clients' sexual health needs often challenge health professionals and can result in insufficient care and reduced quality of life and well-being for those seeking services (Fennell & Grant, 2019). The barriers can include a lack of education and competence, shyness, and a perception that sexual

health is not part of professionals' responsibilities (Fennell & Grant, 2019; Penwell-Waines et al., 2014; Young et al., 2020). Professionals' challenges in addressing sexual health are particularly evident for people with intellectual disabilities (Winges-Yanez, 2014), which is a client group that has received little attention until recently (Charitou et al., 2021).

Intellectual disability is characterised by limitations in both intellectual functioning and adaptive behaviour, which manifest in conceptual, social, and practical adaptive abilities (Schalock et al., 2021). Depending on the needs of people with intellectual disabilities, support systems and care are developed to promote the development and interests of the person and improve functioning and personal well-being (Schalock et al., 2021). Staff working with people with intellectual disabilities tend to have ambivalent attitudes and provide inconsistent answers to questions related to service

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users' sexuality (Charitou et al., 2021). A recent review showed that while healthcare personnel and family generally had positive attitudes toward sexuality, their acceptance of intimacy among people with intellectual disabilities was low and based on negative stereotypes (Correa et al., 2022). Historically, people with intellectual disabilities have been understood and treated as hypersexual and a danger to the human genetic system or as asexual with no need for sexual cohabitation with others (Griffiths et al., 2017). Professionals working in Norwegian services for people with developmental disabilities have reported that clients may express longing for a romantic relationship but struggle to know how to initiate or set boundaries for themselves and others in terms of body and sexuality (Lunde, 2014). The staff may also find it challenging to interpret clients' expressions and see their needs for sexual health (Lunde, 2014). In focus group interviews, performed in a Swedish context, Wickström et al. (2020) discovered that employees desired more education and guidance, as they lacked clear mandates and guidelines from their management to address users' needs regarding sexuality.

People with intellectual disabilities have expressed the need for more training on topics that deal with sexuality (McCann et al., 2019). Individuals reported that sexuality education is mainly about safety, consent, and biology when they desire a greater focus on relationships and sexuality (Hole et al., 2022; McCann et al., 2019). However, research also shows that people with intellectual disabilities are exposed to abuse, including sexual abuse, to a greater extent than other people (Stone, 2018). Abusers can not only be carers or family members but also other people with intellectual disabilities (Tomsa et al., 2021). Circumstances that may influence and constitute risk include power dynamics, education, and training in setting personal boundaries (Hollomotz, 2009). By adopting an ecological approach, this study highlights the role of care services and professionals' potential (exo-system, cf. Hollomotz, 2009) in minimising the risk of abuse and facilitating a sex-positive environment. The review of the literature emphasises the need to examine and address the attitudes and skills of health professionals to both provide appropriate support for a healthy sexual life and prevent abuse for people with intellectual disabilities.

The Norwegian national health authorities have stated that "sexual health is a fundamental dimension of being human and important for a good quality of life throughout the life course" (The Norwegian Health Directorate, 2021, p. 47). In line with this view, requirements are in place concerning employee competence, including organised training in 'the body and cohabitation' and 'the prevention and detection of abuse'. Moreover, employees' attitudes are addressed with the requirement that services must be characterised by tolerance, respect, and openness

about sexuality (The Norwegian Health Directorate, 2021). Like other countries, services for people with intellectual disabilities in Norway are deinstitutionalised (Walmsley & Jarrett, 2019) and provided as municipal services that include social, psychosocial, and medical (re)habilitation, home-based health care, and personal and individualised services encompassing training and social and practical support (Witsø & Hauger, 2020).

