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KNOWLEDGE, ATTITUDE AND PRACTICES RELATED TO REPRODUCTIVE HEALTH AND SOCIAL STIGMA AMONG ADOLESCENTS

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Abstract: Adolescence is a critical developmental period marked by significant physical, psychological and social changes, making reproductive health education essential for overall well-being. Despite increased awareness initiatives, adolescents continue to face gaps in knowledge, negative attitudes, inadequate practices and social stigma related to reproductive health. The present study aims to examine the association between selected socio-demographic factors particularly type of school and place of residence—and adolescents' knowledge, attitudes, practices, and perceptions regarding reproductive health, as well as their impact on social stigma in Thrissur District, Kerala State. A descriptive cross-sectional research design was adopted for the study. The sample comprised adolescents selected using appropriate sampling techniques from different types of schools. Data were collected using a structured questionnaire assessing knowledge, attitudes, practices related to reproductive health and perceptions of social stigma. The collected data were analyzed using descriptive statistics and inferential analysis. Chi-square tests were employed to determine the association between socio-demographic variables and reproductive health-related outcomes. The findings revealed statistically significant associations between type of school and levels of knowledge, attitudes, practices and perceptions of reproductive health-related social stigma among adolescents. Similarly, place of residence showed a significant relationship with reproductive health awareness and stigma perception. Adolescents studying in certain school settings demonstrated better knowledge and more positive attitudes, while variations were observed in reproductive health practices and stigma perception across different residential backgrounds. The

study highlights the continued presence of social stigma surrounding reproductive health issues among adolescents, which adversely affects healthy attitudes and practices. The results emphasize the need for comprehensive, age-appropriate and school-based reproductive health education programs that address not only biological aspects but also social and cultural barriers. Strengthening adolescent-friendly education and community awareness initiatives can play a crucial role in reducing stigma and promoting informed and healthy reproductive health behaviors.

Keywords: Reproductive Health, Social Stigma, Adolescents And Cross-Sectional Research.

I. INTRODUCTION

Adolescence is a crucial transitional phase of human development, generally defined as the period between 10 and 19 years of age. This stage is characterized by rapid physical growth, emotional maturation, cognitive development and evolving social relationships. One of the most significant changes during adolescence is the onset of puberty, which introduces reproductive capability along with new health needs and psychosocial challenges (Harris2014). Ensuring adequate reproductive health knowledge and fostering positive attitudes and healthy practices during this stage is essential for the overall well-being of adolescents and for the development of a healthy adult population. Reproductive health encompasses a state of complete physical, mental and social well-being in all matters relating to the reproductive system (McKellar & Sillence, 2020). For adolescents, reproductive health education plays a vital role in helping them understand



bodily changes, menstrual health, sexual health, personal hygiene and prevention of reproductive tract infections. However, in many societies, discussions related to reproductive health remain sensitive and are often surrounded by silence, misinformation and stigma. Cultural taboos, traditional beliefs and lack of open communication within families and schools frequently limit adolescents' access to accurate and reliable information (Wittenberg et al. 2023).

Knowledge, attitude and practices (KAP) related to reproductive health are closely interconnected. Adequate knowledge can lead to positive attitudes, which in turn encourage healthy practices. Conversely, insufficient knowledge may result in misconceptions, fear and unhealthy behaviors (Stevenson, 2020). Adolescents' perceptions and practices are influenced by various socio-demographic factors such as place of residence, type of school, family background, peer influence and exposure to media. Differences in educational environments and residential settings often contribute to unequal access to reproductive health information and support services (Goodwin2020). Social stigma related to reproductive health remains a major barrier to adolescent well-being. Stigma surrounding menstruation, puberty and sexual health discourage adolescents from seeking information, asking questions, or accessing health services. This stigma not only affects adolescents' mental and emotional health but also reinforces gender inequality and harmful social norms (Aggleton 2018). Addressing stigma is therefore as important as improving knowledge and practices, as it shapes adolescents' willingness to engage in healthy behaviors and open discussions. Schools play a pivotal role in shaping adolescents' understanding of reproductive health. The type of school, availability of health education programs and the approach adopted by teachers significantly influence adolescents' awareness and attitudes. Similarly, place of residence whether rural or urban affects access to educational resources, healthcare facilities and supportive environments (Kirby, 2008). Examining the association between these factors and adolescents' reproductive health-related knowledge, attitudes, practices and perceptions of social stigma is essential for designing effective interventions. In this context, the present study seeks to explore the relationship between selected socio-demographic variables and adolescents' reproductive health outcomes. By understanding these associations, the study aims to contribute to the development of targeted, adolescent-friendly reproductive health education programs that promote informed decision-making, reduce social stigma and support the healthy development of young people in Thrissur District, Kerala State.

