

A STUDY ON THE EFFICACY OF HIV PREVENTION COUNSELING OF CLIENTS IN ANAMBRA STATE

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ABSTRACT

The study focused on the efficacy of HIV-prevention counseling of clients in Anambra State. Three research questions and three null hypotheses guided the study. A sample of 207 nurses selected from Tertiary, Secondary and Primary levels of Health Care Institutions were used for the study. The instrument for data collection was checklist titled CHCS. Statistical weighted mean was used to answer the research questions, and Analysis of Variance (ANOVA) was adopted in testing the null hypotheses at 0.05 level of significance. The result showed that the HIV-prevention counselors in Comprehensive Health Centres (Primary Level) adhere mostly to the elements of HIV-prevention counseling and also possess the best counseling skills, while the counselors in Voluntary Agency Hospitals (Secondary Level) are best in ensuring high quality HIV-prevention counseling. Significant differences existed in the mean scores of the counseling strategies and quality HIV-prevention counseling between the providers in tertiary, secondary and primary levels of Health Care delivery. Recommendations were given based on the findings.

INTRODUCTION

Counseling is the helping relationship that includes someone seeking help, and someone willing to give help who is capable or trained to help in a setting that permits help to be given and received (Cormier & Hackney, 1987). It is a specialized service of guidance, and basically an enabling process designed to help an individual come to terms with his/her life and grow to greater maturity through learning to take responsibility and make decisions for himself/herself (Basavanthapa, 2004).

Vedanayagam (1988) cited by Basavanthapa (2004) asserts that counseling is an accepting, trusting and safe relationship in which clients learn to discuss freely what upsets them, to define their goals, to acquire essential social skills and to develop the courage and self-confidence to implement desired new behaviour. Thus counseling implies a learning oriented process carried

out in a social environment in which the professionally competent counselor attempts to assist the counselee using appropriate procedures to become a happy and productive member of the society by formulating realistic and purposeful goals for total growth.

HIV-prevention counseling seeks to reduce HIV acquisition and transmission through information. In HIV-prevention counseling, clients should receive information regarding HIV transmission, prevention and the meaning of HIV test results. It must be noted that provision of information is different from informed consent.

All clients who are recommended for and who request HIV testing should even if the test request is declined, receive information regarding the HIV and how it can be prevented, plus the importance of obtaining test results and explicit procedures for doing so.

Kelly & St. Lawrence (1987) indicated additional useful information that should be given to clients in settings where HIV testing are offered as descriptions or demonstrations of how to use condoms correctly, information regarding risk-free and safer sex options, information regarding other sexually transmitted and blood borne diseases, descriptions regarding the effectiveness of using clean needles, syringes, cotton wool, water and other drug paraphernalia, information regarding drug treatment, and information regarding the possible effects of HIV vaccines on test results for persons participating in HIV vaccine trials. Kelly & St. Lawrence (1987) further explained that in HIV-prevention counseling, information should be provided in a manner appropriate to the client's culture, language, sex, sexual orientation, age and developmental level.

Parker (2002) asserts that risk behaviours place an individual at risk of infection rather than associations with particular group. Therefore in HIV-prevention counseling, clients should receive help to identify the specific behaviours that put them at risk of acquiring or transmitting HIV, and commit to steps to reduce this risk. Parker (2002) also added that HIV-prevention counseling should focus on the client's own unique circumstances and risks, and should help the client set and reach an explicit behaviour change goal to reduce the chance of acquiring or transmitting HIV.

According to Centre for Disease Control (CDC) HIV CTR (1999), all HIV counseling, testing and referral (CTR) providers should ensure efficient HIV-prevention counseling of clients by subjecting themselves and their services to training and quality assurance, HIV-prevention capacity building activities

and evaluation of major programme activities, interventions and services. CTR providers should conduct routine periodic assessments for quality assurance to ensure that the counseling being provided includes the recommended essential counseling elements namely training and Continuing Education for counselors and supervisors, supervisor observations and immediate feedback to counselors, periodic evaluation of physical space, client flow and time concerns, periodic counselor or client satisfaction evaluations and periodic case conferences.

Kamalan (2005) warned that the emergence of HIV infection is a serious public health problem all over the world. According to him, HIV has infected millions of women, men and children in developed as well as developing countries. WHO cited by Kamalan (2005) had predicted that by the turn of the last century, 30 to 40 million people would be infected with HIV. Also, the global AIDS policy estimated the figure of HIV infected people to be 110 million (Kamalan, 2005).