In Norway, most people with intellectual disabilities receive services organised by a group of employees providing care in or in connection with the home, which can typically be a housing cluster with separate apartments or shared housing (Tøssebro & Wendelborg, 2021). Based on residents' individual needs, staff assist with domestic duties, personal hygiene, and other daily tasks as well as facilitating participation in organised or unstructured leisure activities. Concerning background and level of education of employees, the largest group (39%) is staff with a certificate of apprenticeship in health and social work¹; the second-largest group (33%) comprises staff without formal education in health or social work, followed by staff with a university or college education, such as social education, nursing, and social work (28%) (Ellingsen et al., 2020). Among these, social educators primarily serve people with intellectual disabilities as their 'key target group' (Grung, 2016, p. 24) given the social education bachelor programme equips them with comprehensive knowledge of 'cognitive impairments, particularly intellectual disability', and 'comprehensive understanding of the life situation of people with intellectual disabilities' (Regulations on National Guidelines for Social Education, 2019, §§ 10 and 13).

However, the diverse educational backgrounds of professionals also mean providers may also possess a wide range of competence and confidence in addressing sexual health. When it comes to the degree of emphasis on topics related to sexual and reproductive health and rights in the curricula of various healthcare higher education programmes in Norway, the results are disappointing (Areskoug-Josefsson & Solberg, 2022). Those results imply both risk of lack of competence and risk of clients' needs not being met regarding sexual health. The instrument Students' Attitudes Toward Addressing Sexual Health/Professionals' Attitudes Toward Addressing Sexual Health (SA-SH/PA-SH) was developed to measure attitudes toward addressing sexual health (Areskoug-Josefsson et al., 2016a) and has been used in various professional groups and contexts. Studies involving students pursuing various health education programmes have indicated positive attitudes but

¹ For example, licensed practical nurses who have 2 years of upper secondary healthcare education and 2 years of experience as apprentices before obtaining a professional certificate.

insufficient competence and education in sexual health in Norway (Lunde et al., 2020, 2022a), Denmark (Gerbild et al., 2021), and Sweden (Areskoug-Josefsson et al., 2016a, 2019). Similar findings regarding competence and readiness have also been observed among health professionals in Denmark (Elnegaard et al., 2020) and Australia (Frawley et al., 2022), with outcomes paralleling those of students. Quantitative studies of the attitudes of professionals in services for people with intellectual disabilities are lacking, apart from the Australian study by Frawley et al. (2022).

Gender and age differences have also been identified in prior studies employing the SA-SH questionnaire. For example, Areskoug-Josefsson et al. (2016b) and Lunde et al. (2022a) found that female healthcare students were more likely than male students to acknowledge the need for sexual health education. Furthermore, Lunde et al. (2022a) found that male social educator students rated themselves as more comfortable than female students in addressing sexual health. Concerning age, Lunde et al. (2022a) found that older social educator students were less comfortable addressing sexual health than younger students. Notably, studies employing the questionnaire designed for healthcare personnel (PA-SH) have not reported either age or gender differences. However, a Norwegian study using a different measurement (Helland et al., 2013) reported that older healthcare professionals were more likely to raise sexual issues with clients compared to their younger colleagues. The role of age in addressing health issues appears to be uncertain. Although Frawley et al. (2022) aimed to investigate the significance of work experience, their limited sample size made the analysis statistically unfeasible. Variations in attitudes among different professional groups have also been documented. For example, Helland et al. (2013) reported nurses were more likely to raise sexual issues than the other professionals working within rheumatology care, with physiotherapists significantly less likely to do so.

Given these gaps in the literature, we aimed to investigate health professionals' attitudes toward addressing sexual health with people with intellectual disabilities in Norwegian municipal health and care services. More specifically, we hypothesised that attitudes toward addressing sexual health would vary depending on the professionals' education, gender, age, and work experience.

Methods

Design

We employed a cross-sectional survey design and followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guideline (von Elm et al., 2007) to strengthen the reporting of observations.

Study Setting and Participants

This study was conducted with participants of a Breakthrough Series Collaborative (BSC) called 'A sexually inclusive environment for people with intellectual disabilities', conducted between September 2022 and June 2023 (USHT, 2021). Developed by the Institute for Healthcare Improvement (IHI, 2003: 1), a BSC is a structured, time-limited 'learning system' where multiple organisations or teams seek to improve a common challenge or problem through collaborative learning. The BSC was initiated by the Centre for Development of Institutional and Home Care Services Trøndelag County in cooperation with the National Institute on Intellectual Disability, Inland Norwegian University of Applied Science and the Leadership Network for Managers in Services for People with Intellectual Disabilities in Trøndelag.