II. REVIEW OF LITERATURES

Adolescent reproductive health has gained increased attention in global public health research during the 2020s, with a growing emphasis on knowledge, attitudes, practices (KAP), access to services and social stigma. Adolescence is a critical developmental stage and inadequate reproductive health awareness during this period can lead to long-term health and social consequences. Recent literature consistently highlights persistent gaps in adolescents' reproductive health knowledge and the strong influence of socio-cultural norms on their health-seeking behaviour (WHO, 2022; UNICEF, 2023).

A recurring finding across studies is the inadequate level of reproductive health knowledge among adolescents. Cross-sectional studies conducted in various low- and middle-income countries report limited understanding of reproductive anatomy, contraception and prevention of sexually transmitted infections (STIs) (Rahman et al., 2021; Suryani & Widodo, 2022). Studies from Indonesia and Bangladesh reveal that although some adolescents demonstrate positive attitudes, insufficient knowledge remains a major barrier to informed decision-making and safe reproductive health practices (Hossain et al., 2020; Rahmawati et al., 2022). Similar trends have been observed in both rural and urban settings, indicating the widespread nature of the problem.

The literature also emphasizes the role of social and structural barriers in shaping adolescents' reproductive health outcomes. Individual-level factors such as myths, misconceptions, fear and shame discourage adolescents from seeking accurate information (UNFPA, 2021). Interpersonal barriers, including limited parent-adolescent communication and peer-based misinformation, further widen the knowledge gap (Patel et al., 2022). At the community level, stigma, restrictive cultural norms and discrimination continue to limit open discussion of reproductive health issues, particularly in rural and conservative communities (Kumar & Singh, 2023).

Social stigma is repeatedly identified as a central factor influencing adolescents' reproductive health behaviours and service utilisation. Cultural and religious beliefs often label reproductive health discussions as taboo, resulting in fear of judgement and reduced access to services (García et al., 2021; Ahmed et al., 2023). Structural challenges, such as lack of confidential and youth-friendly health services and inadequately trained healthcare providers, further discourage adolescents from seeking care (WHO, 2022). Gender disparities in reproductive health KAP are also evident. Research indicates that female adolescents often exhibit better knowledge and practices, while male adolescents may demonstrate more positive attitudes, highlighting the need for gender-sensitive interventions (Sharma et al., 2024). Socio-demographic factors such as educational level, socio-economic status, parental support and religion significantly influence adolescents' reproductive health outcomes (UNICEF, 2023).



Recent intervention-based studies suggest that school-based reproductive health education, digital learning platforms and family engagement programs can significantly improve adolescents' knowledge and attitudes (Das et al., 2025). Integrating education with adolescent-friendly and confidential health services has been shown to improve service utilisation and reduce stigma (Tadesse et al., 2024). In summary, literature from 2020 to 2025 demonstrates that adolescent reproductive health is shaped by interconnected factors including knowledge deficits, stigma, gender norms and access barriers. Comprehensive, culturally sensitive and adolescent-friendly approaches remain essential for improving reproductive health outcomes and reducing social stigma among adolescents.

