

Attitude towards post-exposure prophylaxis among clinical officer students in Kampala School of Health Sciences, Wakiso District. A cross-sectional study.

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ABSTRACT

Page | 1 **Background**

Early administration of a short course of ART (as PEP for 28days) reduces the risk of HIV transmission by 81%. The study aims to assess the attitude towards Post Exposure Prophylaxis among clinical officer students in Kampala School of Health Sciences, Wakiso district.

Methodology

The study employed across sectional study design with a simple random sampling technique. Data was collected on a sample size of 50 respondents using semi-structured questionnaires written in the English language with open and closed-ended questions. Data analysis was done manually using tally sheets, pens, and paper, and entered in excel computer program and presented in tables and figures.

Results

More than half (56%) of the respondents were males, (44%) were females. All of the respondents (100%) agreed that PEP is important. (87%) believed that training on PEP is important for behavioural change. Regarding whether respondents believed that there should be PEP guidelines in work areas, all (100%) believed that they should be there. (90%) believed that PEP can reduce the likelihood of being diseased after exposure, (10%) didn't know whether it can reduce the likelihood or not. (90%) agreed that PEP is not important if the exposure is not with the blood of a patient with known HIV positive, whereas the least of the respondents (10%) were not sure.

Conclusions

The study revealed that study participants had a reasonable attitude towards post-exposure prophylaxis, as all the respondents agreed that PEP is important.

Recommendations

The Ministry of Health should make sure that there are PEP guidelines in the workplaces where students do their practicum, since all respondents had a positive attitude towards them, and hence can guide the respondents in case of an exposure.

Keywords: Attitude, Post-Exposure Prophylaxis, Clinical Officer Students.

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Background

Early administration of a short course of ART (as PEP for 28days) reduces the risk of HIV transmission by 81% (Tiznobeik, 2013). In the context of HIV, PEP refers to the set of services that comprises first aid, counselling, risk assessment, relevant laboratory investigations, a short course of PEP for 28 days, and monitoring (Endalew Gemechu Sendo et al, 2014). Studies in Ethiopia by Biniam Mathewos, Wubet Birhan, Sebesbe Kinfe et al (2013) among health care workers on knowledge, attitude, and practices towards post-exposure prophylaxis for HIV results showed that among 195 health care workers, 75.4% had a good attitude toward post exposure prophylaxis for HIV.

A study in Gaborone by Peter Bareki, Tenego Tenego (2018), findings among doctors and nurses on assessment of knowledge, attitude, and practice of HIV post exposure prophylaxis results showed that among 693 respondents, 82.2% had a positive attitude towards PEP. In India, Sumit kumar, Gaurav Mishra, Vinay Kumar Gupta (2019) study among BDS Interns on knowledge and Practice of Post Exposure Prophylaxis results that among 274 BDS interns

who completed the survey 93% said that there should be guidelines regarding PEP in working area and 95% said the PEP can reduce the chances of developing AIDS in patients exposed accidentally to the used instrument /syringe, this indicated a positive attitude of the participants towards PEP. In Nigeria, Sarah Ajibola, Akinsegun Akinbami, Charles Elikwu et al (2014) revealed that among health workers in Lagos University Teaching Hospital, on knowledge, attitude, and practice of post-exposure prophylaxis, results showed that among 372 participants, 73% of the respondents had a positive attitude towards HIV PEP. A study in Khartoum city by Tibyan Abdelazim Elsadig, Elhadi Mohieldin Awooda (2019) among Sudanese dentists on the level of knowledge, attitude, and practice results showed that among 161 participants, the majority (89.4%) had a positive attitude towards PEP. The study aims to assess the attitude towards Post Exposure Prophylaxis among clinical officer students in Kampala School of Health Sciences, Wakiso district.

METHODOLOGY

Study design

A cross-sectional descriptive research design in nature was used in this study. The design was considered favourable because it helped the researcher to use various survey methods to gather quantitative data within a reasonable period of time.

