
RESEARCH ARTICLE

Assessing the Knowledge and Intention on HIV Prevention Among Senior High School Students in Selected Public Schools of San Pablo City

¹Rindsay Lee D. Dichoso, ²Keith William M. Alamara, ³Jan Razhiela T. Bulaklak, ⁴Rhod Michael V. Roxas, ⁵Girlye Mannphy A. Lacambra RM, RN, MAN, ⁶Marc Lester F. Quintana Ed.D, MAN., RN

^{1,2,3,4,5}College of Nursing, Canossa College San Pablo City Inc., San Pablo City, Laguna, Philippines

⁶Dalubhasaan ng Lungsod ng San Pablo, Laguna, Philippines

Corresponding Author: Rindsay Lee D. Dichoso, **E-mail:** leerindsay@gmail.com

ABSTRACT

The human immunodeficiency virus (HIV) continues to pose a major public health concern, especially for adolescents and young adults, and there are a growing number of cases being reported worldwide, including in the Philippines. In addition, gaps exist between HIV knowledge and the intention to participate in HIV-preventive behavior despite ongoing prevention initiatives. The purpose of the study was to compare the relationship between HIV knowledge and intention to perform and support HIV preventive actions among selected senior high school students in the public high schools in San Pablo City, Laguna, Philippines. A quantitative, cross-sectional, descriptive correlational design was utilized with 367 respondents who had been randomly selected using a multi-stage sampling process. Using an adapted structured questionnaire, HIV transmission, prevention, and medical management and health services were measured, along with intention to participate in HIV preventive behaviors. Data were analyzed using descriptive statistics and Spearman's rho. A moderate amount of HIV knowledge was reported and a high level of intention to participate in preventive behaviors was also reported. There is a statistically significant but weak positive correlation between the two variables ($p = 0.124$, $p = 0.018$). There was a major connection between having knowledge about transmission and prevention but there was not a major relationship found between knowledge of medical management or health services. This suggests that there is not much effect of knowledge by itself on an individual's intention to seek the service and therefore shows that a comprehensive behavior-focused education program about health is necessary.

KEYWORDS

Human Immunodeficiency Virus, HIV knowledge; HIV prevention; intention; adolescents; community health nursing

ARTICLE INFORMATION

ACCEPTED: 21 June 2026

PUBLISHED: 14 July 2026

DOI: 10.32996/jmhs.2026.7.9.7

1.0 Introduction

Human Immunodeficiency Virus (HIV) is a viral infection that weakens the immune system by targeting CD4 and T cells, making the body vulnerable to infections. It is transmitted through infected body fluids such as blood, semen, vaginal fluids, and from mother to child during pregnancy, birth, or breastfeeding (World Health Organization, 2025). The Philippines is among the fastest-growing HIV epidemic countries in the Asia-Pacific, with 163,454 cases and 10,247 deaths as of December 2025, and CALABARZON ranking second highest (DOH, 2025). The rise in HIV cases is linked to unprotected sex, delayed testing, and late diagnosis (ABC News, 2024). Among adolescents, risky behaviors like multiple partners and low condom use increase risk (Dijkstra, 2024), while stigma and limited sexual education contribute to low testing rates.

This study assesses and compares students' knowledge of HIV and preventive measures, as well as their intention to engage in preventive behaviors based on demographic profile, and examines the relationship between knowledge and intention. Aligned with primary prevention and SDG 3 (Good Health and Well-Being), it aims to identify knowledge levels and support the development of health education programs for schools, government agencies, and future research.

Copyright: © 2026 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (<https://creativecommons.org/licenses/by/4.0/>). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

2.0 Methodology

2.1 Research Design

This study used a quantitative, cross-sectional comparative-correlational design to assess, compare, and examine the relationship between students' HIV knowledge and preventive intentions using a structured questionnaire. It analyzed differences across demographic groups and the association between knowledge and intention in a single-time survey without manipulation.

2.2 Research Locale

This study was conducted in three public schools in San Pablo City, Laguna: School 1 in DLMP Compound, Barangay San Roque; School 2 along F. Amante Drive, Barangay Santo Cristo; and School 3 in Barangay San Jose. The respondents were senior high school students enrolled in the academic year 2025–2026. These schools were selected due to their large student populations and their relevance to the study's objectives.

