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Original Research Article

Practice of Provider Initiated HIV Testing And Counseling (PITC) Among Medical Doctors in University of Port-Harcourt Teaching Hospital, Port Harcourt, Rivers State, Nigeria

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Abstract: **Background:** In recent times, no other disease has captured people's attention as HIV/AIDS. Reaching individuals with HIV who do not know their sero-status is a global public health priority. The Provider Initiated HIV Testing and Counselling (PITC) approach is recommended by health care providers as a standard component of medical care for all patients. This study set out to determine the level of practice of PITC among doctors in the University of Port-Harcourt Teaching Hospital. **Methods:** A descriptive cross-sectional design was used in this study. A stratified sampling method was employed. Data collected from 384 consenting doctors using self- administered questionnaires was analyzed using the SPSS statistical software version 20. Descriptive statistics were used to summarize relevant data. **Results:** It was found that 74.2% of the participants practiced PITC. It was shown that 23.4 % of the participants practice PITC always without any indication while 6.0% practiced PITC due to hospital policy; 46.6% and 34.1 of the participants practiced PITC due to severity of illness and routine investigation respectively. **Conclusions and Implications for Translation:** The results of this investigation revealed that majority of the doctors in UPTH practice PITC due to mainly severity of illness and routine investigation. PITC services should be offered to patients on a regular basis notwithstanding the symptoms they present, more especially in high risk groups as a standard component of medical care. Interventions that will scale up PITC practice should be intensified.

Keywords: **HIV/AIDS, HTC, PITC, Practice, Doctors, UPTH**.

1. INTRODUCTION

Between 2005 and 2013 the number of AIDS-related deaths in sub-Saharan Africa fell by 39% (UNAIDS Global Report. 2013). Based on projected HIV estimates of 2013, about 3,229,757 people live with HIV in Nigeria, making it the country with the second highest burden of HIV in the world, only after South Africa; while 220,394 new HIV infections occurred in 2013. A total of 210,031 died from AIDS related cases and a total of 1,476,741 required anti-retroviral drugs (ARV) in 2013 (Nigeria GARPR. 2014). In many high-prevalence countries, fewer than one in ten people with HIV are aware of their HIV status (World Health Organization. 2011). Reaching individuals with HIV who do not know their sero-status is a global public health priority. Since AIDS is life threatening and as of present has no cure, various preventive strategies have been employed to stem the spread of HIV infection including HIV Testing and Counselling (HTC) which can be carried out through different approaches (Basset, I.V., & Walensky, R.P. 2012). HIV Counselling and Testing is the critical entry-point for engagement into treatment and care as well as for primary and secondary prevention efforts (Becker, J. *et al.*, 2009). According to Ebenezer, (2014) it is a process by which an individual undergoes counselling to enable him/her to take informed decision about been tested for HIV, assess their personal risk for HIV and develop risk reduction strategies. These include Provider-Initiated Testing and Counselling (PITC) as part of medical care and Client-Initiated Testing and Counselling (Becker, J. *et al.*, 2009). WHO/UNAIDS jointly released the Guidance on Provider-Initiated Testing and Counselling in Health

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Facilities in May 2007. Endorsement of provider-initiated HIV testing and counselling by WHO and UNAIDS is not an endorsement of coercive or mandatory HIV testing (WHO/UNAIDS. 2007) Provider-initiated testing takes place in hospital settings, whereby the test is performed with the patient/client's consent while client-initiated testing and counselling can be carried out in various service delivery points ranging from health facilities, specially designed stand-alone sites, mobile outreach to communities and home- based settings. Knowing one's HIV status at an early stage is important to adopt positive behaviors to prevent infection if negative and to link up with care and support services, if positive. Provider-initiated HIV testing and counselling (PITC) is initiated to avoid missed opportunities for people to get tested for HIV. To address the 'missed opportunity' the WHO and UNAIDS advocated for an increase in provider-initiated HIV testing and counselling (PITC) in addition to client-initiated testing and counselling (CITC). Following a series of consultations, PITC is referred to routine testing in a clinical setting as part of a standard program of medical services (WHO/UNAIDS. 2007). It is recommended by health care providers as a standard component of medical care for all patients, including children attending health facilities irrespective of epidemic setting. This approach has been shown to increase the uptake of HIV testing in a variety of settings. In a study carried out with the aim of determining the sero-prevalence of HIV among clients accessing HTC services in Dalhatu Araf Specialist Hospital, Lafia, North Central Nigeria, showed that promoting Provider-initiated HCT in all health facilities will increase detection of undiagnosed HIV cases, thus leading to an early initiation of treatment (Solomon, A.E. *et al.,* 2012). Early identification cases through health provider-initiated HTC will lead to early intervention in terms of treatment and ultimately prevention of new infections. When individuals are in contact with the health system for other health conditions, provider-initiated HIV testing ensures uptake of testing not only because it is necessary and is conveniently available at the time of seeking medical attention, but also because it helps preserve service users' sense of moral worth by not making assumptions about their behavior which could lead to stigmatization (Obermeyer, C.M., & Osborn, M. 2007; Ebenezer, O.D. 2014). The PITC services must adhere to the principles of consent and confidentiality, and the opt-out alternative to safeguard privacy, integrity and right to self-determination of individuals (Ebenezer, O.D. 2014; Manongi, R. *et al.,* 2014). There are concerns that PITC could deter clients from accessing health services. Although limited, the available evidence does not support those fears. A study conducted in Kenya by Odeny *et al.,* (2013) observed that patient education sessions on HIV had a greater impact and were more beneficial because they were done in an integrated setting where there was a mixed population of HIV-positive patients and general patients. There was also increased satisfaction with patient reception by hospital staff, reduced waiting times and improved patient-provider interactions because of training of all healthcare workers on HIV services, hence, enhancing PITC practice. This study is designed to determine the level of practice of Provider Initiated HIV Testing and Counselling among doctors in University of Port-Harcourt Teaching Hospital (UPTH).