According to Rose (1996), clinical experience suggests that the "emerging epidemic" of HIV presents a unique challenge to women especially mothers. This rising trend of HIV certainly poses challenge to the effectiveness of the counseling strategies adopted by Health Care providers in HIV-prevention counseling.

STATEMENT OF PROBLEM

The problem of the study is the efficacy of HIV-prevention counseling methods for clients.

RESEARCH QUESTIONS

- To what extent do the HIV-prevention counselors adhere to the elements of effective HIV-prevention counseling of clients?
- What skills do the HIV-prevention counselors possess in ensuring effective HIV-prevention counseling of clients?

- What measures do the HIV-prevention counselors adopt effective HIV-prevention counseling of clients?
- What measures do the HIV-prevention counselors adopt to ensure high quality HIV-prevention counseling?

HYPOTHESES

- There is no significant difference in the mean scores of the HIV-prevention counseling strategies adopted in the Tertiary, Secondary and Primary Care Health Institutions.
- Significant difference does not exist in the mean scores of the skills of the HIV-prevention counselors in Tertiary, Secondary and Primary Health Care Institutions.
- Significant difference does not exist in the mean scores in ensuring high quality counseling among the HIV-prevention counselors in Tertiary, Secondary and Primary Health Care Institutions.

METHOD

The study was a survey. Judgmental sampling technique was adopted in selecting Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi which is the only Teaching (Tertiary) Hospital in Anambra State. Simple random sampling was used to select 4 General Hospitals, 2 Voluntary Agency Hospitals and 2 Comprehensive Health Centres out of the 24 General Hospitals, 7 Voluntary Agency Hospitals and 10 Comprehensive Health Centres in Anambra State. This was to give all the government and voluntary agency hospitals equal chance of being selected for the study (Nworgu, 1991). The General Hospitals selected were General Hospital Awka, General Hospital Onitsha, General Hospital Ekwulobia and General Hospital Enugwu-Ukwu. The Voluntary Agency Hospital selected were St. Charles Borromeo Hospital Onitsha and Akwudo Diocesan Hospital Nnewi, while the CHC Dunukofia and CHC Nweni were the Health centres selected.

A sample size of 23 nurses who participated in HIV-prevention counseling were selected from each of the selected Health institutions. Total number of nurses selected for the study was 207.

The instrument used for data collection in the study was checklist titled Client-Centred HIV-Prevention Counseling Scale (CHCS) which is made up of three subsections namely elements of HIV-prevention counseling, skills for effective counseling/counselor characteristics, and quality assurance measures in HIV-prevention counseling.

The instrument was designed by the researchers in 4 point scale ranging from 1 to 4 with poor having 1 point, fair 2 points, good 3 points and very good 4 points.

The instrument was face validated by three experts in preventive medicine, HIV-prevention counseling supervision as well as Measurement and Evaluation. These experts were given copies of the draft instrument, research questions and hypotheses for content validation.

The instrument was also subjected to reliability test by collecting data through interview of 10 nurses who participated in HIV-prevention counseling in a State Hospital in Enugu State. The aggregate scores were calculated, and then *crombach alpha* was employed to determine the internal consistency of the items. The result showed reliability co-efficient score of 0.8.

The researchers used direct approach method in the data collection so as to interact with the respondents and also to facilitate the work. Trained research assistants were also employed for the data collection. Mean scores and standard deviations were used to answer the research questions, while Analysis of Variance (ANOVA) was employed in testing the null hypotheses at 0.05 level of significance.

Results: The results of the study are presented in the table below:

Table 1: Mean scores of the extent of adherence to the Element of HIV -prevention counseling by HIV counselors.

Variable	Health Institution	N	X	SD
Elements of HIV -Prevention Counseling	Teaching Hospitals (Tertiary Hospital)	23	2.7826	0.36129
	General Hospital	92	2.7826	0.45596
	Voluntary Agency Hospital	46	2.9766	0.39553
	Comprehensive Health Centres	46	3.0318	0.34991

Table 1. shows that HIV-Prevention counselors in Comprehensive Health Centres have the highest mean score of 3.0318 with a standard deviation of 0.34991 with regard to adherence to the elements of HIV-Prevention counseling. Next in the rating is the mean

score of 2.9766 by the HIV-Prevention Counselors in Voluntary Agency Hospitals while the counselors in Teaching and General Hospitals have the least mean scores of 2.7826 respectively.

