

Literature Review

The Alignment Between Nursing Students' Field Practices and the Needs of the 2030 HIV/AIDS-Free Era

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ABSTRACT

Background: The involvement of nursing students in field practice needs to be questioned in the era approaching HIV/AIDS-free 2030. **Objective:** This research aims to determine the correlation between student practices and the field needs of the 2030 HIV/AIDS free program. **Methods:** This research used quantitative methods with a correlational design. The population was students from the Jayapura Ministry of Health Polytechnic in Wamena, Papua Mountains province. The sample was 180 nursing students. The dependent variable was the needs of the field in an HIV/AIDS-free era. The independent variable was Student field practice. The research instrument was a questionnaire distributed online using Google Forms. The data was processed using univariate, bivariate, and analyzed using Pearson's Product Moment with the help of SPSS version 25. **Results:** The analysis of Pearson's Product Moment show a p-value of 0.000, which means p-value <0.05, which means H₀ is rejected. There is an influence between Student field practice and the field needs of the HIV/AIDS 2030-free Era. The Pearson correlation coefficient (r) value is positive 0.830. **Conclusion:** The study recommended that the association between student field practice and the field needs of the HIV/AIDS 2030-free era is in the 'low/weak' category.

Introduction

Until now there have been no standard field practice guidelines for students majoring in health (especially nursing majors) regarding HIV/AIDS eradication programs. The Indonesian government is committed to overcoming the HIV/AIDS epidemic by targeting the achievement of 3 Zeros (Zero new HIV infections, Zero Stigma and Discrimination, Zero Deaths Related to AIDS) by socializing the HIV/AIDS prevention program and a treatment program called the STOP Program (Educate, Test, Treat and Maintain)¹. So far, the field practice of students majoring in nursing has not emphasized the real problems in the field, including those related to dealing with HIV/AIDS². Meanwhile, Indonesia will face an HIV/AIDS-free era in 2030³. Indonesia is

one of the countries that is actively involved in promoting HIV/AIDS prevention programs⁴. The prevalence of HIV in Indonesia is estimated at around 0.3% (800,000 people)⁵. The majority of people living with HIV (ODHA) are 25–49 years old; teenagers, 19 years old reached 5.8%⁶.

Although the epidemic is concentrated in a few centers, with approximately 19% of reported HIV infections in the capital Jakarta, cases are spread across urban and rural areas on 2,342 islands stretching over 5,000 kms⁷. Some of the causes of the spread of HIV/AIDS cases are due to the lack of education and budget for prevention^{8–10}. The delivery of information related to HIV/AIDS in Papua, for example, as one of the regions with the highest prevalence rate, is still not optimal¹¹. HIV/AIDS in Papua reached 50,011 by September 2022 is a concrete example.

Papua contributes to 15% of new HIV cases in Indonesia with HIV prevalence in adolescents aged 15-24 at 3%¹². The cause of the HIV epidemic in Papua is due to the low level of education and knowledge about HIV¹³. There are still many people who do not understand this disease. The available communication and information facilities and infrastructure for HIV/AIDS, apart from being inaccessible to the person concerned, will also not increase that person's knowledge¹⁴. The lack of education from people who have HIV/AIDS to the general public, and the involvement of those patients in policies or programs related to increasing capacity to understand HIV/AIDS problems are also the main causes. This is where the urgency of involving students who practice in the field in dealing with ODHA lies.

The role of student field practice in overcoming HIV/AIDS needs to be considered, especially in Papua province where PLWHA cases are relatively high. Many HIV/AIDS patients have better knowledge regarding the disease¹⁵. This is confirmed by various research results. Patients who have been involved in those activities are assumed to have better knowledge than those who have never been involved^{16,17}. This is because this activity will enable patients to obtain adequate information about HIV/AIDS. However, the lack of human resources, including the low involvement of students in preventing HIV/AIDS and the lack of budget, are also quite influential in carrying out prevention in various regions¹⁴. Many studies have explored the importance of involving teenagers and students in overcoming HIV/AIDS. The roles of teenagers with student status include seeking information about HIV/AIDS and informing fellow teenagers, providing moral support to HIV/AIDS patients for treatment, not carrying out anarchic actions, or staying away from HIV/AIDS patients⁸.

Several studies recommend that campuses hold discussion activities on HIV and AIDS issues, not only among students, the majority of whom are teenagers, but also involving members of the local community⁸. Campuses can invite HIV and AIDS patients, or ODHA organizations to share their experiences. On the one hand, the involvement of students on campus in practical field work in dealing with HIV/AIDS is very much needed. To achieve that goal, guidelines are needed to prepare based on the results of studies so that they can be academically accountable. Research related to field practice guidelines for students who face ODHA, will help directly or indirectly in overcoming the problem of ODHA, especially ahead of the HIV/AIDS-free era in 2030⁶. Therefore, it is the duty and responsibility of the campus as an education provider, lecturer, student, and together with the community, government agencies, and related private parties to jointly tackle the threat of HIV/AIDS by preparing clear guidelines for students who take part in field practice. To achieve this goal, it is necessary to improve field practice provision through research.