2.3 Research Respondents

The respondents were 367 senior high school students from Grades 11 (187) and 12 (180) in three public schools in San Pablo City, Laguna, for the academic year 2025–2026. A multi-stage sampling technique was used, involving stratification by school, sex, and grade level, followed by simple random sampling to ensure unbiased selection of respondents.

2.4 Research Instrument

The research instrument was adapted and modified from Se Hee Min, Mirjam-Collette Kempf, et al. (2025). It was a semi-structured questionnaire consisting of 35 items, including 25 multiple-choice questions on HIV transmission, prevention, medical management, and testing, and Likert-scale items assessing respondents' perceptions and intentions.

2.5 Data Gathering Procedure

Data were collected through paper-and-pen questionnaires administered during the respondents' homeroom period under the supervision of the researcher. The researchers ensured proper monitoring during the data collection to maintain consistency and accuracy of responses.

2.6 Data Analysis

The study employed quantitative methods using both descriptive and inferential statistics. Frequency and percentage described respondents' demographics, while mean and weighted mean assessed levels of HIV knowledge and preventive intention. The Kruskal–Wallis H and Mann–Whitney U tests determined group differences, and Spearman's rho assessed the relationship between knowledge and intention. Nonparametric tests were applied due to non-normal data distribution.

2.7 Ethical Consideration

The study followed ethical guidelines of the Philippine Health Research Ethics Board and obtained all necessary approvals before data collection. Informed consent for adults and both parental consent and assent for minors were secured, and confidentiality was maintained in compliance with the Data Privacy Act of the Philippines (RA 10173).

3.0 Results and Discussion

This section presents, analyzes, and interprets the findings of the study on the level of knowledge and intention on HIV prevention among senior high school students in selected public schools of San Pablo City, Laguna

Table 1

Frequency Distribution Of The Respondents According To Demographic Profile

School	f	%
School 1	216	58.9%
School 2	96	26.2%
School 3	55	15.0%
Sex		
Male	183	49.9%
Female	184	49.9%
Religion		
Born Again	24	6.5%
Catholic	315	85.8%
Iglesia ni Cristo	17	4.6%
Others	11	3.0%
Total	367	100%

The respondents' demographic profile shows that most came from School 1, while Schools 2 and 3 had smaller shares, indicating that findings may be more reflective of School 1's context. The sample is evenly distributed by sex, which supports fair comparisons between males and females. In terms of religion, most respondents are Catholic, with smaller non-Catholic groups, suggesting limited precision for religion-based comparisons.

Table 2

Mean Level Of The HIV Knowledge Of Senior High School Students In Terms Of Transmission

	School 1		School 2		School 3	
Level of Knowledge	f	%	F	%	f	%
Outstanding (90-100%)	78	21.3%	38	10.4%	36	9.8%
Very Satisfactory (85-89%)	0	0	0	0	0	0
Satisfactory (80-84%)	58	15.8%	21	5.7%	13	3.5%
Fairly Satisfactory (75-79%)	0	0	0	0	0	0
Did not meet expectations (below 75%)	80	21.8%	37	10.1%	6	1.6%
Total	216	58.9%	96	26.2%	55	15.0%
Grand Mean	77.0 % Fairly Satisfactory		78.5 Fairly Satisfactory		90.5 Outstanding	

Table 6 shows the level of HIV transmission knowledge among senior high school students across three schools, with an overall mean of 79.4% interpreted as fairly satisfactory. Results are concentrated in the Outstanding and Did not meet expectations categories, with no respondents in the middle ranges. School 3 recorded the highest performance, while Schools 1 and 2 showed mixed results across categories.

This aligns with findings of Beebwa et al. and De Jesus and Martinez, who reported that adolescents generally have moderate knowledge but still hold misconceptions about transmission. Furthermore, Ratnawati et al. and Bojo et al. found that exposure to HIV education improves knowledge, although gaps remain, consistent with the present results.

Table 3

Mean Level Of HIV Knowledge Of Senior High School Students In Terms Of Prevention

	School 1		School 2		School 3	
Level of Knowledge	f	%	f	%	f	%
Outstanding (90-100%)	60	16.3%	23	6.3%	22	6.0%
Very Satisfactory (85-89%)	85	23.2%	33	9.0%	20	5.4%
Satisfactory (80-84%)	0	0	0	0	0	0
Fairly Satisfactory (75-19%)	0	0	0	0	0	0
Did not meet expectations (below 75%)	71	19.3%	40	10.9%	13	13.5%
Total	216	58.9%	96	26.2%	55	15.0%
Grand Mean	82.7 % - Satisfactory		79.5 % - Satisfactory		87.3 % - Very Satisfactory	

Table 3 shows that HIV prevention knowledge was satisfactory overall, with School 3 obtaining the highest mean, followed by Schools 1 and 2, indicating differences in performance and some inconsistency across groups.

