

Improving Awareness of HIV Prophylaxis Amongst Non-Healthcare Individuals: A Research Proposal

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Abstract: *The goal of ending the HIV epidemic by 2030, with the worldwide effort to address the HIV epidemic, is in line with Sustainable Development Goal (SDG) 3.3. Strategies have been put in place by WHO, UNAIDS, and the Global Fund to address the substantial financial and public health impact of HIV, especially in low- and middle-income countries. HIV infection continues to be a danger to quality of life despite continuous efforts. HIV prophylaxis, which includes both pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP), plays an important role in the fight against new infections. Although it is clear that these preventive measures are helpful, there are noticeable gaps in knowledge and adherence, especially among non-healthcare individuals. Although special attention should be given to HCW, it is also important also to focus on the general public. For a complete strategy to HIV prevention, it is imperative to close gaps in public knowledge and improve awareness on HIV prophylaxis. The main aim of this research is to first investigate reasons why non-healthcare individuals have low awareness level of HIV prophylaxis both PREP and PEP and also evaluate ways to improve awareness and uptake by these category of individuals. This study will use a mixed-method approach to assess HIV prophylactic knowledge in Greater Accra, Ghana (PEP and PrEP). Surveys and interviews will be conducted with 200 participants in the research, which includes FSW, MSM, and hospital patients. Random sampling and snowballing are two techniques for sampling. Validity and reliability will be ensured through, thorough training of research assistants, pretesting research tools by pilot study. For ethical principles, there would be Participant anonymity, informed consent, IRB compliance, and safe data processing. This research proposal will go a long way by providing evidence-based knowledge to decision makers. The outcomes will guide the creation of community outreach initiatives, educational campaigns, and specialized medical services. By filling information gaps, identifying relationships, and advancing global health initiatives, the research hopes to improve public health outcomes through well-informed actions.*

Keywords: improving awareness, HIV prophylaxis, non-healthcare, individuals, research proposal

INTRODUCTION

HIV is an infection that targets the body's defenses, particularly the CD4 cells, which are white blood cells. HIV kills these CD4 cells, lowering a person's immunity against opportunistic diseases including TB, fungal infections, serious bacterial infections, and some malignancies. (WHO,2023). In line with SDG goal 3.3,

which calls for ending the HIV pandemic by 2030, are global HIV plans from WHO, UNAIDS, and the Global Fund(WHO ,2023). Public health is concerned about the HIV/AIDS epidemic due to its alarming financial and health costs in low- and middle-income nations. .. The World Health Organization reports that the virus has impacted 40.4 million people worldwide. By the end of 2022, there were a projected 39.0 million people living with HIV worldwide, with around two thirds of them located in the WHO's African area. In 2022, 1.3 million new cases of HIV acquisition were reported, and 630,000 deaths were attributed to HIV-related causes (WHO,2023).OWUSU,2023 Despite targeted international and local efforts to prevent and lessen its effects, HIV infection still poses a threat on the quality-of-life of individuals Cheabu, B.S.N et al). In the effort to prevent new cases, the implementation of HIV prophylaxis has been made paramount. With its global implications, there is an evident need for further highly effective preventive interventions, with a focus on HIV Post-Exposure Prophylaxis (PEP). This preventive measure is designed to prevent individuals from acquiring this infection, both before contact, through pre-exposure prophylaxis (PrEP), and after contact with the virus, through post-exposure prophylaxis (PEP). PEP has been available inside the Unified Health System (SUS) since 1999 and is notable for its exceptional effectiveness in reducing the risk of infection. It is advised during instances with sexually transmitted infections or percutaneous exposures, including cases of sexual assault, unprotected sex (i.e., with a defective or nonexistent condom), and work-related problems. Matos, M.C.B.,et al. Pre-Exposure Prophylaxis was also approved by the United States Foods and drugs board in 2012, for HIV prevention(Owusu,2023). This prophylaxis have since also played a pivotal role in HIV prevention.