III. RESEARCH METHODOLOGY

3.1 Research Design

The present study adopted a descriptive and analytical research design to examine the association between selected socio-demographic variables and adolescents' perceptions of knowledge, attitude and practices related to reproductive health, as well as the perceived impact of reproductive health on social stigma. A descriptive design was considered appropriate as it enables the systematic description of characteristics of a population, while the analytical component facilitates the examination of relationships between variables. The design helped in understanding existing levels of awareness, attitudes, practices and stigma among adolescents without manipulating any variables.

3.2 Sampling

The study population comprised adolescents enrolled in different types of schools, including government, private and aided institutions. A multistage sampling technique was employed to select the respondents. In the first stage, schools were selected using simple random sampling from the selected geographical area. In the second stage, respondents were selected from the chosen schools using proportionate stratified random sampling, ensuring adequate

representation across gender, age groups and types of schools. The final sample size was 660 adolescents in Thrissur District, Kerala State. They were determined based on feasibility, time constraints and statistical adequacy to ensure reliable analysis. Adolescents who were willing to participate and whose parents or guardians provided consent were included in the study.

3.3 Tools of Data Collection

Data were collected using a structured questionnaire developed by the researcher after reviewing relevant literature and consulting subject experts. The tool consisted of socio-demographic details, including age, type of school and place of residence. And assessed knowledge, attitude and practices of reproductive health and impact of reproductive health on social stigma. The tool was pre-tested to ensure clarity, reliability and validity and necessary modifications were made based on feedback.

3.4 Methods of Data Collection

Primary data were collected through self-administered questionnaires, distributed to the respondents in their respective schools. Prior permission was obtained from school authorities and informed consent was secured from parents or guardians as well as assent from the adolescents. The purpose of the study was clearly explained to the respondents and confidentiality was assured. Secondary data were collected from books, journals, reports, government publications and online databases to support the conceptual framework and interpretation of findings.

3.5 Data Analysis

The collected data were coded, tabulated and analysed using appropriate statistical techniques. Descriptive statistics such as frequency, percentage, mean and standard deviation were used to describe the variables. Inferential statistics, particularly the chi-square test, were applied to examine associations between variables. The results were interpreted at a 5% and 1% level of significance

IV. FINDINGS AND DISCUSSION

Table No: 1
Age of the respondents

S.No.	Age	No. of Respondents (n =660)	Percentage
1.	12-13 years	80	12.1
2.	13-14 years	43	6.5
3.	14-15 years	181	27.4
4.	15-16 years	196	29.8
5.	16-17 years	160	24.2

The table 1 presents the age-wise distribution of the respondents. Out of 660 respondents, the majority were in

the age group of 15–16 years, accounting for 196 respondents (29.8%). This was followed by the 14–15 years



age group with 181 respondents (27.4%), indicating that more than half of the respondents were between 14 and 16 years of age. The 16–17 years age group constituted 160 respondents (24.2%), showing a substantial representation of older adolescents in the study. In contrast, the younger age groups were less represented. The 12–13 years group accounted for 80 respondents (12.1%), while the 13–14 years group had the least number of respondents, with 43 respondents (6.5%). The age distribution reflects a higher

concentration of middle and late adolescents, which is appropriate for a study on reproductive health, as awareness, attitudes and practices related to reproductive health become more relevant during these stages. The distribution ensures adequate representation across different adolescent age groups, enabling meaningful analysis of age-related variations in knowledge, attitude, practices and perceptions of social stigma.