This supports findings of the Beebwa et al. (2021), which report that adolescents generally have adequate knowledge of prevention but still exhibit gaps in proper understanding and application. Furthermore, Ratnawati et al. (2024) found that structured HIV education improves prevention knowledge, consistent with the variations observed in the present study.

Table 4

1) *Mean Level Of HIV Knowledge Of Senior High School Students In Terms Of Medical Management*

	School 1		School 2		School 3	
Level of Knowledge	f	%	f	%	f	%
Outstanding (90-100%)	49	13.4%	5	1.4%	11	3.0%
Very Satisfactory (85-89%)	93	25.3%	37	10.2%	24	6.5%
Satisfactory (80-84%)	0	0	0	0	0	0
Fairly Satisfactory (75-19%)	0	0	0	0	0	0
Did not meet expectations (below 75%)	74	20.2%	54	14.7%	20	5.4%
Total	216	58.9%	96	26.2%	55	15.0%
Grand Mean	81.8 % - Satisfactory		73.5 % - Did not meet expectations		81.3 % - Satisfactory	

2) Table 4 shows that the level of HIV knowledge on medical management was fairly satisfactory overall ($M = 79.6\%$), indicating moderate understanding. Schools 1 (81.8%) and 3 (81.3%) both showed satisfactory performance, while School 2 recorded the lowest mean (73.5%), suggesting weaker understanding compared to the other schools.

The study of Birhanu (2026) noted that the lack of structured HIV-related content in school curricula negatively affects adolescents' knowledge of HIV therapy, while Tesfaye (2026) found that this limitation reduces their understanding of treatment processes.

Table 5
Mean Level Of HIV Knowledge Of Senior High School Students In Terms Of Health Facilities And Testing

Level of Knowledge	School 1		School 2		School 3	
	f	%	f	%	f	%
Outstanding (90-100%)	88	24.0 %	14	3.8%	2	0.5%
Very Satisfactory (85-89%)	0	0	0	0	0	0
Satisfactory (80-84%)	60	16.3 %	28	7.6%	12	3.3%
Fairly Satisfactory (75-19%)	0	0	0	0	0	0
Did not meet expectations (below 75%)	68	18.5 %	54	14.7%	41	11.2%
Total	216	58.9 %	96	26.2%	55	15.0%
Grand Mean	81.6 % - Satisfactory		69.1 % - Did not meet expectations		60.3 % - Did not meet expectations	

Table 5 shows that HIV knowledge on health facilities and HIV testing was fairly satisfactory overall ($M = 75.1\%$), indicating borderline understanding of where and how to access HIV testing services. School 1 obtained the highest mean (81.6%, Satisfactory), followed by School 2 (69.1%, Did not meet expectations) and School 3 (60.3%, Did not meet expectations), showing low and uneven performance across schools and highlighting the need to improve knowledge on HIV testing services, particularly in lower-performing groups.

According to Ndim et al. (2025), although adolescents are aware that HIV testing services exist, many do not know where or how to access them. Reeves et al. (2023) reported that embarrassment and concerns about confidentiality reduce willingness to undergo testing, reflecting gaps in practical understanding. UNAIDS (2021) emphasized that awareness of services does not always translate into utilization due to structural and informational barriers.

Table 6

Summary Table On The Mean Level Of HIV Knowledge Of Senior High School Students

Sub-variables	School 1		School 2		School 3	
	Mean	VI	Mean	VI	Mean	VI
HIV Transmission	77.00 %	Fairly Satisfactory	78.50 %	Fairly Satisfactory	90.5%	Outstanding
Prevention	82.70 %	Satisfactory	79.50 %	Fairly Satisfactory	87.3%	Very Satisfactory
Medical Management	81.80 %	Satisfactory	73.50 %	Did not meet expectations	81.3%	Satisfactory
Health facilities and testing	81.60 %	Satisfactory	69.10 %	Did not meet expectations	60.3%	Did not meet expectations
Grand Mean	80.75 %	Satisfactory	75.15	Fairly Satisfactory	79.75	Satisfactory

Table 6 shows that the overall HIV knowledge of students is fairly satisfactory (M = 78.55%), indicating moderate understanding across the three schools. School 1 recorded the highest overall mean (80.75%, Satisfactory), followed by School 3 (79.75%, Satisfactory), while School 2 had the lowest (75.15%, Fairly Satisfactory).