The effectiveness of these prophylactic measures have been undoubtable, however, there exist notable gaps in awareness and adherence in individuals with non-occupational exposure. While it is undeniably important to focus on at-risk populations such as healthcare workers, equal attention should be given to the general population with non-occupational exposure. The gaps in awareness and adherence among the general public are significant, as HIV transmission is not limited to specific occupational hazards. Ensuring awareness and adherence to both PrEP and PEP in non-healthcare individuals is extremely important for a comprehensive approach to HIV prevention. In-depth understanding and targeted interventions are needed to bridge these gaps in awareness and adherence. Ghana a country in Africa had its first case of HIV in 1986. In 2020 as reported by UNAIDS, there was a total of 19,000 new HIV infections with a national prevalence of 175 among adults and an estimated 350, 00 living with HIV in Ghana(Boah, et al, 2023) in Owusu, 2023. Ghana has made HIV combination prevention her main method for reducing the spread of new infections. According to the NSP 2021–2025, with focus on prevention of HIV, its main aims as part of other measures include improving access to s PrEP, PEP, PMTCT, amongst others .

This study aims to evaluate measures to increase awareness and the use of HIV prophylaxis PREP and PEP amongst non-healthcare individuals in Ghana. This study will evaluate awareness of HIV in non-healthcare individual using the health believe model. Theory provides understanding on participants awareness and failure to adapt to HIV prophylaxis. As stated by Ashcraft, L.E., et al 2020..

Theoretical frameworks offer a necessary foundation to identify and assess strategies for disseminating research to policymakers.The Health Belief Model (HBM), The HBM was developed initially in the 1950s by social psychologists in the U.S Champion, V.L. and Skinner, C.S., 2008, . created by Rosenstock and associates, offers a model through which personal attitudes and views towards health-related behaviors may be thoroughly investigated. Regarding HIV prophylaxis, the Health Belief Model (HBM) will enable us to investigate the ways in which people in the non-healthcare sector view their susceptibility to HIV,

consequences, and perceptions that decreases one's awareness and adherence strategies. This model suggests that an individual's perception will predict their adaptive behavior. The Health Belief Model offers a strong theoretical basis for studying awareness of HIV prophylaxis in non-healthcare individuals. This will provide in-depth understanding of the variables influencing awareness by methodically looking at people's perceptions, and beliefs. This study may have limitations due to cultural disparities in non-healthcare individuals, which may reduce its probability to be generalized. Also, issues about subjectiveness due to personal beliefs which may have an impact on the accuracy of this proposed model in the aspect of one's behavior to HIV prophylaxis. Also, the methodology of this proposal will make it time consuming since research will integrate both qualitative and quantitative measures and thus much resources will be needed to undertake study. To investigate and address the knowledge gap regarding HIV prophylaxis, specifically non-occupational Post-Exposure Prophylaxis (nPEP), among non-healthcare adults in greater Accra Ghana. Utilizing the Health Belief Model (HBM), this study seeks to understand factors influencing awareness, informing targeted interventions to reduce new HIV cases in Ghana.

LITERATURE REVIEW

Preventive interventions are important for preventing the spread of HIV, which is still an important worldwide health threat. A key aspect of preventing HIV transmission is the use of pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP). In order to evaluate the awareness, knowledge, attitudes, and behaviors of healthcare professionals and high-risk populations about PEP and PrEP, this literature review examines a number of studies carried out in several African nations, namely Ghana, Nigeria, Ethiopia, and Uganda. According to Knopf, J.W., 2006, literature review a general overview of a body of research which reveals what has already been done well, and help determine gaps in existing research.