2. METHODS

2.1 Study Area and Population

This descriptive cross-sectional study was conducted at the University of Port Harcourt Teaching Hospital (UPTH), an 850- bed public tertiary hospital on East-West road, Port Harcourt, Rivers state, Nigeria with coordinates 4˚53′58″N 6˚55′43″E which was founded in 1980. It is a major tertiary-care teaching and research facility comprising of clinical and non-clinical departments, with University of Port-Harcourt as Affiliate University. The hospital is managed through a three-tier managerial system; the Board of Management, Hospital Management and the Departments. The study population constituted medical doctors in all the existing outpatient clinics of the selected Clinical Departments of the University of Port Harcourt Teaching Hospital.

2.2 Sample Size and Sampling Technique

A minimum sample size of 384 participants was sufficient to describe the level of practice of PITC among doctors at UPTH. The sample size was calculated using the formula published by Daniel, W.W. (1999).

$$N = \frac{Z^2 p (1 - p)}{D^2}$$

Stratified sampling method was employed in this study. The clinical Departments represented the different strata of the hospital. Sample size proportional to the population of each Department was selected to make the calculated overall sample size.

2.3 Data Collection

All the available doctors at the outpatient clinics of the selected Departments on the various clinic days who consented to the study were daily recruited for the study until the intended sample size was achieved. Data collection was carried out using a well-structured self-administered questionnaire to obtain information on socio-demographic variables of the respondents and indicators that determine the practice of PITC. Data were from June 2015 to August 2015 by the principal researcher and a research assistant.

2.4 Data Analysis

Data collected was entered and analyzed using Statistical Package for Social Science (SPSS) program

version 20. Descriptive statistics of frequencies, percentages and bar charts including cross-tabulation were used to summarize relevant data.

2.5 Ethical Review/Statement

Ethical approval was sought and obtained from the ethical committee of University of Port Harcourt Graduate School. Informed consent form was issued to the study participants alongside the study questionnaires. The form informed the participants of the purpose and objectives of the study. The participants' identities were not compromised as their names and signatures were not required to be provided in the questionnaire. They consented to participate by ticking the acceptance box on the informed consent form. The information obtained from the filled questionnaires was treated with confidentiality and anonymity by the investigator and the questionnaires were secured by the investigator. Also, the participants were free to change their mind and decline in the process of filling the questionnaire.

3. RESULT

3.1 Socio-demographic Characteristics of Study Population

The study enrolled 384 doctors where a total of 220 (57.3%) males and 164 (42.7%) female participants were interviewed. Most of the study participants belonged to the age group of 25-34 years while 61.5% of the study participants were married followed by single (37.8%), separated (0.3%) and widowed (0.5%). A large proportion was Christians (98.4%) and 36.5% of the participants belonged to the Igbo ethnic group. Senior Registrars constituted the highest number of doctors interviewed (32.0%). The socio-demographic characteristics of the study participants are summarized in Table 1.

Table 1: Socio-demographic Characteristics of Participants

Characteristics	Frequency (N= 384)	Percent (%)
Age (years)<25	20	5.2
25-34	225	58.6
35-44	125	32.6
45-54	12	3.1
>54	2	0.5
Sex Male	220	57.3
Female	164	42.7
Marital status Single	145	37.8
Married	236	61.5
Separated	1	0.3
Widowed	2	0.5
Religion Christianity	378	98.4
Islam	2	0.5
Traditionalist	1	0.3
*Others	3	0.8
Ethnic group Igbo	140	36.5
Yoruba	11	2.9
Hausa	5	1.3
Ikwerre	80	20.8
Ogoni	20	5.2
Kalabari	11	2.9
**Others	117	30.5

***OTHERS: Eckankar **OTHERS: Ogba/Egbema, Benin, Urhobo, Ijaw, Okirika, Opobo**

3.2 Level Practice of PITC by Participants

Table 2 presents the level of practice of PITC among respondents. It was found that 74.2% of the participants practiced PITC. It was shown that 23.4 % of the participants out of the 384 interviewed always practice PITC while 6.0% practiced PITC due to hospital policy; 46.6% and 34.1 of the participants practiced PITC due to severity of illness and routine investigation respectively.