In the study of De Jesus and Martinez (2021), it was found that while students understand basic HIV transmission, their knowledge remains incomplete. Moreover, Beebwa et al. (2021) reported that structured health education improves prevention knowledge, including safe practices and testing awareness. In addition, Ndim et al. (2025) emphasized that although adolescents know HIV testing exists, many still lack clarity on procedures and access. Furthermore, Quintana and Martinez (2022) found that students have strong HIV/AIDS knowledge and leadership potential, but gaps in program implementation show the curriculum is not fully utilized and needs improvement.

Table 7

Level Of Students' Intention To Engage In And Promote HIV-Preventive Actions Within Their School And Community

Indicators	School 1		School 2		School 3	
	Mean	VI	Mean	VI	Mean	VI
1. I am likely to participate in school or National AIDS and STI Prevention and Control Program (NASPCP) aligned activities that promote HIV awareness and prevention.	3.31	VL	3.40	VL	3.42	VL
2. I am likely to use or recommend free, voluntary, confidential HIV testing when it's available.	3.00	L	3.26	VL	3.53	VL
3. I am likely to learn about PrEP and PEP and consider them if advised by a healthcare provider.	3.30	VL	3.41	VL	3.76	VL
4. If a doctor prescribes it, I am likely to follow medical advice on (PrEP) Pre-Exposure Prophylaxis, (PEP) Post-Exposure Prophylaxis, or (ART) Antiretroviral Therapy as prescribed.	3.38	VL	3.36	VL	3.80	VL
5. I am likely to avoid meeting strangers from apps like Tinder, Bumble, or Yubo for sexual intent, or if I do, I make sure to practice safer behaviors such as testing, using condoms, and ensuring clear consent.	3.54	VL	3.46	VL	3.95	VL
6. I am likely to seek accurate HIV information from reliable sources such as (DOH) Department of Health, (WHO) World Health Organization sites, clinics, and teachers.	3.53	VL	3.58	VL	3.91	VL
7. I am likely to correct HIV misinformation or share accurate information with friends when it comes up.	3.50	VL	3.43	VL	3.78	VL
8. I am likely to discuss prevention and testing with a partner.	3.22	VL	3.26	VL	3.80	VL
9. If I engage in sexual activity, I am likely to use condoms every single time.	3.47	VL	3.35	VL	3.82	VL
10. If I think I may have been exposed to HIV, I am likely to go to a health facility for testing and protection advice.	3.63	VL	3.60	VL	3.93	VL
Composite Mean	3.39	VL	3.41	VL	3.77	VL

Table 7 shows that students have a generally high level of intention to engage in and promote HIV-preventive actions, with an overall mean of 3.52 (Very Likely). School 3 recorded the highest composite mean (3.77), followed by School 2 (3.41) and School 1 (3.39), all interpreted as Very Likely, indicating strong readiness for preventive actions across schools. The strongest intentions are related to seeking HIV testing and information after exposure, while lower intentions are observed in routine testing and participation in school-based HIV programs. Overall, students show greater willingness for self-protection than for regular testing and formal prevention activities.

This is supported by the study of Zeleke et al. (2024), which found that attitudes, perceived control, and risk perception strengthen adolescents' intention to use HIV self-testing. Similarly, Ratnawati et al. (2024) reported that education improves both knowledge and preventive intentions. In addition, Latifahanun (2025) noted that higher knowledge increases the likelihood of engaging in preventive behaviors.

Table 8*Difference In The Level Of Knowledge Of The Respondents On HIV Prevention When Grouped According To School*

Sub-Variable	Mean Score			H-value	p-value	Decision	Conclusion
	School 1	School 2	School 3				
HIV Transmission	3.85	3.93	4.53	19.03	<.001	Reject Ho	Significant
Prevention	5.79	5.56	6.11	7.78	<.001	Reject Ho	Significant
Medical Management	5.73	5.15	5.69	20.06	<.001	Reject Ho	Significant
Health Facilities and Testing	4.89	4.15	3.62	52.5	<.001	Reject Ho	Significant
Overall	20.26	18.78	19.95	20.56	<.001	Reject Ho	Significant

Table 8 shows that there are significant differences in HIV knowledge across schools in all domains ($p < .001$). School 3 recorded the highest scores in transmission and prevention, while Schools 1 and 2 were lower and generally similar. In medical management, Schools 1 and 3 performed significantly better than School 2. For health facilities and testing, School 1 had the highest mean, while School 3 had the lowest, with all schools significantly different from each other. Overall knowledge also differed significantly, with School 1 scoring highest, followed by School 3 and School 2, indicating variation in HIV knowledge across schools and domains.