Knopf, J.W., 2006. Doing a literature review. *PS: Political Science & Politics*, 39(1), pp.127-132. Literature reviews provide a platform for gaining familiarity with the existing knowledge in your field. This familiarity not only helps with understanding the significance of your additional research but also offers the opportunity to analyze and contribute to the ongoing problem in your area of study. Literature Review, University of Illinois Springfield. To lay background for proposed research, it's imperative that previous studies on this particular topic are reviewed. This section presents a thorough examination of the present body of literature and identifying research gaps. This literature review of studies systematically reviewed in previous module Global Health (47588) with the following library sources for included studies. This study assessed four databases via ProQuest. These databases included Coronavirus research database, eBook central, ProQuest academic and ProQuest one business, which were published between 2013 and 2023. Conducted within Africa conducted amongst key population, HCW, FSW, MSM. which assessed the level of knowledge and adherence of PEP/PrEP amongst KP. Gloria, 2023. Below is the summary of 10 studies used for review of literature.

STUDY 1

A Cross sectional Study by Babanawo et al, assessed the level of awareness of HIV PEP in 185 healthcare professionals in Ghana. Results drawn from the study's interviews with healthcare professionals amounted 96.8% HCW know they are at risk, 97.3% HCW know of the existence of HIV PEP and 90.8% HCW reports the effectiveness of PEP. Despite high levels of knowledge of the effectiveness of HIV PEP, Overall

PEP adherence was low. Although this study had Adequate sample size (185 healthcare professionals) and Comprehensive evaluation of healthcare professionals' awareness, knowledge, and attitudes toward PEP, reliance on self-reported data may have led to response bias.

STUDY 2

Study by Ogunbajo et al in the year 2021 in Ghana which was a qualitative found out that amongst men who have sex with men, Only 3 out of 137 people had knowledge about PREP – 0.022%. Overall findings showed that Ghanaian MSM had low knowledge of PrEP, but when information about PrEP was provided, there was high acceptability. Weaknesses of this study included the fact that Data collection was done whiles PREP hadn't been instituted although in the same year, 2012. Thus results can be said to be biased since generally awareness might have not fully been yet established. Also HIV status was underestimated in the sample, since 24% of participants failed to report HIV status.

STUDY 3

Study Guure et al, 2021 which was a qualitative study and conducted in Ghana, discovered that there is a widespread lack of knowledge regarding Pre-Exposure Prophylaxis (PrEP) among the participants in a series of 22 focus group discussions that were held in Accra, Kumasi, and Manya Krobo between March and June 2012. Out of the 5107, only 998 respondents had ever heard of HIV prophylaxis PREP and amongst these only 64 (6.39%) have ever used PrEP. Qualitative nature of this study could limit its generalizability due to its relative nature and the fact that FSW were imbursed with an amount of 50cedis, which could have influenced legibility of their responses.

STUDY 4

Qualitative study by Nagai et al, in 2023 sought views on the implementation of HIV PREP. Study included 23 in-depth interviews with healthcare practitioners in Ghana. 20 key informant interviews with local and federal politicians. Policymakers and healthcare practitioners strongly favor the introduction of PrEP for KPs. Thoughts were expressed on potential behavioral disinhibition, non-adherence and pharmaceutical side effects, potential financial implications, and the stigma surrounding HIV and important communities. Participants underlined how important it is to include PrEP into already-offered programmes. They suggested that difficulties with behavioral factors, adherence, and financial considerations be managed. For effective PrEP integration and adoption, the Ghana Health Service is urged to put into practice a thorough plan that tackles these problems.

STUDY 5

Cross sectional study Sunglo et al in Ghana included 199 frontline healthcare workers within a healthcare facility in the year 2021. Results from study showed that, 90.1% frontline HCW are aware of PEP, 96% frontline HCW are less likely to experience occupational exposure of PEP and 94% frontline HCW are less likely to adhere to PEP. In all adherence for PEP control was low with rate of 17.9%. The study adopts a cross-sectional design, which is suitable for examining the prevalence and factors associated with PEP adherence at a specific point in time. However, cross-sectional studies have limitations, such as the inability to establish causation.

