School-Level Curricula for Sexuality Education in Nepal Considering International Technical Guidance on Sexuality Education 2018

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Received Date: February 21, 2025; **Reviewed Date:** March 22, 2025
Accepted Date: April 25, 2025

ABSTRACT

There is an enormous need for sexuality-related information for adolescents and young people due to rapid psycho-social and bodily changes occurring during the most transitional periods of life, but there is no or less access to such information at home. The sexuality education curriculum is thus required to take the lead in schools formally. The purpose of this study was to critically analyze the current sexuality education curricula of grades 1 to 12 of the Government of Nepal (GoN) concerning International Technical Guidance on Sexuality Education (ITGSE) 2018. A desk review of the curricula of grades 1 to 12 was done. Before this, the present curriculum structure and contents related to sexuality education were understood through a discussion with curriculum planners and curriculum officers at the Curriculum Development Center (CDC), Nepal. A thorough evaluation of Nepal's current curriculum of Comprehensive Sexuality Education (CSE) for grades 1 to 12 identifies both its advantages and areas for improvement. It revealed significant flaws in the design and structure of the curriculum, including limitations on the inclusion of sexuality-related topics and a lack of vertical organization. Across the curriculum, several significant concepts and topics were not thoroughly addressed at different levels. It is critical to create a CSE curriculum that covers the whole range of sexuality-related issues, assures age-appropriate content, and fosters students' holistic awareness of sexuality and reproductive health to solve these shortcomings.

Keywords: Adolescents, Comprehensive Sexuality Education, curriculum, health education, ITGSE 2018

Introduction

Sexuality Education (SE) is an age-appropriate and culturally relevant approach to teaching sex and relationships by providing scientifically accurate, realistic, and non-judgmental information (UNESCO, 2009). It is effective among children and adolescents in developing responsible sexual behaviors, relationships, and addressing their health needs. Comprehensive Sexuality Education (CSE) is a novel approach to SE that strengthens young people's civic engagement, empowers individuals and communities, and fosters the development of a just and caring society (UNESCO et al., 2018). CSE enables children and young people to develop: accurate and age-appropriate knowledge, attitudes, and skills; positive values, including respect for human rights, gender equality and diversity, and attitudes and skills that contribute to safe, healthy, positive relationships (UNESCO, 2009; UNESCO et al., 2018).

SE empowers young people to avoid negative health consequences, talk about sex and sexuality health, understand healthy and unhealthy relationships, understand the autonomy of the body and respect the physical autonomy of others, show dignity and respect for all, sexual orientation, gender identity, as well as a youth (Helmer et al., 2015). CSE is highly encouraged by the United Nations (UN) for its potential to contribute to achieving Sustainable Development Goals (SDGs) such as ending poverty, good health and well-being, quality education, gender equality, and reduced inequalities (Gratzer & Keeton, 2017). The SE is necessary for adolescents and young people because they undergo various psycho-social and bodily changes. However, most families in Nepal are reluctant to provide this education at home. Talking about sex and sexuality is a taboo in Nepal. Therefore, school is a suitable institution where SE can be provided systematically (Iudici, 2015). Just as school teachers play a crucial role in providing sexuality and reproductive health education, education also plays a vital role in guiding and changing young people's behavior (Acharya et al., 2009).

From early childhood to adolescence, young people need information and skills to have healthy and safe sexual and reproductive lives (WHO, 2003). Such skills nurture a positive relationship. It all depends on SE (Panchaud et al., 2019). In the early years of adolescence, primary schools also play an essential role for adolescents to provide age-appropriate SE on the right-based perspectives (Roeser et al., 1996). A school plays a vital role in promoting the Sexual and Reproductive Health (SRH) of adolescents (Schalet et al., 2014). However, many young people are beyond the reach of reliable information about sex and sexuality. They neither get holistic informative reading materials on sexuality nor are they supported by their teachers/schools in this regard.

