

# HIV/AIDS Formative and Capacity Assessment: A Guide to Enhance Preventive Measures on HIV/AIDS

**Keywords:** HIV/AIDS; Infections; Sexually transmitted diseases; Knowledge; Perception; Education; Sexual behaviours and awareness

**Abbreviations:** PEP: Post Exposure Prophylaxis; CSW: Commercial Sex Workers; STDs: Sexually Transmitted Diseases; IDUs: Injecting Drug Users; PLWA: People Living with HIV/AIDS

## Introduction

HIV/AIDS continues to be a global issue and we all have a role to play as we move towards ending this epidemic by 2030. The biggest problem of HIV epidemic stem from its link with all aspects of society and cultural factors. The society and cultural factors becomes the primacy that unravels the viral transmission, the outcome of prevention strategies and the compassion of Health care workers in managing their HIV patients. A clear understanding of these factors, therefore, becomes a determinant for planning the response to the epidemic.

2 million deaths caused by HIV/AIDS globally in 2008 [1] indicates that HIV/AIDS remains one of the most global public health risks since its recognition in 1981 [2]. With an estimated 33.4 million infected and 2.7 million new infections [1], there is need to establish or improve on existing cost effective measures to reduce the infection.

Formative and capacity building assessment is a community based intervention geared towards the growing global HIV/AIDS epidemic [3]. Formative assessment is useful to determine the level of knowledge, perception, education, sexual behaviours and awareness of HIV/AIDS prevention measures among the most at risk populations. While capacity building response [4] focus on attitude of health care providers towards HIV/AIDS patients to identify poor practices in HIV/AIDS service provision. This will improve HIV/AIDS counselling services [3] and sexual health behaviours [5] to enhance preventive measures for effective and comprehensive response to HIV/AIDS.

Although, it is now an acceptable fact that antiretroviral assists the HIV patients live longer, the atomic difference between managing and controlling this viral menace often evades the understanding of most people, especially policy makers in urban poor and rural populations (Onyebuchi E, 2013).

Hence, the rationale for this research, to strengthen country activities through formative and capacity building by taking the fight against the disease to the door step of this often, neglected segment of the population, as a rational to enhance comprehensive universal response to HIV/AIDS.

A list of selected key questions from different research articles was selected to support the theme of this report, to examine the strength and weaknesses of the methods applied in answering the questions.

The lists of the selected Research questions are:

## Research Article

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- "Health care workers are worried about getting HIV/AIDS from caring for persons with HIV/AIDS?" [6].
- "What is the level of knowledge of HIV/AIDS and sexual belief among commercial sex workers in Daulatdia, Bangladesh?" [7].
- "Are people with HIV/AIDS having a sexual partner who is an injection drug user?" [8].
- "Has the partner been tested? Can the partner be trusted to be faithful? What is the sexual history of the partner?" [9].
- "People have different ideas about their risk of getting HIV/AIDS. What do you think the chances are that you will acquire HIV?" [10].
- "Does the idea of using a condom appeal to you?" [11].

## The quantitative methods

Peter Delobelle et al. [6] in their mixed method used a cross sectional survey to engage participants by administering questionnaires. While the hospital nursing staff were recruited using proportionate random sampling, the PHC nursing staff were recruited using cluster sampling probably because of the cost and concentrated population of the nurses, therefore the rationale to use a cross sectional method in measuring demography to save time and money. Information about the nurses' awareness on disease transmission; precaution and prevention were measured using a knowledge scale to identify occupational transmission. While information on nurses' attitude towards patients with HIV/AIDS was measured to find out whether the nurses sympathises with their patients living with HIV/AIDS or avoids them during service provision. Universal precaution adherence, post exposure prophylaxis (PEP) requirements and availability and behaviour with regard to HIV testing and referral were measured using practice scale component to explore gaps in effective practice for capacity building response. Anne Spaulding et al. [11] in separate

mixed method to measure attitude towards condom use, used sexual risk scale – a questionnaire with 5 – point Likert scale. Only prisoners were asked about attitude towards condom use in the 1<sup>st</sup> phase while releases followed in the second phase. Eligibility criteria included former prisoners and residence in the vicinity of Atlanta and Macon, Georgia. Paper based instrument was administered “one on one” with former prisoners to measure demographics and beliefs about HIV prevention and attitude toward a mentoring programme with focus on HIV/AIDS self - efficacy concerning safe behaviour and abstinence from alcohol and drugs. Condom attitude survey was also administered to both the volunteers and releases to measure their sexual risk behaviour. The perceived peer norm regarding sexual practice were measured using the peer norm scale – a predictor variable that determines peer’s behaviour or belief on sexual practice by preparing a questionnaire on a Likert scale. The sexual risk scale indicated that same sex partner using condom was 1.6 (SD = 0.99), while prisoners using condom with different partners was 1.5 (SD = 0.67). The peer norm scale indicated mean difference between releases who believe on abstinence (mean = 2.3, SD = 1.2) and releases who agree on having sex while on drugs or alcohol (mean = 2.7, SD = 1.4).