Table No: 2
Class studying of the respondents

S.No.	Class studying	No. of Respondents (n =660)	Percentage
1.	8th Std.	114	17.3
2.	9th Std.	99	15.0
3.	10th Std.	94	14.2
4.	11th Std.	136	20.6
5.	12th Std.	217	32.9

The table 2 shows the distribution of respondents according to the class in which they are studying. Among the 660 respondents, the highest proportion were studying in 12th standard, accounting for 217 respondents (32.9%). This indicates that nearly one-third of the respondents belonged to the senior secondary level. This was followed by students of 11th standard, with 136 respondents (20.6%), suggesting a considerable representation of higher secondary school students. Respondents studying in 8th standard constituted 114 respondents (17.3%), while those in 9th standard accounted for 99 respondents (15.0%). The 10th standard students formed 94 respondents (14.2%), representing the

lowest proportion among the classes. Overall, the distribution reveals that a larger proportion of respondents were studying in higher classes, particularly in 11th and 12th standards. This is appropriate for a study on reproductive health, as students in higher classes are more likely to have exposure to reproductive health information and greater awareness of related issues. The varied representation across classes also allows for meaningful comparison of knowledge, attitude and practices related to reproductive health among adolescents at different educational levels.

Table No: 3
Type of School of the respondents

S.No.	Type of School	No. of Respondents (n =660)	Percentage
1.	Government	253	38.3
2.	Private	226	34.3
3.	Aided	181	27.4

The table 3 depicts the distribution of respondents based on the type of school they attend. Out of the total 660 respondents, the majority were studying in government schools, comprising 253 respondents (38.3%). This indicates that more than one-third of the adolescents in the study belonged to government educational institutions. Students from private schools accounted for 226 respondents (34.3%), forming the second-largest group. Respondents studying in aided schools constituted 181 respondents (27.4%), representing the smallest proportion

among the three categories. The distribution shows a fairly balanced representation of respondents across government, private and aided schools. This balanced composition allows for meaningful comparison of reproductive health knowledge, attitudes, practices and perceptions of social stigma among adolescents from different educational settings. The inclusion of diverse school types enhances the generalizability of the findings and provides insights into how institutional environments may influence adolescents' reproductive health awareness.

Table No: 4



Respondents' Perception towards Knowledge, Attitude and Practices (KAP) on Reproductive Health

S. No.	Perception towards KAP on reproductive health	No. of Respondents (N=660)					
		Low	%	Moderate	%	High	%
1.	Knowledge	195	29.5	152	23.0	313	47.5
2.	Attitude	185	28.0	168	25.5	307	46.5
3.	Practices	184	27.8	166	25.2	310	47.0
4.	Overall level of KAP on reproductive health	189	28.6	156	23.6	315	47.8

Table 4 presents the respondents' levels of knowledge, attitude and practices regarding reproductive health, classified as low, moderate and high. Regarding knowledge, nearly half of the respondents (313; 47.5%) had a high level of knowledge on reproductive health, while 195 (29.5%) had low knowledge and 152 (23.0%) demonstrated a moderate level. This indicates that a substantial proportion of adolescents possess adequate knowledge, although a significant number still have limited awareness. In terms of attitude, 307 respondents (46.5%) exhibited a high level of positive attitude towards reproductive health, while 185 (28.0%) had a low attitude and 168 (25.5%) had a moderate attitude. This suggests that most adolescents maintain a favorable attitude, but a considerable number may still hold misconceptions or less constructive perspectives. For

practices, 310 respondents (47.0%) reported high levels of appropriate reproductive health practices, whereas 184 (27.8%) had low practice levels and 166 (25.2%) demonstrated moderate practices. The findings indicate that while a majority follow recommended practices, there is room for improvement among a sizeable portion of adolescents. Considering the overall KAP on reproductive health, 315 respondents (47.8%) had a high overall level, 156 (23.6%) were at a moderate level and 189 (28.6%) were at a low level. This demonstrates that almost half of the adolescents are well-informed and engage in positive attitudes and practices, but a significant proportion require targeted interventions to enhance their knowledge, attitude and behavior regarding reproductive health.