Nepal is a signatory of the International Conference on Population and Development (ICPD) and endorsed it beyond the 2014 review document, where the need for CSE is highlighted. Nepal has introduced sexuality education in its school curriculum since 2000 AD. However, questions are frequently raised about its effectiveness to date. The curriculum for sex education should be relevant, engaging, and developmentally suitable with clear progressive avenues for learning experience (Acharya et al., 2019). Therefore, in light of the ITGSE 2018, this study aimed to critically evaluate the existing school education curriculum used by the GoN up to 12 grades.

Methods

The study utilized a test-based analysis approach to examine Nepal's written curriculum and textbooks of secondary level that constitute up to grade 12 from grade one. The researchers conducted an extensive review of the existing school education curriculum, focusing on the curriculum of each grade. The review aimed to critically analyze the curriculum content based on the ITGSE 2018. The first author conducted a desk review of relevant literature, including the ITGSE 2018 to gather additional insights. Moreover, the first author held discussions with the curriculum officer at the CDC and curriculum designers responsible for grades 1 to 3, 4 to 8, and 9 to 12. These discussions provided valuable input on the structure and content of the current curriculum related to SE. By employing a combination of curriculum analysis, literature review, and stakeholder consultations, this study ensured a comprehensive examination of the existing CSE curriculum in Nepal. It allowed for an in-depth understanding of the curriculum's strengths, weaknesses, and areas for improvement following the ITGSE 2018.

Results

The school curriculum of Nepal does not include CSE as a separate curriculum but includes various courses as a formal and hidden curriculum. Contents related to SE are primarily included in Health Education (HE) courses in grades four to 12 in Nepal. The integrated curriculum of grades 1 to 3 does not explicitly include matters of SE, even in e HE as suggested by ITGSE 2018. Health, Physical and Creative Arts courses in grades 4 and 5 also include selected contents on Menstrual Hygiene Management (MHM) only. Whatever the contents of SE included in the grades 6 to 8 in Health, Physical and Creative Arts courses are also not framed under CSE.

The curriculum includes essential topics such as personal cleanliness, reproductive health, and sexual and reproductive anatomy, which are covered in

various grade levels (UNESCO et al., 2018). This provides students with essential knowledge about their bodies and fundamental aspects of sexual and reproductive health. However, the curriculum has significant gaps, particularly in topics related to relationships, gender, and sexual behavior. These areas are either partially included or not directly related to sexuality, limiting the comprehensive nature of the curriculum. Furthermore, more specified coverage for essential topics such as values, rights, culture, and media literacy may help students' understanding of these aspects (UNESCO et al., 2018). The overall impression of the curriculum of grades 1 to 12 of the GoN is detailed as follows.

CSE in Grades 1 to 3

Based on the ITGSE 2018, it is recommended that sexuality education be integrated into the curriculum at all grade levels. However, in the case of grades 1 to 3 in Nepal, the provided information indicates that CSE needs to be specifically mentioned and that HE is integrated with other subjects.

Table 1

CSE contents included in grades 1 to 3

Grades	Type of Curriculum	Scope (Units)	Contents related to CSE	Unit Credits	Content Credits
1, 2, 3	Compulsory; Health Education integrated with other subjects	Not applicable (NA)	NA	NA	NA

Since the curriculum does not explicitly mention CSE for these grades, it can be assumed that there is no CSE provided at this level. It is important to note that the absence of explicit mention does not necessarily mean that no aspects of SE are covered. Some fundamental health and personal hygiene aspects may be addressed within the context of integrated health education.

However, for a comprehensive and age-appropriate approach to SE, it is recommended to introduce the key concepts and topics of SE at an early age, starting from grade 1. This includes teaching children about body parts, personal boundaries, relationships, consent, and respect. Children can develop a healthy understanding of their bodies, relationships, and personal well-being by providing age-appropriate and accurate information at an early stage. Therefore, Nepal needs to consider incorporating CSE into the grades 1 to 3 curriculum to provide children with the knowledge and skills necessary for their holistic development and well-being.