The findings are consistent with Orji et al. (2025), who reported that schools and teachers serve as important sources of HIV information and play a significant role in improving adolescents' HIV knowledge. Similarly, Birhanu et al. (2026) emphasized that knowledge gaps may still persist when HIV-related topics are not discussed comprehensively, indicating the need for continuous and effective HIV education programs in schools.

Table 9*Difference In The Level Of Knowledge Of The Respondents On HIV Prevention When Grouped According To Sex*

Sub-Variable	Mean Score		U-value	p-value	Decision	Conclusion
	Male	Female				
HIV Transmission	3.853	4.12	114089	.004	Reject Ho	Significant
Prevention	5.80	5.76	16272	.561	Failed to Reject Ho	Not Significant
Medical Management	5.52	5.62	16504	.730	Failed to Reject Ho	Not Significant
Health Facilities and Testing	4.47	4.54	16008	.401	Failed to Reject Ho	Not Significant
Overall	19.68	19.97	16637	.884	Failed to Reject Ho	Not Significant

Table 9 shows that HIV knowledge differs by sex only in the transmission domain, where females scored significantly higher than males ($U = 14,089$, $p = .004$). In prevention, medical management, health facilities and testing, and overall knowledge, no significant differences were found between males and females ($p > .05$), with comparable mean scores across both groups. Overall, the results indicate that sex-based differences in HIV knowledge are minimal, with females showing a slight advantage only in transmission knowledge.

According to the study of Purwanto and Gumilang (2025) reported that females have higher HIV knowledge than males, highlighting the need for gender-sensitive interventions to improve male awareness. In contrast, Khamisa et al. (2020) found no significant difference in HIV knowledge between males and females, suggesting that both sexes may have equal exposure to

HIV-related information. The findings indicate that gender differences in HIV knowledge may vary depending on context and information access.

Table 10

Difference In The Level Of Knowledge Of The Respondents On HIV Prevention When Grouped According To Religion

Sub-Variable	Mean Score				H-value	p-value	Decision	Conclusion
	R1	R2	R3	R4				
HIV Transmission	3.71	4.01	4.00	3.55	4.451	.217	Failed to Reject Ho	Not Significant
Prevention	5.75	5.79	5.59	5.82	0.290	.962	Failed to Reject Ho	Not Significant
Medical Management	5.75	5.58	5.06	5.64	3.905	.272	Failed to Reject Ho	Not Significant
Health Facilities and Testing	4.33	4.56	3.71	4.55	4.902	.179	Failed to Reject Ho	Not Significant
Overall	19.54	19.94	18.35	19.55	4.185	.242	Failed to Reject Ho	Not Significant

Table 10 shows that there are no significant differences in HIV knowledge across religious groups in all domains and in the overall score ($p > .05$). For HIV transmission, prevention, medical management, health facilities/testing, and overall knowledge, all Kruskal–Wallis tests were not significant despite small variations in mean ranks across groups. These results indicate that HIV knowledge is relatively consistent regardless of religion.

The study of Agyekum (2025) found that factors such as age, gender, and religion did not significantly influence HIV knowledge, awareness, or testing behaviors, suggesting that other determinants like education and access to information play a more important role. Similarly, Alauya (2025) reported that HIV awareness was mainly shaped by limited formal education and lack of curriculum exposure rather than religious affiliation.

Table 11

Difference In The Level Of Intention To Engage And Promote HIV-Preventive Actions Of The Respondents When Grouped According To School

Sub-Variable	Mean Score			H-value	p-value	Decision	Conclusion
	School 1	School 2	School 3				
Intention to engage and promote HIV preventive actions	3.77	3.41	3.39	.922	<.001	Reject Ho	Significant

Table 11 shows that the intention to engage in and promote HIV-preventive actions significantly differed across schools ($H(2) = 0.922$, $p < .001$). School 1 recorded the highest mean intention score ($M = 3.77$), followed by School 2 ($M = 3.41$) and School 3 ($M = 3.39$). Post hoc comparisons showed significant differences between School 1 and School 2 ($p < .001$) and between School 2 and School 3 ($p < .001$), while School 1 and School 3 did not differ significantly ($p = .694$), indicating variation in intention levels across school contexts.