A total of 93 health professionals of care services for people with intellectual disabilities from 16 municipalities in Trøndelag County participated in the BSC. Participants formed 18 improvement teams based on the same workplace (e.g. group home) or different workplaces within the same municipality. Participation in the BSC involved attending five learning sessions (digital and physical) and working on self-chosen areas of improvement between sessions while receiving team guidance. The learning sessions, each approximately 4 h long, addressed topics of prevention and detection of abuse and adapted education on sexuality, body, identity, and related subjects. The BSC also aimed to enhance participants' knowledge regarding staff training on the topic of sexuality. Overall, the BSC aimed to enable the municipalities to create and maintain a sexually inclusive environment within care services for people with intellectual disabilities.

Data Collection

Data were collected from November 2022 to January 2023. An anonymous self-administered online survey, including the PA-SH-N, was distributed to all participants of the previously described BSC with the tool 'Nettskjema' (University of Oslo). The research group tested the online version of the PA-SH-N prior to distribution, which led to minor changes in the layout to ensure usability and technical functionality.

A link to the online survey was forwarded by email to the BSC participants by a contact person at the Centre for Development of Institutional and Home Care Services Trøndelag County. The email included information explaining the aim of the study that participation in the study was voluntary and that confidentiality would be maintained. To promote a high response rate, three reminder emails were sent. Reminders were also given by the contact person during two of the BSC learning sessions.

Measures

The PA-SH-N is a modified version of the original SA-SH (Areskoug et al., 2016a), the extended Norwegian version (SA-SH-Ext; Lunde et al., 2022b), and the Danish version for professionals (PA-SH-D; Elnegaard et al., 2022). The original Swedish questionnaire (SA-SH; Areskoug-Josefsson et al., 2016a) was developed to measure both attitudes and competencies toward addressing sexual health among students in healthcare professions. Since then, the SA-SH has been translated and validated into multiple languages and is also used outside of Scandinavia (Felter, 2020; Lynch & Joosten, 2022; Turan et al., 2021). The extended version has also been used in a modified version for professionals working with people with intellectual disabilities in Australia (Frawley et al., 2022). Thus, the PA-SH-N is considered valid and reliable for measuring health professionals' attitudes toward addressing sexual health in municipal healthcare services for people with intellectual disabilities.

The PA-SH-N consists of 22 items and the response options and analysis follow the original SA-SH (Areskoug et al., 2016a). The items are divided into four domains: feelings of comfortableness (Items 1–9), fear of negative influence on client relations (Items 10–15), working environment (Items 16–18), and educational needs (Items 19–22). The items are measured using a 5-point Likert scale ('disagree', 'partly disagree', 'partly agree', 'agree', and 'strongly agree'). The responses 'strongly agree' and 'agree' are considered positive for positively loaded items, and 'disagree' and 'partly disagree' are considered negative for negatively loaded items. The response 'partly agree' is considered neutral, which differs from the original SA-SH but is according to the results of the Rasch analysis of the SA-SH (Areskoug-Josefsson & Rolander, 2020). Items 9–14 and 16–18 are reversed for analysis, as these items were phrased in the negative. In addition, all responses were converted to numeric values from 1 to 5, where 5 is the most positive value and 1 is the most negative value. A total score was created by summing up the responses (1–5) in all 22 items (possible total score is between 22 and 110). The PA-SH-N including all 22 items showed a good internal consistency (Cronbach's $\alpha = 0.801$). In addition to responses to the PA-SH-N, demographic information and details regarding education and employment conditions were also gathered.