Table No: 5

Respondents' perception towards the impact of reproductive health on social stigma

S. No.	Perception towards impact of reproductive health on social stigma	No. of Respondents (N=660)					
		Low	%	Moderate	%	High	%
1.	Stigma on menstruation	180	27.3	182	27.6	298	45.1
2.	Stigma on reproductive health education	182	27.6	160	24.2	318	48.2
3.	Stigma on seeking healthcare	191	28.9	174	26.4	295	44.7
4.	Stigma from family and community	183	27.7	190	28.8	287	43.5
5.	Peer and school stigma	192	29.1	156	23.6	312	47.3
6.	Self-stigma and myths	171	25.9	169	25.6	320	48.5
7.	Overall level of impact of reproductive health on social stigma	176	26.7	158	23.9	326	49.4

Table 5 illustrates respondents' perceptions regarding the impact of reproductive health on various dimensions of social stigma, categorized into low, moderate and high levels. Regarding stigma on menstruation, nearly half of the respondents (298; 45.1%) perceived a high level of stigma, while 180 (27.3%) reported low stigma and 182 (27.6%) reported moderate stigma. For stigma related to reproductive health education, 318 respondents (48.2%) perceived high stigma, 182 (27.6%) reported low and 160

(24.2%) reported moderate levels. This indicates that adolescents face considerable social barriers when accessing reproductive health education. Concerning stigma on seeking healthcare, 295 respondents (44.7%) reported high stigma, suggesting that fear of judgement may limit healthcare utilization. Similarly, stigma from family and community was perceived as high by 287 respondents (43.5%), highlighting the role of cultural and familial norms in shaping adolescents' experiences. Peer and school stigma



was reported as high by 312 respondents (47.3%), while self-stigma and myths had the highest perception of high stigma with 320 respondents (48.5%), indicating internalized stigma and misinformation significantly affect adolescents. Overall, the total impact of reproductive health on social stigma was perceived as high by 326 respondents

(49.4%), moderate by 158 (23.9%) and low by 176 (26.7%). These findings reveal that nearly half of the adolescents experience a high level of stigma in relation to reproductive health, emphasizing the need for interventions that reduce cultural taboos, address peer and family influence and dispel myths and self-stigma.

Table No: 6

Association between Respondents' Type of School and their Knowledge, Attitude and Practices (KAP) Regarding Adolescent Reproductive Health

S. No	Type of school	Knowledge, Attitude and Practices regarding adolescent reproductive health			Statistical Inference
		Low	Moderate	High	
1.	Knowledge	n=195	n=152	n=313	$\chi^2 = 5.314$ df = 4 0.257 > 0.05 Not Significant
	Government	80	66	107	
	Private	60	50	116	
	Aided	55	36	90	
2.	Attitude	n=185	n=168	n=307	$\chi^2 = 4.363$ df = 4 0.359 > 0.05 Not Significant
	Government	82	60	111	
	Private	60	60	106	
	Aided	43	48	90	
3.	Practices	n=184	n=166	n=310	$\chi^2 = 9.683$ df = 4 0.046 < 0.05 Significant
	Government	87	53	113	
	Private	53	62	111	
	Aided	44	51	86	
4.	Overall level of KAP	n=189	n=156	n=315	$\chi^2 = 11.526$ df = 4 0.021 < 0.05 Significant
	Government	90	56	107	
	Private	59	58	109	
	Aided	40	42	99	

Hypothesis: 01

H₀: There is no significant association between respondents' type of school and their overall KAP regarding adolescent reproductive health.

H₁: There is a significant association between respondents' type of school and their overall KAP regarding adolescent reproductive health.