CSE in Grades 4 to 8

Based on the ITGSE 2018, the curriculum for grades 4 to 8 about SE was found as follows:

Table 2

CSE contents included in grades 4 to 8

Grades	**Type of Curriculum**	**Scope (Units)**	**Contents related to CSE**	**Unit Credits**	**Content Credits**
4	Compulsory: Integrated with Physical education and Creative arts	Unit 1: Personal cleanliness	- Introduction to Menstruation - Menstruation is a natural and inherent process	4	1
5	Compulsory: Integrated with Physical education and Creative arts	Unit 1: Personal cleanliness	- Safety behaviors during menstruation - Role of Family and friends during menstruation	4	1
6	Compulsory: Integrated with Physical education and Creative arts	Unit 7: Sexual and reproductive health	- Introduction to adolescence and changes - Problems of adolescence and management - Menstruation is a natural and inherent process - Factors to be considered during menstruation (Menstrual pain management, nutrition management, cleanliness of reproductive organs, and physical exercise) - Introduction to menstrual hygiene and sanitation management - Introduction to wet dreaming and methods of management	5	5
7	Compulsory: Integrated with Physical education and Creative arts	Unit 7: Sexual and reproductive health	- Introduction to gender identification and sexual orientation - Effects of myths and superstitions of menstruation on reproductive health - Safer sexual behavior - Identification of sexual abuse	6	6

			- Unexpected pregnancy and safe abortion - Role of adolescents in sexual and reproductive health		
8	Compulsory: Integrated with Physical education and Creative arts	Unit 1: Human body	- Introduction to the reproductive system - Organs of male and female reproductive systems - Introduction to sperm production, ovum production, ovulation, conception	5	3
		Unit 4: Disease	- Introduction, cause, and prevention of Sexually transmitted infections	5	1
		Unit 7: Sexual and reproductive health	- Introduction to contraception - Methods of contraception - Adolescent-friendly sexual and reproductive health service - Positive behavior towards people with HIV and AIDS - Menstrual cycle - Preparation and use of reusable sanitary pads in menstrual hygiene management - Proper selection, use, and disposal of sanitary pad	6	6

Personal cleanliness in grade 4 introduces menstruation and emphasizes that menstruation is a natural and inherent process. This unit provides students with basic information about menstruation, focusing on promoting an understanding of menstruation as a normal bodily process. The unit addresses misconceptions or stigmas surrounding menstruation and fosters a positive attitude. It is credited with four units, indicating its significance, and has one content credit, specifying the specific content related to menstruation within the broader topic of personal cleanliness.

Personal cleanliness in grade 5 focuses on safety behaviors during menstruation and the role of family and friends. This unit aims to educate students about maintaining personal hygiene and practicing safety measures during menstruation. It covers topics such as ‘proper menstrual hygiene practices, the use of menstrual hygiene products, and the role of family and friends in supporting individuals

during menstruation'. The unit is credited with four units, highlighting its importance, and has one content credit dedicated to the specific content related to 'safety behaviors and social support during menstruation'.

SRH covers various topics related to adolescence. It includes discussions on the changes that occur during adolescence, problems commonly experienced during this phase and their management, the natural process of menstruation, factors to consider during menstruation such as menstrual pain management, nutrition, cleanliness of reproductive organs, and physical exercise, introduction to Menstrual Hygiene and Sanitation Management (MHSM), and an introduction to wet dreaming and methods of management. This unit provides students with comprehensive information about SRH, focusing on the physical and emotional changes experienced during adolescence and managing related challenges. It is credited with five units, indicating its significance, and has five content credits representing the extensive content coverage within this unit.

These curriculum components aim to provide students with accurate knowledge, promote positive attitudes, and develop essential life skills related to menstruation, personal hygiene, and sexual and reproductive health during the respective grade levels. Introduction to gender identification and sexual orientation is a topic that aims to promote understanding and acceptance of diverse gender identities and sexual orientations. Effects of myths and superstitions of menstruation on reproductive health is another topic that addresses the negative impacts of myths and superstitions surrounding menstruation on reproductive health and encourages evidence-based knowledge.