Analysis

Background variables and each of the 22 items within the PA-SH-N questionnaire were analysed by descriptive statistics and expressed as frequencies and percentages. To analyse differences in attitudes toward sexual health among subgroups, a total score was first created by summing up responses (1–5) for all variables. Next, an independent

sample *t*-test and one-way ANOVA were performed to determine if statistically significant differences existed between means of the total score across groups. The statistical significance level was set to $p \leq .05$. The statistical analyses were performed with IBM SPSS version 28 (IBM Corp, Armonk, NY, USA).

Compliance with Ethical Standards

The processing of personal data was approved by the Norwegian Agency for Shared Services in Education and Research (project no. 981521). The participants received written information about the study by email and answered the survey digitally. They were informed that participation was voluntary and that answering was considered consent to participation. They had the opportunity to change or delete their answers during the data collection. The participants consented to participate by answering the survey.

Results

Sample Characteristics

The response rate was 77%, with a total of 72 responders of 93 invited. The participants represented various municipalities categorised by population size: 38.9% from large municipalities (more than 15,000 inhabitants), 37.5% from medium-sized municipalities (5000 to 15,000 inhabitants), and 23.6% from small municipalities (fewer than 5000 inhabitants). As illustrated in Table 1, most participants were female (86%) and were 30 years or older (88%). Just over half of the sample (53%) were in full-time employment, and most of the participants (74%) had 6 or more years of experience working in municipal healthcare services for people with intellectual disabilities. Over half of the participants (54%) had a bachelor's degree (social educators, registered nurses, child welfare educators, and social workers). Among those pursuing further education (following professional education or a certificate of apprenticeship) (44%), mental health was the most common field. Two-thirds of those with further education also had a bachelor's degree (60%).

The mean total score for the PA-SH-N across the entire sample was 79.8 ($SD = 8.24$, range = 60–99). As shown in Table 2, the only statistically significant difference between subgroups was observed concerning further education ($M = 77.66$, $SD = 8.12$) vs. non-further education ($M = 81.55$, $SD = 8.02$, $p = .046$).

Responses at the item level, which were categorised as negative, neutral, and positive (see Table 3), showed that professionals generally reported a relatively high level of comfort when discussing sexual health with clients, irrespective of clients' ages, cultural backgrounds, or sexual

Table 1 Characteristics of the participants ($N=72$)

Characteristics	<i>n</i>	%
Age (years)		
20–29	9	12.5
30–39	21	29.7
40–49	26	36.1
50–59	12	16.7
≥ 60	4	5.6
Gender		
Male	10	13.9
Female	62	86.1
Occupational groups		
Social educator ^a	21	29.2
Registered nurse ^a	10	13.9
Licensed practical nurse ^b	17	23.6
Child and youth worker ^b	7	9.7
Child welfare educator ^a	5	6.9
Social worker ^a	3	4.2
Assistant	7	9.7
Others	2	2.8
Further education		
Yes	32	44.4
No	40	55.6
Experience from ID care services ^c		
≤ 5 years	19	26.4
≥ 6 years	53	73.6
Working time fraction (%)		
100	38	52.8
76–99	19	26.4
50–75	13	18.1
20–49	1	1.4
< 20	1	1.4

^aHigher education (bachelor's degree)^bLower education (upper secondary school)^cID intellectual disabilities

orientations. However, they expressed less confidence when it came to discussing specific sexual activities (Item 8). A large proportion of respondents (95%) stated that they would not feel embarrassed if clients initiated conversations about sexual issues. Nonetheless, they were more uncertain about whether clients might experience discomfort or embarrassment if professionals broached sexual topics. Only a small minority (1%) expressed concern that discussions about sexual health could create tension in the professional–client relationship. Broad agreement that colleagues would not feel uncomfortable if sexual topics were discussed (Item 16) was also noted. However, responses varied regarding whether colleagues might exhibit restraint or discomfort when addressing questions about clients' sexual health. A majority of participants (78%)

Table 2 Mean total scores for attitudes toward addressing sexual health ($N=72$)