From the explanation referring to several references above, it proves that researchers' concern has increased along with the rise in HIV/AIDS cases. The difference with this research is the research location, population and sample. What is even more focused is that this research only involved nursing students in the Papua Mountains province. That is the novelty of this research.

This quantitative research with a correlational design seeks to explore the relevance between nursing students' field practice and field needs in programs in the HIV/AIDS-free era of 2030. The implication is that the results of this research can be used by researchers, lecturers, education administrators, and national health policyholders to improve the current system. there is by involving nursing students in the

national level HIV/AIDS prevention programs

Materials and Methods

Research Design

This research used quantitative methods with an analytical descriptive design. Held between May to July 2024 in Wamena, the capital of the Papua Mountains province.

Population and Samples

The population were students from the Jayapura Ministry of Health Polytechnic in the Wamena nursing study program. This location was chosen because Wamena is one of the areas with the highest HIV/AIDS cases in Papua^{13,18}. The sample was 180 nursing students. Samples were selected according to inclusion criteria. The inclusion criteria were active nursing students. Exclusion criteria for non-nursing students. The dependent variable is the needs of the field in an HIV/AIDS-free era. The independent variable is student field practice.

Data collection and Techniques

Data were collected using a structured questionnaire distributed online via Google Forms. Before participation, respondents received a clear explanation of the study's objectives, their rights as participants, and assurances of data confidentiality. Informed consent was obtained prior to questionnaire completion. The instrument employed a Likert scale to measure perceptions related to the study variables. Primary data originated from the questionnaire responses, while secondary data were sourced from relevant literature and policy documents published between 2019 and 2024. These secondary sources were used to support, enrich, and contextualize the primary data analysis. This combination of primary and secondary data collection ensured a more comprehensive understanding of the research problem and improved the validity of the findings through triangulation of sources.

Data Analysis

Data were processed using univariate and bivariate, and analyzed using Pearson's Product Moment and SPSS version 25.

Ethical Consideration

Although no formal ethical approval was obtained, the study adhered to ethical research principles, including informed consent, voluntary participation, and confidentiality. Participants were informed of their rights, the purpose of the research, and their freedom to withdraw at any stage without any consequences.

Result

The results of this study provide an overview of the demographic characteristics of nursing students and their experiences related to field practice, particularly in the context of HIV/AIDS education and preparedness. Understanding these characteristics is crucial to assess how well current field practice programs align with the competencies needed to support national health goals, especially the HIV/AIDS-Free 2030 Era. The findings presented in the following tables include students' sociodemographic profiles, field practice experience, program adequacy, and the relationship between field practice quality and the perceived needs of the field in addressing HIV/AIDS challenges.

Demographic Characteristics and Field Practice Experience of Respondents

Table 1 shows the majority of respondents were female (61.2%), under the age of 20 (44.4%), enrolled in the Diploma III program (77.7%), and native to Papua (75.0%). Although more than half of the respondents (55.5%) had participated in field practice, a significant portion (44.5%) had not. About 25% of students reported not receiving any preparatory training prior to field practice, and 54.5% perceived that HIV/AIDS programs in

the curriculum were inadequate. Despite this, 88.8% indicated that HIV/AIDS topics were

included in their fieldwork.

Table 1. Demographic and Field Practice Characteristics of Nursing Students (N = 180)

Category	Subcategory	Frequency (F)	Percentage (%)
Gender	Male	70	38.8
	Female	110	61.2
Age	Less than 20 years	80	44.4
	21–25 years	60	33.3
	More than 25 years	40	22.3
Education	Diploma III	140	77.7
	Bachelor of Applied Sciences	40	22.3
Residence	Native Papuan	135	75.0
	Non-native	45	25.0
Field Practice Experience	Yes	100	55.5
	No	80	44.5
Pre-Practice Training	Yes	135	75.0
	No	45	25.0
Field Practice Includes HIV/AIDS Topics	Yes	160	88.8
	No	20	11.2
HIV/AIDS Program Adequacy	Yes	68	37.7
	No	98	54.5
	No idea	14	7.8

Source: Primary Data (Processed with SPSS v25, 2024)

Table 2. Distribution of Student Field Practice Quality and Perceived Field Needs in the HIV/AIDS-Free 2030 Era (N = 180)

Variable	Category	Frequency (F)	Percentage (%)	Mean
Student Field Practice Program	Good	86	65.2	17.4
	Poor	46	34.8	
Perceived Field Needs	High	70	53.1	38.5
	Low	62	46.9	

Source: Primary Data (Processed with SPSS v25, 2024)

Distribution of Field Practice Quality and Perceived Field Needs

Table 2 shows that approximately two-thirds of the students (65.2%) rated their field practice experience as “Good,” suggesting that the majority found the training environment supportive and beneficial for learning. Meanwhile, 34.8% rated their experience as “Poor,” indicating room for improvement in practice quality or supervision. Regarding the perceived field needs to achieve the HIV/AIDS-Free 2030 Era, 53.1% of students assessed these needs as “High,” reflecting a

strong awareness of the urgency and importance of enhanced competencies, resources, and interventions in the field. This highlights the students’ recognition of significant gaps that must be addressed to meet the 2030 target effectively.