The sample size of 199 frontline healthcare workers is moderately sized for this type of study. However, the representativeness of the sample needs to be considered, as it may not fully reflect other cadres within healthcare settings.

STUDY 6

Cross sectional study by oche et al , amongst healthcare workers evaluates the postexposure prophylaxis (PEP) knowledge, attitude, and practice of healthcare workers in a tertiary health facility in Nigeria. 156 participants were selected using a stratified sample strategy for the cross-sectional descriptive research design conducted at University Teaching Hospital . A total of 87.2% (136) of the respondents were aware of PEP, and 71.8% (112) believed that PEP might prevent HIV/AIDS. about those who responded to the survey, 71.2% (111) had good understanding about PEP and 86.8% (118) had a positive view towards it. this study provided samples from all health cadres but The study does not explore the actual practices of healthcare workers in terms of PEP utilization. Knowing about PEP and having a positive attitude does not necessarily translate to correct practices.

STUDY 7

A cross-sectional survey, by Adal et al in 2022, carried out in Ethiopia on PEP for HIV reported sizable fraction of respondents (51.6%) and 63.6%) having inadequate understanding and/or practice. Nonetheless, 54.2% of respondents, or more, had a positive opinion of PEP for HIV. -91.3% of HCW have heard about PEP. Out of which , 55.8% had PEP guidelines but, 51.6% reported poor knowledge regarding PEP. 63.6% reported poor adherence / poor practice to PEP for HIV. Despite having generally positive views, a sizable percentage of respondents lacked information and practice addressing HIV PEP. The majority of healthcare professionals (68.9%) never received PEP training. This study can bs said to be generalizable, since it participants were selected in 6 randomly selected public hospitals
Asmamaw Abeb, Ousman Adal a, *

STUDUY 8

Cross-sectional study carried by AKELLO et , al amongst HCW in Uganda during 2018 , showed that 92.9% of the respondents were aware of post-exposure prophylaxis, 65.9% never received PEP training ,Attitude towards PEP showed -47.9% agree PEP as an effective HIV prevention tool, And -38.9% HCW exposed sought PEP with 71.4% completing the PEP dose

STUDY 9

Study by Agbulu et al , which was a quantitative study on doctors in Nigeria in 2013 showed 57% of doctors knew what PEP was -5% had no clue of what PEP was about. only38% out of 80 doctors clearly stated the indications for PEP. Out of 15 attitude parameters with 5 maximum score Positive and super positive attitude had 51-65, and above 65 points respectively. Study can be said to be narrow as it focused on only one cadre of healthcare work making less generalizable.

STUDY 10

Retrospective cross-sectional study by SHAMIL ET ALL ON HEALTHCAREWORKERS in Ethiopia during 2021 . Results from study showed that 35.02% of the participants had inadequate knowledge of PEP. Indicating a greater percentage of HCW having prior knowledge of HIV prophylaxis but 32.26% had an unfavorable attitude towards PEP. Amongst the various research gaps highlighted in a systematic review by GLORIA, 2023, included was low awareness of PREP IN NON HCW INDIVIDUALS, AS SEEN FROM STUDY that level of PREP awareness amongst FSW and MSM was extremely low with percentages of awareness ranging from 0.022% to 19.54%.

The awareness levels in non-healthcare individuals hasn't been well studied, despite the abundance of studies examining factors influencing adherence to HIV post-exposure prophylaxis (PEP) and pre-exposure

prophylaxis (PrEP) among healthcare professionals. Previous research has predominantly concentrated on healthcare professionals, resulting in a significant gap in understanding on the general public's awareness of PEP and PrEP. Insights on factors influencing awareness in the general public will contribute to bridge this gap of knowledge.

Aims of Research

The main aim of this research is to first investigate reasons why non-healthcare individuals above 18 years living in Accra, Ghana, have low awareness level of HIV prophylaxis both PREP and PEP and also evaluate ways to improve awareness and uptake.