The next topic on safer sexual behavior aims to educate students on responsible sexual behavior, emphasizing the importance of consent, communication, and safe practices. 'Identification of sexual abuse' as a topic aims to raise awareness about sexual abuse, teaching students how to recognize and respond to situations involving sexual abuse. Unexpected pregnancy and safe abortion topics provide information on unintended pregnancies and safe abortion services, emphasizing the importance of informed decision-making and accessing appropriate healthcare. Similarly, the role of adolescents in sexual and reproductive health topics highlights the active role that adolescents can play in promoting sexual and reproductive health, including advocating for their rights and accessing healthcare services.

The human body in grade 8 introduces students to the reproductive system, including the organs of the male and female reproductive systems. It provides a foundational understanding of the structures and functions involved in human reproduction. The disease unit focuses on the introduction, causes, and prevention

of sexually transmitted infections (STIs). It provides information on the transmission, common types, and preventive measures of STIs. Similarly, another unit Sexual and Reproductive Health covers a wide range of topics, including the introduction to contraception which familiarizes students with different contraceptive methods available, highlighting their effectiveness, usage, and considerations. Students also get an opportunity to learn about various contraception methods, including hormonal and barrier methods, and their respective benefits and limitations.

Adolescent-friendly sexual and reproductive health service is another topic that emphasizes the importance of accessible and youth-friendly healthcare services for sexual and reproductive health needs. Positive behavior towards people living with HIV and AIDS (PLHA)-related topics aim to reduce the stigma and discrimination associated with HIV and AIDS, promoting empathy, understanding, and supportive behavior. The menstrual cycle topic helps students learn about the menstrual cycle, including its phases, duration, and related physiological changes. Preparation and use of reusable sanitary pads in menstrual hygiene management-related topics introduce students to eco-friendly menstrual hygiene products and their proper use. Topics on 'proper selection, use, and disposal of sanitary pads' also help students learn about the importance of selecting appropriate sanitary pads, correct usage, and safe disposal practices.

These curriculum components aim to provide students with comprehensive knowledge, foster positive attitudes, and develop essential skills related to sexual and reproductive health, gender identity, contraception, menstrual hygiene, and prevention of sexually transmitted infections.

CSE in Grades 9 to 12

Aligned to the ITGSE 2018, the curriculum for Grades 9 to 12 focuses on CSE. It is offered as elective courses integrated with physical education. These grades offer elective courses that integrate CSE with physical education. The curriculum covers various topics related to sexuality, reproductive health, and personal development.

Table 3

CSE contents included in grades 9 to 12

Grades	Type of Curriculum	Scope (Units)	Contents related to CSE	Unit Credits	Content Credits
9	Elective; Integrated with	Unit 3: CSE	- Concept, objectives, and importance of sexuality education	15	15

	Physical education		- Sexuality in adolescence and its management - Management of menstruation-related problems in adolescence - Preparation, use, and management of sanitary pad - Problems of teenage marriage, pregnancy, and motherhood and ways to be safe		
10	Elective; Integrated with Physical education	Unit 3: CSE	- Elements of CSE - Problems of pre-marital and extra-marital relationships and methods of management - Safer sexual behaviors - Menstruation-related religious beliefs, myths, and restrictions - Importance of menstrual hygiene management - Efforts on menstrual hygiene management in Nepal	15	15
11	Elective; Integrated with Physical education	Unit 5: Reproductive health	- Meaning of reproductive health - Elements of reproductive health - Male reproductive system - Female reproductive system - Menstruation cycle and menstrual hygiene management - Menstruation related culture and its effects in Nepal - Pregnancy and prenatal care	15	15