Study area

Kampala School of Health Science is a private school located in Buloba, Semunyanya, Wakiso district, approximately 25 km from Kampala. The school was founded with four years' development plan, which started in 2013 as a clinical school offering a diploma in clinical medicine and community health. The school started offering courses like diploma in biomedical engineering, diploma in HIV/AIDS counseling, diploma in Public health, certificate in pharmacy, diploma in medical records and health informatics, certificate in medical records and health informatics and other courses. Kampala School is accredited by the Allied Health Professions Council, the National Council for Higher Education, and the Uganda Business and Technical Examinations Board. The school has a total population of 537, comprising male and female students. The school takes an obligation to attach its students to different hospitals in Uganda, like Butabika National Referral, Kayunga Regional Referral, Kawolo General Hospital, Rubaga Hospital, and Wakiso Health Centre IV for practicum every semester.

Study population

The study population refers to a large group of people possessing one or more characteristics in common on which a research study focuses. Therefore, the study targeted a population of clinical officers who attended hospital practicum and were present during the period of data collection in the selected area of study.

Sample size determination

The sample size was determined using Burton's formula (1965)

$$\text{Sample size (n)} = QR/O$$

Where,

Q- Total number of days taken for data collection

R- Maximum number of respondents who were interviewed per day

O- Maximum time taken on each respondent per day.

Values: Q= 10 days

R=5 respondents.

O=1 hour

Therefore, $n = QR/O$

$$N = (10 \times 5) / 1$$

=50 Respondents

Therefore, 50 respondents were used in the study.

Study variables

Dependent Variable

The dependent variable in this study was post-exposure prophylaxis.

Independent Variable

Independent variables were knowledge, attitude, and practices towards post-exposure prophylaxis among clinical officer students.

Selection criteria

Inclusion criteria

This was composed of clinical officer students who went on hospital attachments by the school, which included students of the second year and third year of the Kampala School of Health.

Scientists who were present during the period of data collection.

Exclusion criteria

Clinical officer students of Kampala School of Health Sciences who were present during the period of data collection, but did not attend the hospital attachments, were excluded from the study.

Sampling technique

A simple random sampling technique was used to select respondents from the source population. This technique was preferred because it ensures freedom from human bias, and each member of the target population had an equal and independent chance of being included.

Data collection tool

A semi-structured questionnaire was designed and used by the researcher to collect data from respondents. The questionnaire was designed according to the specific objectives of the study with open and closed questions, written in English. The questionnaire was preferred because it was suited to collect data from a larger sample, considering the nature of the study population.

Pretesting of the questionnaire

For uniformity of the data collection, pretesting of the questionnaire was done among 15 clinical officer students in Kampala School of Health who attended hospital practicum, in order to ensure that questions were easily understood by all the respondents, and the pretested instruments helped to identify questions that might have caused ambiguity and contradiction.

Data collection procedure

A permission letter was obtained from the Principal of Kampala School of Health Sciences. The researcher was then granted permission to collect data from the institute. The researcher was assisted by a trained research assistant who was knowledgeable in the field of research. After the data was collected, it was checked for completeness and accuracy. The questionnaires that were not completed or correctly filled out were completed before the respondents left. The forms were then kept in a locked cupboard so as to maximise confidentiality and ensure access to the research team only.

Quality control

The right respondents were selected through the inclusion and exclusion criteria. All activities regarding data collection were done under the monitoring and supervision of the research assistants. The research team met after data collection to review the collected data and cross-check the filled questionnaires for correctness and completeness. Standard operating procedures for coronavirus were also followed and maintained for the purpose of protecting the

study participants and data collectors from risks of coronavirus.

Therefore, quality control was done to ensure the accuracy and validity of the data collected.

Data analysis and presentation

Data was analysed manually using tally sheets and entered into a computer using the Microsoft Excel computer program to generate tables, pie charts, and bar graphs for easy presentation of findings.

Ethical considerations

The researcher introduced the topic, purpose, and significance of the study to the respondents. The respondents were assured of confidentiality in the study as no names were used, and thereafter agreed to sign a consent form. No respondent was forced to participate in the study. Each respondent was interviewed alone, and information got from any respondent was not shared with other colleagues. The data collected was kept in a locked cupboard.

Results

Demographic data.

Table 1 shows the distribution of respondents according to demographic data.