Research Objectives

1. To evaluate knowledge base of non-healthcare individuals on HIV prophylaxis , PREP and PEP
2. To identify factors that influence awareness of HIV prophylaxis PREP and PEP in non-healthcare individuals
3. To investigate how awareness of HIV prophylaxis influence adherence in non-healthcare population
4. To examine how socioeconomic /demographic factors affect awareness of HIV prophylaxis PREP and PEP in non-healthcare individuals
5. To know the availability of HIV prophylaxis to non-healthcare population
6. Evaluate the misconceptions about HIV prophylaxis in non-healthcare population
7. Deduce strategies which can be implemented to increase awareness of HIV prophylaxis in non-healthcare population.

Research Questions

1. What is the knowledge base of non-healthcare individuals on HIV prophylaxis, PREP and PEP
2. What factors influence awareness and knowledge of HIV prophylaxis in non-healthcare population
3. How does awareness of HIV prophylaxis influence adherence in non-healthcare population
4. What socioeconomic /demographic factors affect awareness of HIV prophylaxis PREP and PEP in non-healthcare individuals
5. How available is HIV prophylaxis to non-healthcare population
- 6.. What are the misconceptions about HIV prophylaxis in non-healthcare population?
7. What strategies can be implemented to increase awareness of HIV prophylaxis in non-healthcare population.

METHODS

This study will use a mixed method approach by combining surveys and interviews to evaluate the current levels of awareness of HIV prophylaxis i.e. PEP and PREP. According to Legesse, 2014,. Research methodology provides the principles for organizing, planning, designing and conducting good research. Methodology is the guidelines in which we approach and perform activities Hence, it is the science and philosophy behind all researches. Quantitative and qualitative methods work best when combined to provide a more rigorous study A researcher using quantitative research depends on numerical data. Alternately, qualitative research is defined as "an enquiry process of understanding" in which the researcher creates a "complex, holistic picture, analyses words, reports specific perspectives from informants, and carries out the study in a natural environment"(Ivankova, N.V., 2002).

Research Setting

The proposed study would be carried out at the capital city of Ghana, Greater Accra. Ghana is a country situated at the coastal belt of western Africa. Of Ghana's 16 administrative areas, the Greater Accra Region has the most population, yet it is the lowest in terms of land size. With 3,245 square kilometer of total land area, this region makes up only 1.4% of Ghana's total land area. With 5,455,692 residents as of 2021, the Greater Accra Region makes up a significant 17.7% of Ghana's overall population of 32.83 million, according to the Population and Housing Census 2021 report. The Greater Accra Region is essential to the nation's administrative, economic, and ultra-landscapes, as seen by its dual function as both regional and national capital. The region's urban-centricity and demographic significance draw attention to its dynamic and significant role in Ghana's larger socioeconomic framework

Research Design

Proposed study will use a mixed methods survey approach. This method will ensure a comprehensive approach to exploring research topic. By using both qualitative and quantitative approach, the quantitative method will provide statistical data while qualitative method will provide subjectiveness.

Study Population

Total of 200 participants will be studied, ten FSW, ten MSM and 180 patient participants, breakdown to 60 participants from three tertiary hospitals. The three tertiary hospitals are namely Korlebu Teaching Hospital, Greater Accra Regional Hospital and 37 Military Hospital.

Inclusion Criteria;

1. FEMALE SEX WORKERS; female individuals engaged in sex work will be identified as female sexual workers. This category of individuals will be selected due to their susceptibility to acquiring HIV infection from the nature of their work.
2. MEN WHO HAVE SEX WITH MEN; this category of men also do have special needs and are also susceptible to HIV.
3. PATIENTS FROM OPD OF THREE TERTIARY FACILITIES
This population will be representative of general population. This group will allow a broader understanding of the health seeking behavior of the general population at large .