The findings of the study indicate that the type of school has a limited role in shaping adolescents' knowledge and attitudes regarding reproductive health, as the chi-square analysis for knowledge ($\chi^2 = 5.314$, df=4, p = 0.257) and attitude ($\chi^2 = 4.363$, df = 4, p = 0.359) showed no significant association. This suggests that formal education or exposure to reproductive health information across government, private and aided schools is relatively uniform in terms of content delivery, resulting in comparable levels of knowledge and positive attitudes among students. However, practices and overall KAP were significantly associated

with school type, with chi-square values of $\chi^2 = 9.683$ (p = 0.046) and $\chi^2 = 11.526$ (p = 0.021), respectively. These results indicate that the school environment, peer influence, access to resources and extracurricular programs may affect how adolescents apply their knowledge and attitudes in real-life situations. For example, government schools may provide different health education initiatives or counseling services compared to private and aided schools, which could explain variations in practices. Based on these results, it is recommended that reproductive health programs focus on practical application and behavior reinforcement in schools, while policy interventions aim to standardize reproductive health curricula across all school types. Additionally, social workers and educators can implement peer-led and activity-based programs to improve overall knowledge, attitude and practices among adolescents, ensuring that they not only understand reproductive health but also practice it effectively in their daily lives.

Table No: 7

Association between respondents' type of school and their perception of the impact of reproductive health on social stigma among adolescents



S. No	Type of school	Impact of reproductive health on Social Stigma			Statistical Inference
		Low	Moderate	High	
1.	Stigma on menstruation	n=180	n=182	n=298	$\chi^2 = 9.273$ df = 4 0.056<0.05 Significant
	Government	69	68	116	
	Private	63	60	103	
	Aided	48	54	79	
2.	Stigma on reproductive health education	n=182	n=160	n=318	$\chi^2 = 9.124$ df = 4 0.058<0.05 Significant
	Government	68	69	116	
	Private	54	47	125	
	Aided	60	44	77	
3.	Stigma on seeking healthcare	n=191	n=174	n=295	$\chi^2 = 10.365$ df = 4 0.024<0.05 Significant
	Government	65	76	112	
	Private	62	56	108	
	Aided	64	42	75	
4.	Stigma from family and community	n=183	n=190	n=287	$\chi^2 = 11.404$ df = 4 0.016<0.05 Significant
	Government	79	71	103	
	Private	56	62	108	
	Aided	48	57	76	
5.	Peer and school stigma	n=192	n=156	n=312	$\chi^2 = 11.197$ df = 4 0.017<0.05 Significant
	Government	69	62	122	
	Private	59	58	109	
	Aided	64	36	81	
6.	Self-stigma and myths	n=171	n=169	n=320	$\chi^2 = 27.683$ df = 4 0.000<0.01 Significant
	Government	59	84	110	
	Private	47	45	134	
	Aided	65	40	76	
7.	Overall level of impact of reproductive health on social stigma	n=176	n=158	n=326	$\chi^2 = 20.751$ df = 4 0.001<0.01 Significant
	Government	67	62	124	
	Private	50	56	120	
	Aided	59	40	82	

Hypothesis 2

H₀: There is no significant association between type of school and overall perception of the impact of reproductive health on social stigma.

H₁: There is a significant association between type of school and overall perception of the impact of reproductive health on social stigma.

The findings of the study indicate that the type of school significantly influences adolescents' perception of social stigma related to reproductive health across all domains. Stigma associated with menstruation, reproductive health education, seeking healthcare, family and community, peer and school interactions, as well as self-stigma and myths,

showed significant associations with school type. Government and private school students generally reported higher levels of perceived stigma, while aided school students reported comparatively lower levels. Differences may arise due to variations in school culture, peer interactions, availability of counselling services and teachers' approaches to reproductive health topics. High self-stigma and myths among private school adolescents may reflect greater awareness combined with fear of judgment, indicating that knowledge alone without supportive reinforcement can increase anxiety and internalized stigma. Based on these results, it is recommended that schools implement stigma-reduction programs, including peer-led workshops and counselling

sessions and that health education directly addresses myths and misconceptions to reduce self-stigma. Additionally, family and community engagement programs can help lower social stigma at home and in the community, while

policy interventions should promote uniform, adolescent-friendly reproductive health education across all school types to ensure equitable understanding and reduce disparities in perception of stigma.