			- Postpartum period and post-natal care - Methods of birth control		
12	Elective; Integrated with Physical education	Unit 5: Sexual health	- Meaning and importance of sexual health - Prevention and protection from HIV and sexually transmitted infections - Methods of healthier sexual behavior and their importance - Sexual identification and roles - Sexual orientation and introduction and situation of sexual minorities - Love and romantic relationship for sexual and reproductive health - Sexual and reproductive rights - Preparation for marriage and healthy marital life - Meaning, cause, and effect of sexual violence - Meaning, cause, and effect of sexual abuse and sexual harassment - Preventive measures of sexual violence, abuse, and harassment - Introduction and importance of adolescent-friendly health service	16	16

In grade 9, the course is titled CSE and includes units that explore the concept, objectives, and importance of sexuality education. It addresses various aspects of sexuality in adolescence and covers managing menstruation-related problems, including sanitary pads' preparation, use, and management. Additionally, it addresses the challenges and ways to ensure teenagers' safety regarding marriage, pregnancy, and motherhood.

Grade 10 continues with the elective course CSE. The curriculum delves into the elements of CSE, including pre-marital and extra-marital relationships and their management, safer sexual behaviors, religious beliefs and myths related to menstruation, and the importance of menstrual hygiene management. It also explores efforts made in Nepal regarding menstrual hygiene management.

In grade 11, the elective course Reproductive Health focuses on the meaning and elements of reproductive health. It covers the male and female reproductive systems, the menstrual cycle, and menstrual hygiene management. Moreover, it addresses the cultural aspects and effects of menstruation in Nepal, pregnancy, prenatal care, postpartum period, post-natal care, and birth control methods.

Finally, grade 12 offers the elective course 'sexual health'. This comprehensive course covers various aspects, including the meaning and importance of sexual health, prevention and protection from HIV and STIs, methods of healthier sexual behavior, sexual identification and roles, sexual orientation, love and romantic relationships for sexual and reproductive health, sexual and reproductive rights, preparation for marriage and healthy marital life, and the meaning, causes, and effects of sexual violence, abuse, and harassment. Additionally, it emphasizes the importance of preventive measures and the introduction of adolescent-friendly health services.

These elective courses in grades 9 to 12 provide in-depth knowledge and skills necessary for adolescents to make informed decisions, develop healthy attitudes, and practice responsible behaviors related to sexuality and reproductive health. The curriculum acknowledges the importance of addressing topics such as menstruation, safe sexual behaviors, contraception, gender identity, sexual orientation, and the prevention of HIV and STIs. Integrating CSE with physical education promotes holistic well-being and empowers adolescents to navigate their sexual and reproductive health in a supportive and informed manner.

CSE Contents Coverage as per ITGSE 2018

After analyzing the contents of CSE in the school curriculum of Nepal, it was further evaluated regarding ITGSE 2018. A matrix was prepared to show which key concepts and topics were included in each grade. A rating benchmark was made before the evaluation with four indicators. If any key concept was included in the curriculum as per ITGSE 2018 in any age group or grade, it was named as included as per ITGSE. If most of the components of the critical concepts were included (more than three-fourths), it was named 'mostly included'. If any key concept was included in the curriculum, it was named 'partially included'. Some topics that seemed not deliberately included under the sexuality theme but could

be related by the name such as relationships in the family, the human body, and sanitation were named as partially included but not related to sexuality. This category included such contents that were initially organized in the curriculum to provide information on fields other than sexuality; however, a teacher could link it to sexuality education if trained to do so. The evaluation revealed the following situation:

Table 4

CSE contents inclusion matrix regarding ITGSE 2018 in the school curriculum of Nepal

Key Concept	**Topics**	**Grades**											
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Relationships	Families	Y	Y	Y									
	Friendship, Love, and Romantic Relationships	Y	Y	Y									P
	Tolerance, Inclusion, and Respect	Y	Y	Y				P					
	Long-term Commitments and Parenting												
Values, Rights, Culture, and Sexuality	Values and Sexuality										Y		
	Human Rights and Sexuality												P
	Culture, Society, and Sexuality												
Understanding Gender	The Social Construction of Gender and Gender Norms											P	P
	Gender Equality, Stereotypes, and Bias												
	Gender-based Violence												
Violence and Staying Safe	Violence									Y			P
	Consent, Privacy, and Bodily Integrity												
	Safe use of Information and Communication Technologies (ICTs)												
Skills for Health and	Norms and Peer Influence on Sexual												