Characteristics	<i>n</i>	Mean (SD) ^a	<i>p</i> -value
Age (years)			0.139
20–29	9	80.33 (9.92)	
30–39	21	82.90 (7.68)	
40–49	26	77.27 (8.02)	
≥ 50	16	79.63 (7.63)	
Gender			0.147
Male	10	76.30 (6.20)	
Female	62	80.39 (8.43)	
Education ^b			0.526
With higher education	39	79.59 (8.94)	
With lower education	24	80.88 (7.44)	
No formal	7	76.86 (7.54)	
Further education			0.046
Yes	32	77.66 (8.12)	
No	40	81.55 (8.02)	
Experience from ID care services ^c			0.710
≤ 5 years	19	79.21 (8.27)	
≥ 6 years	53	80.04 (8.30)	
Position size			0.138
Full-time	38	81.18 (8.18)	
Part-time	34	78.29 (8.16)	
Manager position			0.956
Yes	6	88.00 (5.76)	
No	66	79.80 (8.46)	

^aStandard deviation^bTwo missing: response category 'others'; higher education (bachelor's degree); lower education (upper secondary school)^cID intellectual disabilities

reported having adequate time at work to address sexual issues. Conversely, only 17% believed they possessed sufficient competence to engage in conversations about sexual health with clients (Item 21), and more than half of the professionals indicated that they had not received training in sexual health during their education.

Comparisons of mean scores on the different items revealed significant variations between subgroups. These discrepancies were observed in terms of gender (Items 1, 11, 19) and age groups (Items 11, 22) as reported in Table 4 and education (Item 20), further education (Items 3, 4, 6, 19), and work experience (Items 12, 15, 17, 19) as reported in Table 5.

Specifically, men reported a higher level of comfort in providing information to clients about sexual health compared to women. Conversely, women were less inclined than men to believe that clients would feel embarrassed if the topic of sexuality were broached, and they agreed to a greater extent that their educational background had

Table 3 PA-SH-N item responses ($N=72$)

PA-SH-N item	Negative (%)	Neutral (%)	Positive (%)
1. I feel comfortable informing clients about sexual health	2.8	25.0	72.2
2. I feel comfortable initiating a conversation regarding sexual health	5.6	34.7	59.7
3. I feel comfortable discussing sexual health with clients	2.8	25.0	72.2
4. I feel comfortable about discussing sexual health issues with clients regardless of their sex	6.9	23.6	69.5
5. I feel comfortable about discussing sexual health issues with clients regardless of their age	6.9	33.3	59.8
6. I feel comfortable about discussing sexual health issues with clients regardless of their cultural background	8.3	33.3	58.4
7. I feel comfortable about discussing sexual health issues with clients regardless of their sexual orientation	4.2	25.0	70.8
8. I feel comfortable about discussing specific sexual activities with clients	18.1	43.1	38.8
9. I am unprepared to talk about sexual health with clients (R) ^a	13.9	36.1	50.0
10. I believe that I might feel embarrassed if clients talk about sexual issues (R)	0	5.6	94.5
11. I believe that clients might feel embarrassed if I bring up sexual issues (R)	22.2	55.6	22.3
12. I am afraid that clients might feel uneasy if I talk about sexual issues (R)	15.3	59.7	25.0
13. I am afraid that conversations regarding sexual health might create a distance between me and the clients (R)	1.4	18.1	80.5
14. I believe that I have too much to do in my profession to have time to handle sexual issues (R)	5.6	16.7	77.8
15. I take time to deal with clients' sexual issues in my profession	19.5	36.1	44.4
16. I am afraid that my colleagues would feel uneasy if I brought up sexual issues with clients (R)	6.9	20.8	72.3
17. I am afraid that my colleagues would feel uncomfortable in dealing with questions regarding clients' sexual health (R)	13.9	38.9	47.2
18. I believe that my colleagues will be reluctant to talk about sexual issues (R)	8.3	33.3	58.3
19. In my education, I have been educated about sexual health	52.7	27.8	19.5
20. I think that I as a student needed to get basic knowledge about sexual health in my education	2.8	16.7	80.5
21. I have sufficient competence to talk about sexual health with my clients	33.4	50.0	16.7
22. I think that I needed to be trained to talk about sexual health in my education	7.0	15.3	77.8

^aR reversed item

included sexual health. Regarding age groups, the youngest professionals (20–29 years old) exhibited a lower degree of concern compared to older respondents that clients might experience embarrassment if discussions about sexuality were initiated. Additionally, the youngest age group placed a greater emphasis on the importance of receiving training during their education compared to other age groups.