Table 2: Practice of PITC by Participants

	Frequency	Percent
Practice of PITC (N=384) Yes	285	74.2
No	99	25.8
***Indication for PITC** Severity of illness	90	46.6
Always	179	23.4
Routine investigation	131	34.1
Hospital policy	23	6.0

***Multiple responses**

3.3 Level of Practice of PITC by Participants according to their Cadres and Departments

The practice of PITC was seen to vary from one cadre to another; and from one Department to another. This information is shown in Table 3. 95.7% of the participants in the Department of Community medicine practiced PITC. All the 11 doctors recruited in the Department of Haematology practiced PITC. Also, 20.8% of the doctors recruited in Ophthalmology practiced PITC.

Table 3: Practice of PITC by Participants according to their Cadres and Departments

Cadres	**Frequency**	**Percent (%)**
House officer	67	60.4
Registrar	89	78.1
Senior Registrar	100	81.3
Senior Medical Officer	4	50.0
Principal Medical Officer	1	100.0
Consultant	24	88.9
Departments		
Community Medicine	23	95.7
Family Medicine	25	96.0
Obstetrics and Gynecology	58	89.7
Internal Medicine	56	78.6
Surgery	69	72.5
Pediatrics	55	81.8
Psychiatry	7	85.7
Dentistry	29	48.3
Chemical Pathology	10	50.0
ENT	11	36.4
Ophthalmology	24	20.8
Accident and Emergency	6	50.0
Hematology	11	100.0

4. DISCUSSION

4.1 Discussion

This study set out to determine the level of practice of practice of PITC among doctors in University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria. PITC has been found to increase uptake of testing services among individuals. However, the introduction of provider-initiated HIV testing and counselling in antenatal care clinics in Botswana appears to have caused neither reduction in the use of prenatal care nor decline in the proportion of people receiving test results (Steen, T. *et al.*, 2007) and in Zimbabwe, it had no negative effects on post-test counselling rates or the delivery of antiretroviral prophylaxis (Miller, A. 2006). Knowing one's HIV status at an early stage is important to adopt positive behaviours to prevent infection if negative and to link up with care and support services, if positive. Providing PITC services as a part of standard medical care in clinical settings by health care providers will go a long way in increasing the number of individuals who are aware of their status. The doctors interviewed in this study were recruited from different professional status and they were distributed according to Departments. The highest proportion of respondents of different professional status was found in Surgery department while accident and Emergency recorded the fewest number. This is due to the proportional sampling employed in the recruitment of doctors in each Department. The findings of this study provided the evidence that more than half of the doctors interviewed practiced PITC. Majority of the doctors practiced PITC due to severity of illness followed by those who practiced PITC as a routine investigation. A small proportion identified hospital policy as a reason for practicing PITC. Ascertaining the level of practice among the participants according to their professional status, it was found that the consultants interviewed represented the highest proportion of participants who practiced PITC while the House officers practiced it the least. Practice of PITC was found to be most prevalent in the Departments of Community medicine, Family Medicine and Obstetrics and Gynaecology. This observation could be connected to the fact that the STI and Tuberculosis clinics are run in Community Medicine where PITC can be considered a duty of care to patients. As Family medicine is the first port of call of most patients in the hospital, it is assumed that HTC will be initiated by the health care provider, in this case, the doctor, depending on the severity of illness or as part of the routine care (Leelukkanaveera, Y. *et al.*, 2010; Kiene, S.M. *et al.*, 2010). On the other hand, the Ante-natal clinic is run in the Obstetrics and Gynaecology department, indicating a need to provide PITC services. These services were seen to be mostly routine investigations and are in form of Prevention of Mother to Child Transmission (PMTCT) services in HIV positive pregnant women and as prevention

strategies to prevent infection in negative pregnant women, through counselling and screening (CDC. 2006). However, the ENT department recorded the least of participants who practiced PITC.

4.2 Recommendations

Interventions that will scale up PITC practice should be intensified. Adequate training on PITC services of participants may go a long way in increasing the practice of PITC as detailed steps of the process and its importance will be conveyed to the participants enhancing clarity and better understanding of the concept. The findings of Ntuli *et al.,* (2011) and Muthama, F.M. (2011) showed that where health care providers pointed out lack of appropriate training on PITC as a barrier to PITC practice. The public is hereby advised to accept PITC services from health care providers to ascertain their sero-status and prevent late diagnosis.

5. CONCLUSIONS / IMPLICATIONS FOR TRANSLATION

The results of this investigation revealed that majority of the doctors in UPTH practice PITC due to mainly severity of illness and routine investigation. Further research needs to be undertaken among the study population and other related population in Nigeria on this subject matter due to its benefit to public health. PITC services should be offered to patients on a regular basis notwithstanding the symptoms they present, more especially in high risk groups as a standard component of medical care. The public health importance of PITC cannot be over-emphasized as it addresses both the primary and secondary levels of prevention. This study has reemphasized the importance of practicing PITC by health care providers, in this case, doctors and revealed interesting findings which can be acted upon by relevant parties.

Conflicts of Interest:

The Researchers have declared no conflicts of interest in this study.

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