Variables	Response	Frequency (f)	Percentage (%)
Age of respondents	20-25	26	52
	26-35	16	32
	>35	8	16
Total		50	100
Sex	Male	28	56
	Female	22	44
Total		50	100
Marital status	Single	29	58
	Married	8	16
	Cohabiting	13	26
Total		50	100
Year of study	Year 2	15	30
	Year 3	35	70
Total		50	100

Table 1, more than half (52%) of the respondents were within the age range of 20-25 years, while the least (16%) were above the age of 35.

In regard to sex, the study found that more than half (56%) of the respondents were males, and the least (44%) were females.

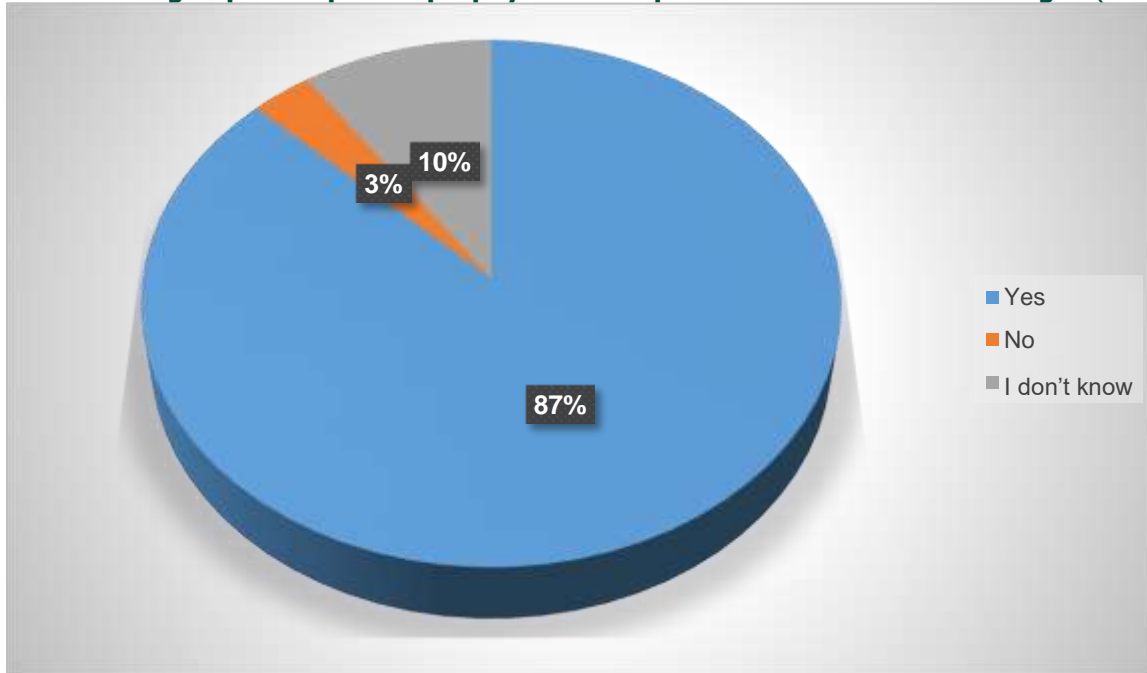
The study discovered that more than half (58%) of the respondents were single, while the least (16%) were married.

The study further revealed that the majority of the respondents (70%) were from year 3, whereas the least (30%) of the respondents were in year 2.

Attitude towards post-exposure prophylaxis among clinical officer students.

Regarding whether respondents thought that PEP was important, all of the respondents (100%) agreed that PEP is important.