Professionals with higher education (bachelor's degree) also placed greater importance on the necessity of

fundamental knowledge regarding sexual health compared to groups with lower educational backgrounds. Respondents without further education reported feeling more comfortable addressing sexual health with clients compared to those with further education.

Regarding work experience, professionals with less than 5 years of experience reported the highest level of concern that clients might feel uncomfortable discussing sexuality. The same applied to thoughts that colleagues could feel

Table 4 Significant differences in single item mean scores for gender and age (mean, standard deviation)

Items	Gender			Age, years				<i>p</i> -value
	Male	Female	<i>p</i> -value	20–29	30–39	40–49	≥ 50	
1 I feel comfortable about informing clients about sexual health	4.00 (0.00)	3.77 (0.71)	.015					
11 I believe that clients might feel embarrassed if I bring up sexual issues	2.40 (0.84)	3.06 (0.87)	.027	3.44 (1.13)	2.86 (0.91)	2.69 (0.84)	3.31 (0.60)	.046
19 In my education, I have been educated about sexual health	1.70 (0.95)	2.65 (1.07)	.011					
22 I think that I needed to be trained to talk about sexual health in my education				4.78 (0.44)	4.33 (0.86)	3.69 (0.97)	3.88 (0.89)	.006

Table 5 Significant differences in single item mean scores for education and experience (mean, standard deviation)

Items	Formal education			Further education			Experience ID services ^a		
	Bachelor	Upper secondary	None	Yes	No	p-value	≤5 years	≥6 years	p-value
3 I feel comfortable about discussing sexual health with clients				3.66 (0.70)	4.00 (0.68)	.039			
4 I feel comfortable about discussing sexual health issues with clients regardless of their sex				3.50 (0.80)	4.03 (0.73)	.006			
6 I feel comfortable about discussing sexual health issues with clients regardless of their cultural background				3.41 (0.80)	3.85 (0.83)	.025			
12 I am afraid that clients might feel uneasy if I talk about sexual issues							2.79 (0.63)	3.23 (0.72)	.023
17 I am afraid that my colleagues would feel uncomfortable in dealing with questions regarding clients' sexual health							3.00 (0.94)	3.55 (0.80)	.017
20 I think that I as a professional needed to get basic knowledge about sexual health in my education	4.33 (0.58)	4.08 (0.97)	3.43 (0.79)			.016			
22 I think that I needed to be trained to talk about sexual health in my education							4.42 (0.77)	3.92 (0.96)	.046

^aID intellectual disabilities

discomfort when dealing with sexual problems. Those with less than 5 years of experience also stated to a greater extent than more experienced employees that the education should cover training in talking about sexual health.

We also examined possible differences between employees with an educational background in social studies ($n = 36$) versus health subjects ($n = 27$), but no significant differences were found in the total score or at item levels ($p = .74$).

Discussion

In this study, we investigated health professionals' attitudes toward addressing sexual health with people with intellectual disabilities in Norwegian municipal health and care services. The average total score on the PA-SH-N was 79.8 out of a possible total score of 110, suggesting that health-care personnel in this study feel partially comfortable and prepared to address sexual health matters with people with intellectual disabilities. The hypothesis regarding differences in attitudes was supported, as several mean scores for single items on the PA-SH-N exhibited significant variation among subgroups based on education, gender, age, and work experience. However, when comparing the mean total scores, significant differences between subgroups were only observed concerning further education.