Exclusion Criteria

1. Healthcare workers/ hospital staff
2. Individuals below 18 years of age.

Sampling Method

FSW & MSM; this category of participants will be sampled by snowballing. Due to the sensitive nature of these groups, and also due to the fact that they have a hidden population. Initial participants will refer others from social network who will meet eligibility criteria.

PARTICIPANTS FROM OPD; simple random sampling will be used for the selection of members. This sampling method will give everyone the chance to be selected equally thus ensuring representativeness and unbiased participant selection.

Data Collection Procedure

participants will be briefed of the intention of the research then afterwards, consent will be first sought from participants identified, both signed and verbal.

Interviews

Interviews will be done confidential by keeping participants anonymous. After which interviews will be recorded and transcribed verbatim. In cases where there is language barrier an interpreter will be available to help assist in effective communication.

Survey Questionnaires

Close ended questions will be administered; then adequate time will be given to patients to answer questions. Interpreter will be made available for interpretations of questions, on occasions whereby there are language barriers.

Data Analysis

Quantitative Data

For descriptive analysis of demographic data, study will use statistical package for social sciences software(SPSS) to identify correlations between demographic variables and awareness levels. There will be thematic content analysis for response to close ended questions.

Qualitative Data

Qualitative data from interviews will be transcribed and coded. Recurring themes would be identified relating to experiences, awareness and perceptions. This will be done with the help of NVivo software for qualitative data analysis. This software will be chosen due to its robustness and the fact that, “NVivo saves researchers from ‘time consuming’ transcription and boost the accuracy and speed of the analysis process” Zamawe, F.C., 2015.

According to Creswell (2002), the steps involved in qualitative analysis are as follows: (1) preliminary data exploration through reading transcripts and writing memos; (2) data coding through text segmentation and labelling; (3) using codes to develop themes by aggregating similar codes together; (4) connecting and interrelating themes; and (5) creating a narrative.

Validity and Reliability

Research methodology is judged for rigor and strength based on validity, and reliability of a research (Morris & Burkett, 2011). Validity in quantitative research refers to how well a measuring tool captures the desired data (Thatcher, 2010). However, in qualitative research, this occurs when a researcher employs specific techniques to check the accuracy of the study findings (Creswell, 2014). To start with research assistants will be trained rigorously. By ensuring that every participant encounters the same conditions, standardized procedures for data collection will reduced the possibility of confounding variables. After which a pilot study will be conducted to pretest data collection tools and to identify potential issues in order to refine questions. This will help maintain validity and reliability of findings. According Kimberlin & Winterstein, 2008, the evidence of validity and reliability are prerequisites to assure the integrity and quality of a measurement instrument.

Ethical Consideration

Permission to conduct research must be acquired in accordance with Institutional Review Board (IRB) rules (Institutional Review Board, 2001). The study will address ethical considerations at every stage. To ensure that study is ethically acceptable these measures will be employed. First, a request for review form will be

filled, this form will have the name of principal researcher, title of research and type of participants involved.

Secondly, an informed consent will be provided. This will confer rights to participants to choose whether to participate or not. Lastly participants will be kept anonymous. Devices used for recording will be kept safely and destroyed after period of time. Participants will be briefed on the fact that research results will disseminate to a of targeted audience, and assured of no traces.

DISCUSSION

In this part of the study, we anticipate the findings of our proposed research will add to the wider body of knowledge, and yield valuable insights of public health importance. The expected outcomes will help understand the factors that influence awareness and adherence of HIV prophylaxis in non-healthcare individuals. Outcomes have been categorized into quantitative and qualitative since methodology will be a mixed method.

In terms of qualitative outcome we seek to obtain numerical data that quantifies the level of awareness within the population of patients at the OPD, this will shed more light on variations in demographic factors such as age range, gender educational background(i.e. demographic factors). With this awareness levels will be affected by demographic disparities.