Table No:8

Two-way Analysis of Variance among respondents' age and type of school of the respondents and perception towards the overall level of impact of reproductive health on Social Stigma

Tests of Between-Subjects Effects					
Dependent Variable: Overall level of impact of reproductive health on social stigma					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	57018.025 ^a	14	4072.716	2.393	.003
Intercept	8980327.203	1	8980327.203	5276.244	.000
Age	17266.831	4	4316.708	2.536	.039
Type of school	15228.362	2	7614.181	4.474	.012
Age*Type of school	38326.578	8	4790.822	2.815	.004
Error	1097809.628	645	1702.030		
Total	15064117.000	660			
Corrected Total	1154827.653	659			

a. R Squared = .049 (Adjusted R Squared = .029)

Profile Plots

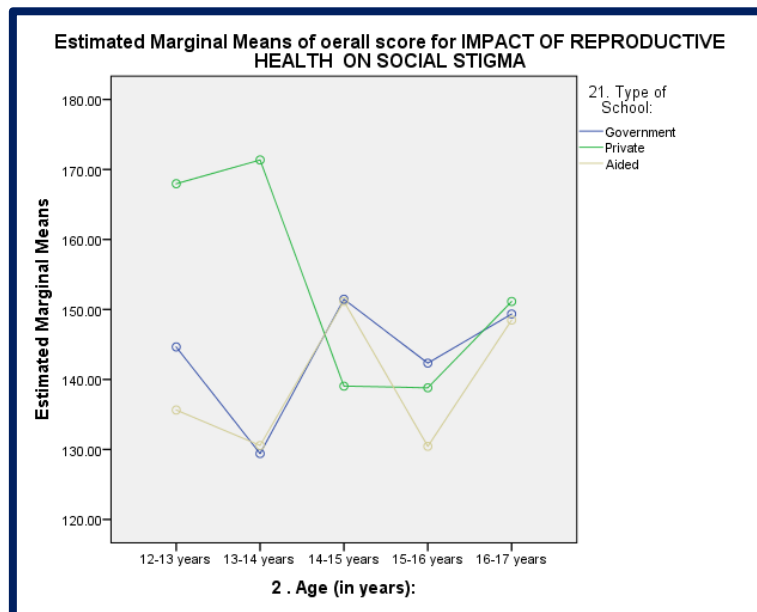


Table No. 8 presents the results of a two-way Analysis of Variance (ANOVA) examining the influence of age, type of school and their interaction on respondents' perception of the overall impact of reproductive health on social stigma. The corrected model was statistically significant ($F = 2.393$, $p = 0.003$), indicating that age and type of school together significantly explain variations in perceptions of social stigma related to reproductive health. The main effect of age was significant ($F = 2.536$, $p = 0.039$), suggesting that

perceptions of social stigma differ across age groups. This may be due to variations in maturity, awareness and exposure to reproductive health information as adolescents grow older. The main effect of type of school was also significant ($F=4.474$, $p=0.012$). Respondents from government, aided and private schools differed significantly in their perceptions of reproductive health-related stigma, possibly reflecting differences in curriculum, institutional environment and openness in addressing reproductive health



issues. A significant interaction effect between age and type of school was observed ($F=2.815$, $p=0.004$). This indicates that the influence of age on stigma perception varies according to the type of school attended, highlighting the combined impact of developmental stage and educational context.

The model explained 4.9% of the variance in perceptions of social stigma ($R^2 = 0.049$; Adjusted $R^2 = 0.029$). Although the explained variance is modest, the significant effects suggest that age and school type play a meaningful role in shaping adolescents' attitudes. The findings emphasize the importance of age-appropriate and school-specific reproductive health education, supported by trained teachers and inclusive school policies, to effectively reduce social stigma related to reproductive health.