Well-being	Behavior													
	Decision-making													
	Communication, Refusal, and Negotiation Skills													
	Media Literacy and Sexuality	Y	Y	Y										
	Finding Help and Support	Y	Y	Y					P				P	
The Human Body and Development	Sexual and Reproductive Anatomy and Physiology						P	P	P					
	Reproduction								P			P		
	Puberty				P	P	M	P	P	P	P	P		
	Body Image													
Sexuality and Sexual Behavior	Sex, Sexuality and the Sexual Life Cycle										P			
	Sexual Behavior and Sexual Response							P					P	
Sexual and Reproductive Health	Pregnancy and Pregnancy Prevention							P	P	P		P		
	HIV and AIDS Stigma, Care, Treatment and Support								P				P	
	Understanding, Recognizing and Reducing the Risk of STIs, including HIV								P				P	

√ – Included as per ITGSE2018;M – Mostly included; P – Partially included; Y – Partially included but not related to sexuality

The first key concept of CSE as per ITGSE 2018 is relationship. While topics such as families, friendship, love, romantic relationships, tolerance, inclusion, and respect are partially included in the school curriculum over different grades, they are not directly related to sexuality. This indicates a potential gap in addressing the intersection between relationships and sexuality. It is essential to recognize that relationships significantly impact individuals' sexual health and well-being. By incorporating discussions on healthy relationships, consent, sexual orientation, and gender identity, the curriculum can provide a more comprehensive

understanding of relationships within a sexual context. Additionally, promoting inclusive perspectives and addressing issues like gender-based violence can create a supportive and inclusive learning environment. Further examination of the curriculum materials would provide more insight into how relationships and sexuality are approached.

Including values about sexuality suggests an acknowledgment of their importance, but the curriculum does not explicitly address the direct connection between values and sexuality. This leaves room for a deeper exploration of how personal values influence one's understanding and expression of their sexuality. The partial inclusion of human rights and sexuality indicates some recognition of the rights of individuals regarding their sexual identities and behaviors, but the extent of the coverage is unclear. The curriculum lacks specification regarding the coverage of culture, society, and sexuality, which raises questions about exploring cultural diversity, societal norms, and their impact on individuals' sexual experiences and identities. A more comprehensive approach would involve examining these interconnections to foster a holistic understanding of values, rights, culture, and sexuality.

The curriculum partially includes the ‘social construction of gender and gender norms’, suggesting some recognition of the influence of societal expectations on individuals' gender identities and behaviors. However, the extent of coverage is not specified, leaving room for further exploration and understanding. The coverage of ‘gender equality, stereotypes, and biases’ is not specified, which raises concerns about whether the curriculum adequately addresses the harmful effects of stereotypes and biases on individuals' experiences and rights. Similarly, the curriculum does not specify coverage of ‘gender-based violence, consent, privacy, bodily integrity, and safe use of ICTs’, leaving gaps in addressing these crucial aspects of understanding gender and promoting safe and healthy relationships. A comprehensive approach would involve comprehensive coverage and exploration of these topics to foster gender equality and address issues related to violence and safety.

The curriculum does not specify the coverage of ‘norms and peer influence on sexual behavior, decision-making, communication, refusal, and negotiation skills’. Concerns regarding whether students receive thorough instruction on these crucial skills for health and well-being arise from this need for specification. The topic of ‘media literacy and sexuality’ is partially included but not related to sexuality, which may indicate a missed opportunity to address the influence of media on sexual behaviors and attitudes. Similarly, ‘finding help and support’ is partially included but also unrelated to sexuality information. This suggests that the curriculum does not fully address seeking appropriate support in sexual and

reproductive health matters. Regarding the key concept ‘human body and development’, the curriculum partially includes sexual and reproductive anatomy, physiology, and reproduction, while puberty is primarily included across various grade levels. However, the coverage of ‘body image’ needs to be specified, leaving uncertainty about whether this vital aspect of adolescent development is adequately addressed.