In a separate study Hosaina and Chatterjee [7] used both an open – ended and closed – ended question using “face to face method” in a questionnaire administered to the commercial sex workers (CSW) in Bangladesh. This is to find out the attitudes and beliefs that may expose commercial sex workers into a greater risk for HIV infection and to identify gaps for future intervention programme. In this cross – sectional study commercial sex workers were selected based on convenience and questionnaires was pretested with 25 commercial sex workers and administered in Bangla (local language used in Bangladesh). Hu Z et al. [10] concluded a study in Eastern China using a face – to – face interview to measure couples knowledge regarding HIV/AIDS transmission and prevention with 13 true/ false/ unknown scores ranging from 0 – 13 points. Questions on sexual behaviour were assessed using “often or always/ sometimes or never used.” Epi – info 6.12, t – test and multi regression analysis was statistically presented to get the odd ratios and confidence interval. Knowledge, attitude and sexual risk behaviour were associated with migration of couples using SAS 9.1. Alternatively, focus group discussion with other couples could have been integrated if time constraints were not limited to enable participants avoid recall bias because most of the responses were retrospective findings.

### Qualitative methods

Peter Delobelle et al. [6] explored the perception of the PHC and nursing staff by engaging them in a focus group discussion, each using a semi – structured and predefined open - ended question moderated by a nursing expert and conducted in a local language called “Northern Sotho”. The number of nursing staff chosen were small enough (n =20 for PHC nurses and n = 15 for hospital nurses) to give everybody chance to express their perception towards patients with HIV/AIDS. In - depth interview was also employed to understand the HIV/AIDS perception from the perspective of the rural nursing supervisors in the local area. The purpose is to offer a more complete picture of the experiences of the staff towards the patients living with HIV by separating the

nursing supervisors as opposed to group staff opinions in the hospital and PHC. A small number of supervisors (n = 3) was chosen for in - depth discussion in a quiet setting on different meetings to enable the researchers elicit detailed information about the staff perception.

Alternatively if resources and time are available for this research, then a participant observation would have been integrated to enable the researchers give a detailed study of the experiences of the nursing staff by observing training and care, disease presentation, adherence and precautions of the patients by the nursing staff in the hospital and primary health care (PHC). This would have helped to build more explanation for the knowledge; attitude and practices developed in the survey responses and could have as well enrich the research.

However, in a separate study, Shilpa Patel et al. [8] in their longitudinal study used a series of five telephone interviews at 3 – month intervals on people living with HIV/AIDS (PLWHA) who could not be engaged on in – person discussion. Convenient and inexpensive method for the researchers as data to validate ECSQ came from the choices in care study and enrolment is voluntary, implying that outpatients contact digits would be obtained from one of the three HIV/SNPs or in the Medicaid fee – for – service (FFS) system and as well reduce cost by saving them the four dollars transportation stipend for in person participants. Eligibility depends on whether people living with HIV/AIDS (PLWA) were enrolled with any of the three HIV/SNPs or in the Medicaid fee – for – service (FFS) system. New entrants into the FFS system were eligible depending on whether they were 18 years or above, spoke either English or Spanish or live in New York City. FFS recipients were recruited simultaneously as a convenience sample. This is because they agree to participate out of their own wish by responding to the flyers posted at chosen AIDS centres. Interviewers were pilot tested to check their similarity in coding qualitative data. Chin [9] used an inductive model – inquiry strategy to assess the sexual risk of 21 American women in Asian/Pacific Islander. Purposive sampling – selection of participants based on purpose of the study was used to recruit subjects from health clinics and community based social organisations. A semi – structured interview with open ended questions was administered to elicit in – depth information on participants past sexual behaviours such as whether partners use condom or get HIV test. Probes were used to understand full account of participant’s exposure to HIV risk. Observation method was integrated for inductive interpretation to enrich the research considering different languages and cultural context in the region. This is to properly investigate the sexual interactions between partners.

### The contrast and comparison of qualitative and quantitative methods

Survey is cheap and less time consuming unlike face to face or focus group discussion in measuring the sample size and geographical area needed for assessment of the hospital nurses [6] on knowledge, attitude and perception on HIV/AIDS. This is because Surveys maintain a representative sample by choosing a random rather than purposive sampling – used in face to face to cover hard to reach populations. Whilst the use of cross sectional

survey is fast and cost effective, it provided low accuracy or little information about the demography unlike longitudinal surveys that are time consuming and expensive but gives high accuracy [12] and allows the researcher to capture enough demographic information about the population [8]. Considering the sensitive nature of HIV/AIDS in focus group discussion, reliability is not always assured [5] but the less intrusive and consistent nature of survey [13] unlike telephone or face to face interview ensures that trustworthiness is maintained by presenting uniform questions to the participants. However the consistency nature of survey is unfavourable as opposed by focus group or face to face when respondents are required to shade more light on perception towards condom use or HIV status of partners. This is because researchers benefit from time and cost effective detailed information from face to face interview or focus group comments that help extend ideas to other members in developing and exploring more opinions on HIV/AIDS preventive practices. Whilst survey measures the distribution of HIV/AIDS opinion in the population, there is no control over the flow of discussion unlike in one on one or focus group discussion where expert facilitator moderated the group so that nobody dominates the discussion [14].