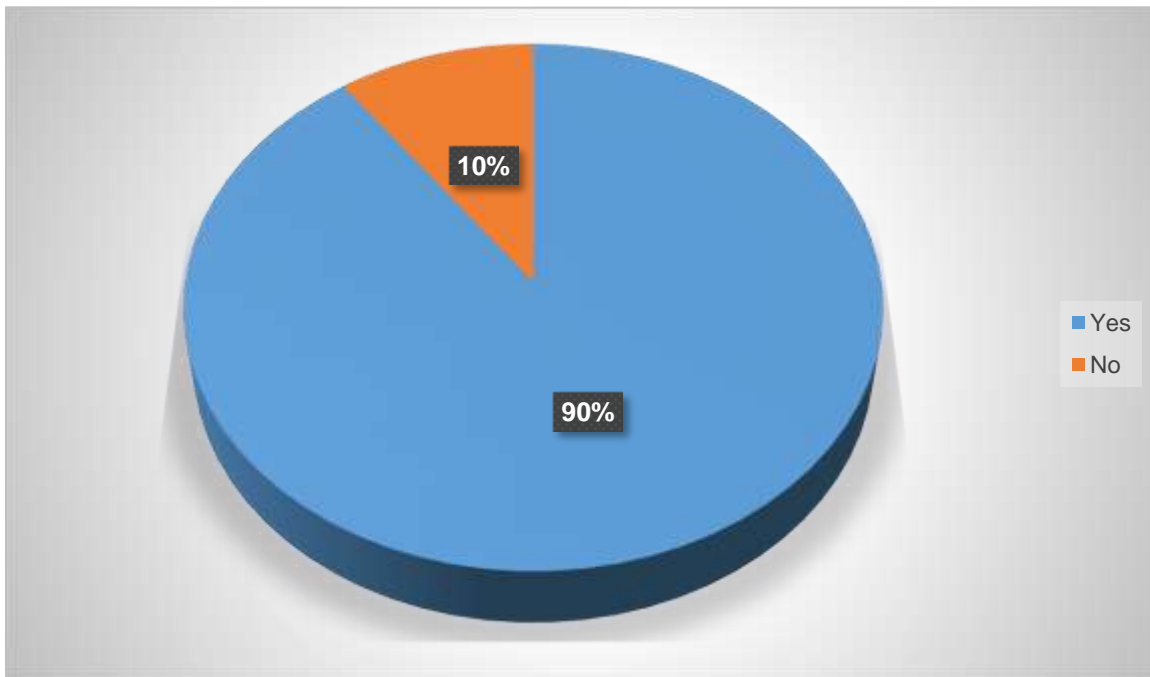
Figure 1: Shows the distribution of respondents according to whether they believe that the training of post-exposure prophylaxis is important for behavioural change. (N=50)



From figure 1, results showed that the majority of the respondents (87%) believed that training on PEP is important for behavioural change, whereas the least of the respondents (3%) didn't know whether it's important or not.

Regarding whether respondents believed that there should be PEP guidelines in work areas, all (100%) believed that they should be there.

Figure 2: Shows the distribution of the respondents according to who believed that PEP can reduce the likelihood of being diseased after exposure. (N=50)



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Figure 2 revealed that the majority of the respondents (90%) believed that PEP can reduce the likelihood of being diseased after exposure, whereas the least of the respondents (10%) remaining didn't know whether it can reduce the likelihood or not.

Figure 3: Shows the distribution of respondents according to who agreed that PEP is not important if the exposure is not with the blood of a patient with known HIV positive. (N=50)