The curriculum partially includes the topic of ‘sex, sexuality, and the sexual life cycle’, suggesting that some aspects of sexual development and understanding may be addressed. Similarly, the topic of ‘sexual behavior and sexual response’ is partially included, indicating that some information may be provided on these subjects. Pregnancy and pregnancy prevention are somewhat covered in the curriculum for the key concept of 'sexual and reproductive health' across various grades and levels, suggesting that there is potential for teaching in this area.

‘HIV and AIDS stigma, care, treatment, and support’ is also only partially covered, indicating that students may learn something about these subjects, albeit it is unclear to what extent. Similar to this, some grade levels contain 'understanding, recognizing, and reducing the risk of STIs, including HIV', which suggests that pupils may receive some instruction on this topic, though the degree of coverage is not clear.

Discussion

A school setting provides an environment where CSE can be delivered in the ideal age- and developmentally relevant sequence over the years, with added content building on previous content (UNESCO et al., 2018). A review of the existing curriculum of Nepal revealed that CSE is included as a hidden curriculum in lower grades (1-3) and a visible curriculum in grades 4 to 12. Health, Physical and Creative Arts is a compulsory subject in grades 4 to 8, which could include CSE components. However, the inclusion is limited and does not allow for a holistic understanding of sexuality education. Menstrual hygiene is one of the new focused areas in grades 4 and 5 now, which used to be included only after grade 6 in the previous curriculum.

On the other hand, CSE-related contents are included as a specific unit in elective Health and Physical Education subject in grades 9 and 10. However, the inclusion of the contents is not diverse and limited partially only to the fundamental concepts of ‘human body and development’ and ‘sexuality and sexual behavior’. The topics are explicitly given but focused more on a minimal area related to adolescence, puberty, and menstruation. This type of focus is observed in the contents of grades 4 to 11.

Another more focused topic is ‘pregnancy and pregnancy prevention’ which is provided in grades 7, 8, 9, and 11. The curriculum of grades 11 and 12 has comparatively more diversity in this regard. However, the linkages to previous courses are not maintained while including the key concepts and topics in the curriculum. It reveals a serious flaw regarding the vertical organization of the contents. CSE covers a wide range of topics, and the omission of crucial topics in the curriculum will lessen the effectiveness of CSE (UNESCO et al., 2018), however, it also reveals that most of the key concepts and topics are missed throughout grades 1 to 12.

A balanced and comprehensive approach is required to effectively engage young people in the learning process and respond to the full range of their needs considering the many competing sources of information in their lives (Acharya et al., 2019). CSE allows for conveying sexuality in a way that also incorporates its positive aspects, such as love and relationships based on mutual respect and equality, in addition to knowledge on reproduction, sexual behaviors, risks, and the prevention of illness (UNESCO et al., 2018). However, the CSE curriculum of Nepal is still more focused on reproduction, pregnancy, and adolescence. CSE focuses on safer sex, preparing young people for personal relationships that may involve sexual activity or other forms of sexual intercourse after they have made thoughtful decisions. However, the topics of relationships and responsible sexual behavior are mostly omitted from Nepal's school curriculum.

Similarly, UNESCO emphasizes that about 1 in 3 women worldwide has experienced either physical or sexual intimate partner violence or non-partner violence in their lifetime (UNESCO, 2009; UNESCO et al., 2018). But the Nepal government's curriculum does not emphasize this issue, and this is included very little in grade 12 only. ‘Violence based on sexual orientation and gender identity’ is nowhere in the curriculum.