Telephone interview was easier and faster in reaching to the people living with HIV/AIDS who could not attend the face to face interview because of stigma and discrimination associated with their status [8]. This enriched the research because interviewer's bias common in face to face was greatly eliminated. Time and money was saved by using telephone method to reach the participants who could not attend the first face to face interview rather than arranging for second opportunity with them. However Face to face interview offers the researcher, the opportunity to dispel all uncertainty obtained in the telephone interviews by reading signs and body movement of the participant or probe in – depth by allowing semi – structured and open ended questions to elicit information on past sexual behaviours and attitude of service providers towards people living with HIV/AIDS. Unlike in the telephone interview where the questions are limited to avoid respondents hanging up or poorly answered for researchers to code useful information [15].

Direct observation enable the researchers study the cultural values in other to understand why certain knowledge or belief on HIV/AIDS exist among American women in Asian/Pacific Island [9], unlike telephone or face to face interview, where the researcher rely on the information provided by the participants. Observation is cheap and easy to overcome language barriers when trying to comprehend “different ideas about people's risk in getting HIV/AIDS” [10] or to understand poor practices of service providers during HIV services [6], but in telephone, focus group or face to face interview an interpreter is always required [16]. However direct observation is time consuming and could introduce a bias called “Hawthorn effect” - when target subjects detect the presence of an observer [17]. This effect is not applicable in telephone or face to face interview because the respondent already knows the intention of the researcher.

## Conclusion

The effort of policy makers and health care workers to tackle the increasing prevalence of HIV/AIDS remained underachieved

due to lack of appropriate knowledge, information and communication (KIC) to the public on current issues surrounding HIV/AIDS on preventive practices and sexual risk behaviours of people living with HIV/AIDS (PLWA) have not been helpful in addressing the epidemic. This is because evidence based cross – sectional survey suggested that “lack of HIV/AIDS knowledge and training is associated with less empathic attitude towards patients with HIV/AIDS among rural health care workers, which has a negative impact on their work [6]. The researchers went further to say that post exposure prophylaxis following an occupational needle stick injury among rural healthcare workers in developing countries is often required, but not always available”. This implies that the reluctance to update staff on current HIV/AIDS training and equipments needed for these services will endanger the task required from the service providers in providing appropriate awareness and support services to the public.

However, Hosaina & Chatterjee [7] concluded that “Inadequate knowledge of the basic concepts of HIV/AIDS, low frequency of condom use, and lack of treatment for Sexually transmitted diseases (STDs) contribute to the high risk of HIV/AIDS.” He stated that the target population need to be knowledgeable of the current trend of HIV/AIDS prevention practices and the risk that unhealthy sexual behaviours pose in exposing them to the disease. This implies there is need for the emergence of new methods of intervention to advance the less valuable customary behavioural response for an effective capacity building response. This will allow the population become well informed on HIV/AIDS and consequently enhance their preventive measure to the disease.

Meanwhile Shilpa Patel et al. [8] in his longitudinal study concluded that poor preventive practices and sexual risk behaviour among other health problems as some of the needs and concerns of people living with HIV/AIDS (PLWA). This is because previous findings argued that HIV/AIDS and poverty are not correlated but current evidence based studies concluded that disparities in threat of HIV prevalence between men and women are related to steps of poverty and that such risk are high among women from poor background because of their sexual behaviour and networking [18]. To scale up HIV/AIDS prevention, policy makers should focus on expanding access to confidential HIV counselling and testing to tackle the barriers like stigma and discrimination [19] which have left a serious gap in the eradication of the disease as evidence based research suggest that efforts to improve on HIV prevention also need to address structural barriers including stigma and discrimination, poverty and institutional capacity [20]. However, lack of appropriate understanding of the public perception or knowledge on HIV/AIDS, will not allow evidence based preventive practices to thrive [9] and certain behavioural risk will not reduce as injecting drug users (IDUs) are unlikely to see sharing syringes as a risk behaviour to contacting HIV [21].

Anne Spaulding et al. [11] concluded that attaching volunteers in United States prisons to mentor HIV- infected inmates returning to the community may enhance behavioural change and maintain health – promoting behaviour upon release. This is another important issue that need to be explored further as the releases concentrate more on addressing their social needs and trying to enhance their living conditions than focusing on sexual health education or HIV prevention [22-24].

These findings will present a base to fill policy gaps in empowering institutions like hospital and public health staff in promoting effective practice to HIV/AIDS prevention through social mobilisation, advocacy and awareness for health promoting behaviours. This is to allow individuals understand the gaps on institutional capacity prevention of behavioural issues that expose them to HIV/AIDS as a way of protecting the population from the disease.

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