With regards to qualitative outcome it's expected to generate information in-depth views of individuals the perception and attitudes towards HIV prophylaxis. Also perceived barriers hindering HIV prophylaxis. Also suggestions on ways to increase participant's awareness of HIV prophylaxis. This will identify common misconceptions which will help with a rich understanding of factors that influence awareness and adherence of HIV prophylaxis its availability. The outcome will be presented using themes and narrative which will compliment qualitative results.

In general expected findings will include sociodemographic statistics of participants showing very low or moderately higher awareness of HIV prophylaxis in certain age ranges. Also associations with certain demographics such as gender and educational background. Qualitative themes will also build emphasis on particular beliefs, perceptions and attitudes.

Implications of Expected Findings

The proposed research finding will help influence policies and public health practices on intervention geared towards awareness and adherence of both HIV pre and post prophylaxis in non-healthcare individuals. For public health practice, results from study would provide informed policy decisions this information can be used by policymakers efficiently allocate resources to specific interventions. example age specific/ gender specific interventions. Apart from policy formulation, educational initiatives such as creating health campaigns would help communication of information to reaching diverse population. Also, community strategies. Outreaches. with respect to current knowledge, this study will provide Advance understanding by Filling knowledge gap and produce New findings, which will help discover associations. Evidence from this study will help tailor intervention to specific population and individuals

Dissemination

This chapter mainly dwells on the process through which results from this research if undertaken will be disseminated. The main objectives of this part of this research proposal is to elaborate how to publicize

knowledge about research findings which will help influence decision making by creating sustained engagement through targeted audience. The information would be shared widely enough to get to audience. According to Kwan, B.M.,2022 We should widely and fairly distribute and maintain usage of evidence-based public health, community, clinical, and health care innovations across a variety of contexts in order to realize the public health effect in research and evaluation.

First the results to answer gap of knowledge will be disseminated in a holistic manner to improve measures for public health engagement. After results gotten from proposed research , steps for dissemination will include

1. Submission of research paper for publication to reach academic audience
2. Report drafting from results ascertained from research . research findings will be put into a formal report, document to help understanding and assimilation by stakeholders , policy makers, etc.
3. Number of audiences would be reached through
 - A, symposium / conference presentation
 - B; communicate findings to policy makers and stake holders
 - C; community engagement , in form of outreaches
4. Infographics and social media engagement
 - Creating short infographics for social media, Instagram, Facebook, YouTube etc. .
 - a. Talk shows/ tv interviews
 - b. Radio/ FM stations Website for global audience
5. There would be focus on engagement in targeted niches direct communications to institutional groups e.g. schools colleges and universities. .
6. Recommendation for policy formulation to policy makers
7. Evaluation; there will be reviews made to address the need for changes
 - Checking impact and getting feedback for improvement of strategies for dissemination.
8. Badget will be drawn by taking into consideration more cost-effective approaches
 - Activities will be prioritized based on their cost effectiveness.

CONCLUSION

The goal to end HIV epidemic by 2030 in line with the Sustainable Development GOAL(SDG) 3.3. preventive methods such as the usage of HIV prophylaxis (ie PEP and PREP) is key in prevention of new infection. The proposed study is to close the knowledge gap on HIV prophylaxis awareness and adherence among non-healthcare individuals, with a focus on Greater Accra, Ghana's Pre-Exposure Prophylaxis (PrEP) and Post-Exposure Prophylaxis (PEP). A comprehensive study design and suggested mixed-methods approach, guided by a review of existing literature, with insightful findings. Expected results might impact public health policy, how resources are allocated, and educational programmes, which would eventually lead to better awareness and adherence amongst non-healthcare individuals in Ghana. the plan for disseminating research findings to different audiences include strategies to channel information through academic publication, formal reports for stakeholders, presentations at conferences and to policymakers, community engagement and social media engagement. All this will be done in a cost-effective approach.

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