When looking at single-item scores, the professionals in our study reported feeling relatively comfortable with discussing sexual health with clients, with a positive response rate ranging from 58 to 78% (Items 1–7). This result is in close alignment with what Norwegian social educator students reported in the study conducted by Lunde et al. (2022a). However, the percentage is notably lower than the level reported by Australian professionals in the study by Frawley et al. (2022), where their positive responses ranged between 81 and 98% in the same domain. One explanation for this difference could be that many of the professionals in Frawley et al.'s study worked in specialised sexual health services, potentially making them more experienced in discussing sexual health with clients. This variation in working context could also possibly explain why our sample, to a greater extent than Frawley's, expressed less confidence when it came to discussing specific sexual activities.

Only 17% of the professionals in our study believed they possessed adequate competence to discuss sexual health with their clients. This proportion is identical to that among the students in Lunde et al.'s (2022a) study but considerably lower than the professionals in the study conducted by Frawley et al. (2022), where the proportion was 77%. A similar pattern applies to training, with more than half (53%) of the professionals in our study reporting not receiving training in sexual health during their education, compared to the professionals in Frawley et al.'s study (40%). The

impression of a lack of education was reflected in a mapping of higher education in Norway by Areskoug-Josefsson and Solberg (2022), who found that sexual and reproductive health and rights were generally not adequately integrated into educational programmes. Moreover, the respondents in the present study had recently started participating in the BSC (USHT, 2021), which may have made them more aware of their lack of knowledge and competence in this area.

Participants' level of education also was significant, with respondents with higher education emphasising the importance of having basic knowledge about sexual health more than those with lower education. However, we found that those with further education reported a lower level of comfort compared to those without further education. The most prevalent form of further education was within mental health, and sexual health is not necessarily emphasised within this subject. Advancing one's education may also highlight areas where specialised knowledge is lacking. Another plausible explanation is the Dunning-Kruger Effect (Kruger & Dunning, 1999), which suggests that individuals with lower competence may overestimate their abilities due to a lack of insight into their level of expertise. Due to the limited sample size, we were unable to conduct statistical analyses to control for potential confounding variables.

We found gender differences in our study, but few men were included in the sample, and the results must be interpreted with caution. Like Lunde et al. (2022a) and Areskoug-Josefsson et al. (2016b), we found that men reported a higher comfort level than women regarding informing clients about sexual health. At the same time, we found that women, to a lesser extent than men, believed that clients would feel embarrassed if sexuality were addressed. However, women reported that their education had included sexual health to a greater extent than men. These gender differences may be due to personal and contextual factors or may also be related to the gender and age of clients. To gain greater insight into these differences, future studies should employ qualitative methods.

Age-related differences were also observed, with younger professionals expressing less concern compared to older ones about discussions on sexuality being met with embarrassment by clients. This is consistent with Lunde et al. (2022a), who found that younger students were more comfortable addressing sexual health than older students. However, Helland et al. (2013) found the opposite: older professionals more frequently addressed sexual issues with patients than their younger colleagues. Notably, Helland's study was conducted with professionals working within rheumatology care using a different questionnaire. Further, a correlation between age and work experience could also be a contributing factor. As seen in our results, professionals with the least work experience in services for individuals with intellectual disabilities had the greatest concern that

clients or colleagues may feel embarrassed when sexuality is addressed. The significance of work experience does not always follow the professional's age. Some respondents may have relatively little experience in this type of service even though they are relatively older because they may have worked in other services previously. The length of time professionals has spent in the work context has also been shown to be decisive for attitudes to sexuality within elder care (Haesler et al., 2016).