Kirby et al. (2021) stated that students' HIV-related preventive intentions are influenced by social factors such as peer interaction and information delivery, and are strengthened by adequate knowledge of HIV transmission and prevention. Similarly, Ajzen (2020) explained that behavioral intention is shaped by knowledge, attitudes, and social norms, highlighting the role of understanding in promoting preventive behavior.

Table 12

Difference In The Level Of Intention To Engage And Promote HIV-Preventive Actions Of The Respondents When Grouped According To Sex

Sub-Variable	Mean Score		U-value	p-value	Decision	Conclusion	Table 12 shows that
	Male	Female					
Intention to engage and promote HIV preventive actions	3.37	3.54	12684	.002	Reject Ho	Significant	

intention significantly differed by sex ($U = 13,684$, $p = .002$), with female respondents ($M = 3.54$) reporting higher intention to engage in and promote HIV-preventive actions compared to males ($M = 3.37$). Although both groups fall within a generally high level of intention, the result suggests stronger preventive readiness among females.

Chandra-Mouli et al. (2021) found that adolescent girls are more receptive and actively participate in health-related discussions, especially when topics are personally relevant, leading to stronger engagement in health education. Similarly, Fauk et al. (2023) reported that female students are generally more engaged in health education programs and are more likely to internalize and apply HIV-related knowledge. These findings suggest that females tend to demonstrate higher engagement in health learning activities compared to males.

Table 13

Difference In The Level Of Intention To Engage And Promote HIV-Preventive Actions Of The Respondents When Grouped According To Religion

Sub-Variable	Mean Score				H-value	p-value	Decision	Conclusion
	R1	R2	R3	R4				
Intention to engage and promote HIV preventive actions	3.42	3.46	3.16	3.60	3.52	.319	Failed to Reject Ho	Not Significant

Table 13 shows that no significant differences in intention were found across religious groups ($H(3) = 3.52$, $p = .319$), despite slight variations in mean scores. This indicates that students' intention to engage in HIV-preventive actions is generally consistent regardless of religious affiliation.

According to the study Vigliotti et al. (2020c) stated that religious affiliation alone is not a strong determinant of health-related outcomes, suggesting that its influence on behavior is limited. Mapingure et al. (2021) similarly found that while religious beliefs and support systems may influence decision-making, they do not necessarily lead to significant changes in perspectives or behaviors.

Table 14

Correlation Between The Level Of HIV Knowledge And Students' Intention To Engage In And Promote HIV-Preventive Actions

HIV KNOWLEDGE	rho-value	Strength	p-value	Decision	Conclusion
HIV Transmission	.212	Weak	<.001	Reject Ho	Significant
Prevention	.206	Weak	<.001	Reject Ho	Significant
Medical Management	.006	Negligible	.912	Failed to Reject Ho	Not Significant
Health Facilities and Testing	-.081	Negligible	.123	Failed to Reject Ho	Not Significant
Overall Knowledge Level	.124	Negligible	.018	Reject Ho	Significant

Table 14 shows that intention has weak but significant positive correlations with HIV transmission knowledge ($p = .212$, $p < .001$) and prevention knowledge ($p = .206$, $p < .001$). However, no significant relationships were found with medical management ($p = .006$, $p = .912$) and health facilities/testing knowledge ($p = -.081$, $p = .123$). Overall HIV knowledge also has a weak but significant association with intention ($p = .124$, $p = .018$), indicating that knowledge has a limited but positive link with preventive intentions.

Vigliotti et al. (2020c) found that students with higher HIV knowledge tend to show greater intention to engage in preventive behaviors, although the association is weak. Mapingure et al. (2021) similarly reported that increased knowledge corresponds to higher preventive intention, but the effect size remains small.

4.0 Conclusion

The study found that senior high school students generally have a satisfactory level of HIV knowledge, particularly in transmission and prevention, but gaps remain in medical management and awareness of health facilities and testing. Differences in knowledge and intention were significant across schools, while sex and religion showed limited or no influence on knowledge levels. Students demonstrated a very likely intention to engage in HIV-preventive practices, although males showed relatively lower intention compared to females. A significant relationship was observed between overall HIV knowledge and preventive intention, especially in terms of transmission and prevention. Overall, the findings suggest that while knowledge and intention are present, they are not consistently strong across all domains. This highlights the need for targeted, school-based interventions that focus on weaker areas and promote both knowledge and behavioral change among students.