The effectiveness of sexuality education in schools and the classroom depends on pedagogy. In this case, pedagogy still plays a major positive role in adolescents' mobilization and direction. How teachers' pedagogy suggests to their adolescent students about gender identity and sexual behavior is reflected in the effectiveness of sexuality education in practice (Sanjakdar et al., 2015). Teachers' teaching methods, along with skills and tools, can profoundly affect adolescents' healthy behavior change (Bilinga & Mabula, 2014). Also, Acharya et al. (2019) say that to effectively reach large numbers of young people with sexuality education before they become sexually active, CSE should be taught by well-trained and supported teachers in school settings, which also offers a structured learning environment for doing so. CSE empowers young people to make informed decisions about relationships and sexuality (Aryal et al., 2023). Not only for

normal children and adolescents, it is equally needed for people with disabilities too who are more vulnerable to sexual violence and access to sexuality-related information (Aryal et al., 2024). However, despite clear evidence of the benefits of curriculum-based CSE, not all children and adolescents in all countries get the benefits of it. With resource-constrained settings, sexuality education can be effectively delivered (Huaynoca et al., 2014). The prevailing system of rights, suppression, and domination in the teaching practice of sexuality education is highly challenging and embarrassing.

A participatory teaching-learning pedagogy is important, which engages adolescents in critical thinking. It helps to create ideas for them (UNFPA, 2014). However, the Curriculum Development Center (CDC) in Nepal has placed less emphasis on health education, which has resulted in both ineffective teaching of sexuality by teachers and ineffective learning on the part of students. Especially in developing countries like Nepal, school-based sexuality education remains a challenge. It is considered socially and culturally taboo to discuss sexual matters in school (Pokharel et al., 2006; Shrestha et al., 2013). One study reported that in Nepal, the main problems faced by young people are unemployment, low opportunities for sex and entertainment, stress, curiosity, communication gaps, and poor sex education and sexual health services that force them to engage in risky sexual behavior (Regmi et al., 2010).

Sexuality education is a small chapter in health education. The approach to health education is narrow in the Nepalese context. So, it has been shifted from compulsory to optional in grades 9 and 10. The existing curriculum is insufficient to address the needs of the youth (Regmi et al., 2010), and the lack of pedagogical skills is a significant barrier to the teaching of sexuality education. Nepal's adolescents face challenges due to a lack of sexuality education, leading to confusion and low SRHR status (Aryal et al., 2023).

Conclusion

Through this analysis, substantial shortcomings in curriculum development and organization, such as restrictions on the inclusion of sexuality issues and a lack of vertical organization, are identified. Numerous important ideas and subjects are not covered in depth in the overall curriculum at various levels. Without specialized knowledge and abilities, it may increase risk-taking and create hurdles to help-seeking for marginalized or disadvantaged children and adolescents, as well as contribute to stigma, shame, and ignorance. However, the addition of menstrual hygiene instruction beginning in grade 4 is considered to be a dramatic departure from Nepal's previous curriculum.

Any sexuality education material that is included in the Nepalese school curriculum must now be adequately delivered. Non-governmental organizations operating in this field should continue their efforts in generating materials for awareness and information sharing among the students as well as instructors in addition to campaigning for the broader inclusion of CSE themes in the school curriculum of Nepal. A detailed curriculum framework (similar to a textbook) is necessary to support the national curriculum of Nepal in providing inclusive, evidence-based, rights-based, culturally relevant, and context-appropriate transformative education to the students and teachers based on the notions of ITGSE 2018.

Acknowledgments

We thank all the researchers and book authors whose findings we cited here in this research that made our research more compact and convenient for the study.

Funding

The author(s) disclosed receipt of no funding or financial support for this research, authorship, and/or publication of the article.

Declaration of conflict of interest

The authors (s) declared no potential conflicts of interest concerning the research, authorship, and/or publication of the article.

Author (s) contribution

BA conceived, reviewed, composed, and led the research. AA supported reviewing the literature and analyzing it. MKS made a substantial contribution by designing, analyzing, and finalizing it. All authors in close collaboration edited, made a final version of the article, and approved for publication.

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