The results document a lack of knowledge and what can be interpreted as a cautious attitude among staff in addressing sexual health issues with clients with intellectual disabilities, which is concerning. Clients in this context are notably reliant on staff members proficient in managing such issues. As persons with intellectual disabilities are at risk for violence and sexual abuse, there are municipalities in Norway that have implemented the violence and abuse prevention programme (VIP) for persons with intellectual disabilities (Åker et al., 2023, 2024). The VIP programme can support people with an intellectual disability discussing their education and support needs to reduce risk of violence and abuse; therefore, a wider implementation of the VIP programme in Norway can be recommended. However, the VIP programme requires staff and management that are engaged and have competence also in sexual health to achieve optimal results (Åker et al., 2023, 2024). In our study, professionals consistently reported a need for additional basic training in sexual health, which argues for more specialised training in sexual health within educational programmes in health and social sciences. Our results also suggest that variations in attitudes toward addressing sexual health may be attributed to differences in professionals' education, gender, age, and work experience. However, further research with a larger sample size controlling for other background factors is necessary before we can conclude statistical relationships. Professionals' attitudes influence the provision of sexual health care for clients (West et al., 2012). Knowledge, a determinant of attitudes, requires enhancement through formal education programmes. Other research emphasises the necessity for guidelines and a clear mandate from management (Wickström et al., 2020). Additionally, discussions on attitudes should be incorporated into working communities, leveraging the diverse composition of employees in terms of gender, age, and educational background for optimal benefit.

Strengths and Limitations

The adaptation and use of an established questionnaire increase the possibility of comparing our results with other studies and add to the value of the study. Although the instrument has been adopted and validated for Norwegian students in health professions (Lunde et al., 2022b), we will publish a separate validation of the instrument for use among

professionals. Lunde et al. (2022b) employed an extended version (SA-SH-Ext), making direct comparisons challenging. Comparisons of internal consistency reliability between Elnegaard et al. (2022), used among Danish employees and the present study, show that Cronbach's alpha for the total scale was 0.89 and 0.80, respectively.

The high response rate indicates that the respondents consider the topic to be relevant to them. However, the invited participants come from a selected group (i.e. participants of an improvement project in a specific county), which may affect the transferability of the results. The present study enables the measurement of changes in attitudes toward addressing sexual health after the participants have completed the improvement project. The sample size limits the opportunities to conduct regression analyses, which could have provided more information about relationships or covariations.

Conclusion

The results showed that professionals in this study felt partially comfortable and prepared to address sexual health issues with people with intellectual disabilities. The professionals consistently expressed a need for more basic knowledge about sexual health and training in communicating about sexuality, which implies efforts are needed to improve education for health and social studies. The results also indicated that attitudes toward addressing sexual health varied based on the professionals' education, gender, age, and work experience. The differences indicate that staff diversity benefits both clients and colleagues through increased confidence and competence when discussing sexual health.

Considerable uncertainty remains regarding how professionals' attitudes concerning addressing sexual health influence service, the factors influencing these attitudes, and the implications of such attitudes for people with intellectual disabilities. Further research is warranted that encompasses not only quantitative studies with larger sample sizes but also qualitative investigations.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s13178-024-01009-z>.

Acknowledgements The authors would like to extend their gratitude to the Centre for Development of Institutional and Home Care Services in Trøndelag, particularly Gro Nina Helberg, for her assistance with the data collection.

Author Contribution Siri Andreassen Devik, Stine Marlen Henriksen, and Rose Mari Olsen contributed to the study conception and design. Material preparation, data collection, and analysis were performed by Siri Andreassen Devik, Stine Marlen Henriksen, and Rose Mari Olsen. The first draft of the manuscript was written by Siri Andreassen Devik, Stine Marlen Henriksen, and Rose Mari Olsen, and Kristina

Areskoug-Josefsson commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Funding Open access funding provided by Nord University This project was conducted in collaboration with The Norwegian Association for Persons with Intellectual Disabilities (NFU) and funded by the Norwegian Dam Foundation (Stiftelsen Dam) (grant number: HEL-437177).

Availability of Data and Material The dataset generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Code Availability All reasonable requests for code relevant to the analyses of this paper will be met.

Declarations

Ethics Approval The processing of personal data was approved by the Norwegian Agency for Shared Services in Education and Research (project no. 981521).

Consent to Participate The participants received written information about the study by email and answered the survey digitally. They were informed that participation was voluntary and that answering was considered consent to participation. They had the opportunity to change or delete their answers during the data collection. The participants consented to participate by answering the survey.

Competing Interests The authors declare no competing interests.

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