Bivariate Analysis

The Pearson Product-Moment Correlation test yielded a p-value of 0.000, which is below the significance threshold of $\alpha = 0.05$, indicating that the result is statistically significant. Thus, H_0 is rejected, and it can be concluded that

there is a significant relationship between student field practice and the perceived field needs to support an HIV/AIDS-Free 2030 Era. The correlation coefficient ($r = 0.830$) indicates a very strong positive correlation. This suggests that better quality field practice experiences are strongly associated with a

higher awareness and understanding of field needs related to HIV/AIDS control programs. The positive direction implies that as the quality of field practice increases, so does the perceived relevance and adequacy of field preparation toward addressing HIV/AIDS in community and clinical settings (Table 3).

Table 3. Pearson Correlation Between Student Field Practice and Field Needs in the HIV/AIDS-Free 2030 Era

Variables	Mean	Standard Deviation	α	p-value	r (Correlation Coefficient)
Student Field Practice	17.42	1.825	0.05	0.000	0.830
Field Needs in the HIV/AIDS-Free 2030 Era	38.48	6.011			

Source: Primary Data (Processed with SPSS v25, 2024)

Discussion

Four findings from this research are to be discussed. First, the majority of respondents involved in field practice were students in their teens (Table 1). Second, according to the respondents, the HIV/AIDS control program is inadequate (Table 2). Third, more than 44% of respondents still have not received practical training and have not fully received training regarding HIV/AIDS management guidelines (Table 2). Therefore, the correlation between students' field practices and the field needs of the free HIV/AIDS 2030 program is in the 'low/weak' category (Table 4), even though the HIV/AIDS prevention program for students is called 'good' with needs in the 'high' category (Table 2).

In Indonesia, the average HIV/AIDS patient is 30-39 years old⁹. However, HIV/AIDS can also attack children aged 1-14 years^{19,20}. This means that teenagers who are in the middle have the potential to be at risk of being exposed. Teenagers occupy a large population, reaching 24% of the total population in Indonesia²¹. Teenagers are the future generation where in 2045 they will occupy the majority portion²². In several

studies, it is stated that it is necessary to involve them in various integration programs in many activities in society, including the fields of education and health. The nursing education curriculum includes field practice as a mandatory requirement^{25,26}. This mandatory training is required because in the future nursing graduates will also be involved in health services not only in hospitals but also in the community²⁷. Moreover, students are the young generation who need to be protected from the risk of exposure to infectious diseases such as HIV/AIDS. HIV/AIDS patients are at high risk of developing complications from other diseases if their physical condition and immunity decrease²⁸. HIV/AIDS greatly affects a person's quality of life²⁹. Understanding health needs while still studying helps broaden their horizons as the nation's next generation who are also responsible for health development.

There is a weak correlation between Student field practice and The field needs of the HIV/AIDS 2030-free era, because more than 40% of respondents have never had field practice and have not received any training, either regarding field practice or information

related to HIV/AIDS (Tables 2, 3 and 4). Several studies state that the strength and weakness of correlation can be influenced by variables, number of samples, measuring instruments, and the test process, for example, measurement error³⁰ . What is clear is that field practice for students requires a practice guide as a reference. By preparing field practice guidelines in dealing with HIV/AIDS, students will be more focused. Clinical governance is really needed by students during the teaching and learning process in order to maintain their future competence³¹. So far there have been no specific practice guidelines, for example, practice guidelines for dealing with communicable diseases for students. Research has proven that with guidelines, a goal will be easier to achieve because the steps to achieve the goal are structured^{32,33}. At least with this research, it is proven that even though the relationship is in the 'low/weak' category, nursing students' field practice to some extent has a role in the field needs of the HIV/AIDS 2030-free era.

Conclusion

This research has attempted to explore the correlation between student field practice and the field needs of the HIV/AIDS 2030-free era where it was found that field practice for students is mandatory as required in the curriculum. The rise of HIV/AIDS cases in the community was recognized by respondents as a health problem that needed to be addressed by involving nursing students through field practice, as part of the learning process. The limitations of this research include the number of respondents who are still local and cannot be representative even for the Papua region. Limited internet coverage also has an impact, that cannot reach a larger population. In addition, this research did not involve field practice supervisors and public health center

health staff who are usually directly involved in various public health programs.

Therefore, the suggestion for this research is that in the future further research can be carried out involving more respondents in other regions, even better if it is representative on a national scale, especially in the regions where the prevalence rate of HIV/AIDS cases is high. It is also necessary to involve supervisors, public health center staff, and other parties related to HIV/AIDS control programs. The most important thing is the publication of a field practice guide for nursing students in dealing with HIV/AIDS.

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