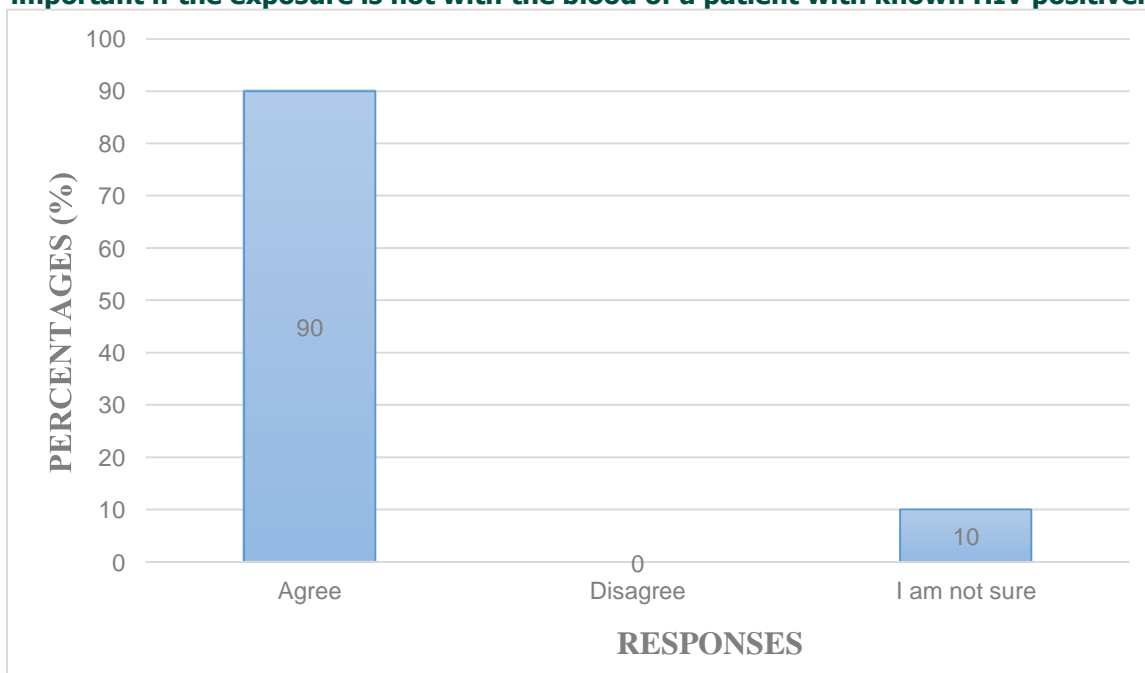


Figure 3 shows that the majority of the respondents (90%) agreed that PEP is not important if the exposure is not with the blood of a patient with known HIV positive, whereas the least of the respondents (10%) were not sure.

Page | 6 Discussion

Based on the study findings, all the respondents (100%) thought that PEP is important. This implies that all the respondents were aware of the importance of PEP. The current was consistent with a study that was done by Biniam Mathewos et al (2013), where findings showed that 98.5% agreed that PEP was important.

The majority of the respondents 87% agreed that training about PEP is important for behavioural change. Such perception clearly shows that a significant number of study participants had a favourable attitude towards learning about PEP. This is in agreement with Peter Bareki et al (2018), where findings showed that 85.6% of the doctors and nurses agreed that training of PEP is important for behavioral change.

All the respondents (100%) were in agreement that there should be PEP guidelines in work areas. This implies that all the students were comfortable with PEP guidelines at their workplaces. The study results were in line with Sadia Shakeel et al (2022), where 88.4% of the respondents believed that there should be PEP guidelines at workplaces. In view of the study findings, the majority of the respondents (90%) believed that PEP can reduce the likelihood of being diseased after exposure, and therefore, this showed that respondents had a positive attitude towards PEP. This is in agreement with Sarah Ajibola et al (2014), where 87% of the respondents agreed that PEP can reduce the likelihood of being diseased after exposure.

The study discovered that the majority of the respondents (90%) agreed that PEP is not important if the exposure is not with the blood of a patient with known HIV positive, and therefore, this denotes that a significant number of the study participants had perceived vital reasons as to why PEP should be given. Study findings were consistent with Tibyan Abdelazim Elsadig et al (2019), where 89.4% of the participants agreed that PEP is not important if the exposure is not with the blood of a patient with known HIV positive.

Conclusions

The study concealed that study participants had reasonable attitude towards post exposure prophylaxis as all the respondents agreed that PEP is important, (90%) believed that training of PEP is important for behavioral change, all the respondents that there should be PEP guidelines in work areas, (90%) believed that PEP can reduce the likelihood of being diseased after exposure and (90%) agreed that PEP is

not important if the exposure is not with blood of a patient with known HIV positive.

Study limitations

Some respondents didn't have enough time to fill out the whole questionnaire due to more time required for the longer study.

The study encountered financial constraints in running the study since research is a lengthy process.

The study faced a problem of bias of the respondents since it is a sensitive study, as some never wanted to be involved in the study.

Recommendations

The Ministry of Health should make sure that there are PEP guidelines in the workplaces where students do their practicum, since all respondents had a positive attitude towards them, and hence can guide the respondents in case of an exposure.

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Conflict of interest

The author did not declare any conflict of interest

Data availability

Data is available upon request

Author contribution

Lovinsa Nakasolya collected data and drafted the manuscript of the study
Mubangizi Prosper supervised the study

Author biography

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