5.0 Contribution of Authors

The authors, RD, WA, JB, RR, GL, and MQ contributed equally to every section. They have also reviewed and approved the final version of the work.

6.0 Funding

This study was conducted without financial support from any funding agency.

7.0 Conflict of Interests

No conflicts of interest were identified throughout the conduct of this study.

8.0 Acknowledgement

The researchers express their sincere gratitude to the administration and faculty of Canossa College San Pablo City, Inc., particularly Sr. Lina L. Amante, FdCC, Ms. Kathleen Corcolon, MAN, RN, Dr. Marc Lester F. Quintana, MAN, RN, Ms. Girlie Mannphy A. Lacambra, RM, MAN, RN, and the clinical instructors, for their invaluable guidance, encouragement, and expertise throughout the completion of this study. The researchers also extend their heartfelt appreciation to the content validators, research statisticians, and the principals of the participating schools for their valuable insights, support, and approval to conduct the research. Sincere thanks are likewise given to all the respondents for their voluntary participation and meaningful contributions. The researchers are deeply grateful to their friends and classmates for their encouragement and camaraderie, and to their families for their unwavering love, patience, and support throughout this journey. Above all, the researchers offer their highest praise and deepest gratitude to Almighty God for His wisdom, strength, guidance, and abundant grace, which made the successful completion of this research possible.

9.0 ORCID iD

0000-0002-5857-407X

Dr. Marc Lester F. Quintana

References

- [1] Agyekum, M. W., Appiah, M., Kyei-Arthur, F., Afrifa-Anane, G. F., Kyei-Gyamfi, S., Yeboah, I., & Abdulai, M. (2025b). Prevalence and factors associated with awareness and use of HIV self-testing kits among young women aged 15–24 in Ghana. *AIDS Research and Therapy*, 22(1), 72. <https://doi.org/10.1186/s12981-025-00764-2>
- [2] Alauya, R. R. (2025a). Lived experiences among Muslim senior high school students on HIV awareness in Balindong National High School, Lanao Del Sur. *International Journal of Research and Scientific Innovation*, XII(XV), 2057–2085. <https://doi.org/10.51244/ijrsi.2025.1215000158p>
- [3] Beebwa, E., Muzoora, C., Ashaba, S., Groves, S., & Atwine, F. (2021b). Knowledge, attitude, and preferred strategies towards HIV/AIDS prevention among adolescents attending secondary schools in South Western Uganda. *African Health Sciences*, 21(3), 1067–1073. <https://doi.org/10.4314/ahs.v21i3.14>
- [4] Birhanu, A. G., Tefera, Y., & Tigu, F. (2026). Determinants of HIV/AIDS knowledge, attitudes, and practices among high school students in Burayu Town, Ethiopia. *Venereology*, 5(1), 2. <https://doi.org/10.3390/venereology5010002>
- [5] Bojo, S., Kokwaro, G., & Agweyu, A. (2025c). Evaluating the level of knowledge of HIV prevention methods and associated socio-demographic factors among adolescents. *BMC Public Health*, 25(1), 746. <https://doi.org/10.1186/s12889-025-22025-7>
- [6] Chandra-Mouli, V., Ferguson, J., & Amin, A. (2021). A pressing need to respond to the needs and sexual and reproductive health problems of adolescent girls living with HIV in low- and middle-income countries. <https://doi.org/10.3389/fgwh.2021.723620>
- [7] Dijkstra, M. (2024, December 6). Students who use dating apps take more risks with their sexual health. *Frontiers*. <https://www.frontiersin.org/news/2024/11/15/students-dating-apps-more-risks-sexual-health>
- [8] Fauk, N. K., et al. (2023). HIV-related adolescent health and education study. <https://doi.org/10.22146/jpk.63736>
- [9] Khamisa, N., Mokgobi, M., & Basera, T. (2020). Knowledge, attitudes and behaviours towards people with HIV and AIDS among private higher education students in Johannesburg, South Africa. *Southern African Journal of HIV Medicine*, 20(1), 991. <https://doi.org/10.4102/sajhivmed.v21i1.991>
- [10] Latifahanun, E., Rahmi, S. A., Febriandi, S., Andani, M. R. R., & P, R. S. (2025b). Health literacy as a determinant of HIV/AIDS preventive behavior. *Community Research of Epidemiology (CORE)*, 75–82. <https://doi.org/10.24252/corejournal.v5i2.57773>
- [11] Mappingure, M., Mukandavire, Z., Chingombe, I., Cuadros, D., Mutenherwa, F., Mugurungi, O., & Musuka, G. (2021b). Understanding HIV and associated risk factors among religious groups in Zimbabwe. *BMC Public Health*, 21(1), 375. <https://doi.org/10.1186/s12889-021-10405-8>
- [12] Mhango, M., Dubula-Majola, V., & Mudadi, L. (2022). Knowledge, attitudes and perceptions about HIV self-testing amongst college students in Namibia. *F1000Research*, 11, 11. <https://doi.org/10.12688/f1000research.55670.1>
- [13] Ndim, M. C. F., Cho, F. N., Tongwa, D. Z., et al. (2025c). Knowledge, attitudes, stigma perceptions, and practices towards HIV testing among youths aged 18–35 years in Kumba, Cameroon. *BMC Public Health*, 25(1), 3061. <https://doi.org/10.1186/s12889-025-24229-3>
- [14] Orji, M. C., Ifebunandu, N. A., Joe-Akunne, C. I., Chidiebere, M. A., Echefu, S., & Eze, J. N. (2025b). Assessment of adequacy and determinants of HIV related knowledge among senior school students in public schools in Abakaliki Southeast Nigeria. *Scientific Reports*, 15(1), 1254. <https://doi.org/10.1038/s41598-024-81582-w>