V. SUGGESTIONS

1. **Strengthening School-Based Reproductive Health Education:** Comprehensive and age-appropriate reproductive health education should be integrated into the school curriculum across all types of schools. The content should go beyond biological aspects and include emotional well-being, gender sensitivity, consent and stigma reduction. Regular interactive sessions, group discussions and activity-based learning can help adolescents better understand reproductive health issues.
2. **Promoting Teacher and Counsellor Training:** Teachers and school counsellors should be provided with regular training on adolescent reproductive health and communication skills. Trained educators can create a safe and supportive environment that encourages adolescents to ask questions and seek guidance without fear or embarrassment.
3. **Enhancing Parental Involvement and Communication:** Parents should be sensitized through awareness programs and workshops to improve open communication with adolescents regarding reproductive health. Strengthening parent-adolescent dialogue can help dispel myths, reduce stigma and support healthy attitudes and practices.
4. **Establishing Youth-Friendly Health Services:** Health facilities should be made more adolescent-friendly by ensuring confidentiality, respectful treatment and accessible services. The availability of trained health professionals who understand adolescent needs can encourage greater utilization of reproductive health services.
5. **Addressing Social Stigma through Community Awareness:** Community-level awareness campaigns involving local leaders, healthcare providers and non-governmental organizations should be organized to challenge negative cultural norms and reduce stigma associated with reproductive health. Creating

community dialogue can help normalize discussions around adolescent reproductive health.

6. **Gender-Sensitive Interventions:** Programs should be designed to address gender-specific needs and challenges. Special focus should be given to empowering adolescent girls while also engaging boys in discussions about responsibility, respect and reproductive health awareness to promote positive attitudes and shared responsibility.
7. **Use of Digital and Media-Based Interventions:** Digital platforms such as mobile applications, educational videos and social media campaigns can be effectively used to disseminate accurate reproductive health information. These tools are particularly useful in reaching adolescents who may be hesitant to seek information through traditional channels.
8. **Policy Support and Institutional Collaboration:** Policymakers should strengthen existing adolescent health programs and ensure effective collaboration between schools, health departments and social welfare agencies. Monitoring and evaluation mechanisms should be reinforced to assess the effectiveness of reproductive health interventions.
9. **Focus on Marginalized and Rural Adolescents:** Special attention should be given to adolescents from rural, socio-economically disadvantaged and marginalized backgrounds. Tailored interventions that consider cultural sensitivities and local contexts are essential to reduce disparities in knowledge, attitude and practices.
10. **Future Research and Longitudinal Studies:** Further research using longitudinal and mixed-method approaches is recommended to assess long-term changes in knowledge, attitudes, practices and stigma. Qualitative studies can provide deeper insights into adolescents' lived experiences and contextual challenges.

VI. CONCLUSION

Adolescent reproductive health is an important public health and social concern, as this stage of life involves significant physical, emotional and psychological changes. The present study examined adolescents' knowledge, attitude and practices related to reproductive health and their perception of social stigma. The findings reveal that although some adolescents possess basic awareness, considerable gaps exist in comprehensive knowledge and healthy reproductive health practices. The study indicates that socio-demographic factors such as type of school and place of residence significantly influence adolescents' perceptions and behaviours. Differences in knowledge, attitudes and practices suggest unequal access to accurate information and supportive environments. Adolescents from less supportive educational and social settings are more vulnerable to misinformation and negative attitudes.



Social stigma was identified as a major barrier affecting adolescents' openness to discuss reproductive health issues and seek appropriate health services. Cultural taboos, fear of judgement and limited communication within families and communities contribute to silence and misunderstanding. This stigma negatively impacts adolescents' confidence and health-seeking behaviour. Educational institutions play a vital role in promoting reproductive health awareness. Schools that provide structured, age-appropriate and gender-sensitive education help adolescents develop positive attitudes and responsible practices. However, such efforts must be supported by trained teachers and youth-friendly health services. In conclusion, improving adolescent reproductive health requires a holistic approach that combines education, health services, family support and community involvement. Reducing stigma, ensuring equal access to information and strengthening institutional support are essential for promoting healthy reproductive health outcomes among adolescents.

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