- [15] Purwanto, E., & Gumilang, L. A. (2025). Differences in knowledge and attitudes between adolescents about HIV/AIDS, and their implications for targeted interventions. *midwifery.iocspublisher.org*. <https://doi.org/10.35335/midwifery.v13i1.1829>
- [16] Quintana, M. L. F., & Martinez, M. C. O. (2022b). Leadership initiative to enrich the HIV/AIDS education for senior high schools. *LIFE International Journal of Health and Life-Sciences*, 8, 23–43. <https://doi.org/10.20319/lijhls.2022.8.2343>
- [17] Ratnawati, D., Huda, M. H., Mukminin, M. A., Widyatuti, W., & Setiawan, A. (2024). Meta-analysis of the effectiveness of educational programs about HIV prevention on knowledge, attitude, and behavior among adolescents. *Narra J*, 4(2), e870. <https://doi.org/10.52225/narra.v4i2.870>
- [18] Reeves, J. M., Zigah, E. Y., Shamrock, O. W., et al. (2023). HIV self-testing among college students: stigma, accessibility, and confidentiality. *BMJ Open*, 13(2), e069574. <https://doi.org/10.1136/bmjopen-2022-069574>
- [19] Rm, R. M. E. P. N. L. N. M. M. P., De Jesus, L. a. O., Martinez, M. C. O., & Rm, R. M. E. P. N. L. N. M. M. P. (2019c). Knowledge and awareness on HIV/AIDS of senior high school students towards an enhanced reproductive health education program. *LIFE International Journal of Health and Life-Sciences*, 5(3), 01–20. <https://doi.org/10.20319/lijhls.2019.53.0120>
- [20] Stigma is fuelling one of the world's fastest-growing HIV epidemics in the Philippines. (2024d, July 6). *ABC News*. <https://www.abc.net.au/news/2024-07-07/philippines-youth-hiv-crisis-stigma-public-health/104057642>
- [21] UNAIDS. (2021). 2021 UNAIDS global AIDS update: Confronting inequalities. <https://www.unaids.org>
- [22] Vigliotti, V., Taggart, T., Walker, M., Kusmastuti, S., & Ransome, Y. (2020c). Religion, faith, and spirituality influences on HIV prevention activities: A scoping review. *PLOS ONE*, 15(6), e0234720. <https://doi.org/10.1371/journal.pone.0234720>
- [23] World Health Organization: WHO & World Health Organization: WHO. (2025c, July 15). HIV and AIDS. <https://www.who.int/news-room/fact-sheets/detail/hiv-aids>
- [24] Zeleke, E. A., Stephens, J. H., Gesesew, H. A., Gello, B. M., & Ziersch, A. (2024). Acceptability and use of HIV self-testing among young people in sub-Saharan Africa. *BMC Primary Care*, 25(1), 369. <https://doi.org/10.1186/s12875-024-02612-0>