Table 2: Mean score of the skills of the HIV -Prevention counselors towards ensuring effective counseling of clients.

Variable	Health Institution	N	X	SD
Skills for Effective HIV -Prevention Counseling	Teaching Hospital	23	2.9684	0.39112
	General Hospital	92	3.0287	0.50246
	Voluntary Agency Hospital	46	3.0277	0.37255
	Comprehensive Health Centre	46	3.1008	0.38770

In table 2 above, the HIV-Prevention Counselors in Comprehensive Health Centres had the highest mean score of 3.1008 with a standard deviation of 0.38770 in skills for effective HIV-Prevention Counseling. The second in the order are the HIV-Prevention Counselors in General Hospitals with mean score of 3.0287 and

standard deviation of 0.50246. The third in the ranking are the HIV-Prevention Counselors in Voluntary Agency Hospital whose mean score is 3.0277, while the HIV.-Prevention Counselors in Teaching Hospitals have the least mean score of 2.9684 with a standard deviation of 0.3911.

Table 3: Mean scores for ensuring high quality HIV -prevention counseling by the HIV - Prevention counselors.

Variable	Health Institution	N	X	SD
Ensuring High Quality HIV-Prevention Counseling	Teaching Hospital	23	2.4928	0.52938
	General Hospital	92	2.7745	0.50555
	Voluntary Agency Hospital	46	3.0217	0.46628
	Comprehensive Health Centre	46	2.5670	0.46667

Above table 3 shows that the HIV-Prevention counselors in Voluntary Agency Hospitals have the highest mean score of 3.0217 with a standard deviation of 0.46628 in ensuring high quality HIV-Prevention counseling. Next in the ranking are the HIV-Prevention counselors in General Hospitals with a mean

score of 2.7745 and standard deviation of 0.50555. The third in the rating are the counselors in Comprehensive Health Centres with mean score of 2.5670 and standard deviation of 0.46667. The HIV-Prevention counselors in Teaching Hospitals have the least mean score of 2.4928 with a standard deviation of 0.52938.

Table 4. Analysis of Variance (ANOVA) to compare the means of HIV -Prevention counseling strategies of Teaching Hospital, General Hospital, Voluntary Agency Hospitals and Comprehensive Health Centres.

Source	Sum of Squares (SS)	Df	X	f-cal	f-crit	probability
Between groups	2.579	3	0.860	5.083	0.002	P<0.05
Within groups	34.340	203	0.169			
Total	36.919	206				

Table 4 above shows that significant difference exists in the HIV-Prevention strategies of tertiary (Teaching) Hospitals, General Hospital, Voluntary Agency Hospitals and Comprehensive Health Centres. The obtained F-ratio value (5.083) is more than the critical value (0.002) at 0.05 level of significance. So the null hypothesis which states that there is no significant difference in

the mean scores of the HIV-Prevention counseling strategies adopted in tertiary, secondary and primary health institutions is rejected. Scheffee test of multiple comparison (Akuezuilo & Agu, 2002) was used to determine the order of significant difference across the four categories of Health Institutions.

Table 5: Scheffee test of multiple comparison of mean scores in the strategies (elements) of HIV-Prevention Counseling across the Health Institutions.

(I) Hospital	(J) Hospital	Mean Difference (I-J)	Std Error	F-crit (sig)
Tertiary (Teaching) Hospital	General Hospital	0.00000	0.09588	1.000
	Voluntary Agency Hospital	-0.19398	0.10503	0.397
	Comprehensive Health Centres	-0.24916	0.10503	0.112
General Hospitals (Secondary Health Institutions)	Tertiary Hospital	0.00000	0.09588	1.000
	Voluntary Agency Hospital	-0.19398	0.07427	0.058
	Comprehensive Health Centres	-0.24916*	0.07427	0.006
Voluntary Agency Hospitals (Secondary Health Institution)	Tertiary Hospital	0.19398	0.10503	0.397
	General Hospital	0.19398	0.07427	0.058
	Comprehensive Health Centres	-0.5518	0.08576	1.000
Comprehensive Health Centres (Primary Health Institution)	Tertiary Hospital	0.24916	0.10503	0.112
	General Hospital	0.24916*	0.07427	0.006
	Voluntary Agency Hospital	0.05518	0.08576	1.000

KEY: * = The mean difference is significant at 0.05 level.

Above table 5 shows that significant difference exists in the counseling strategies between the HIV-Prevention Counselors in General Hospitals and those in

Comprehensive Health Centres. The mean difference of 0.24916 is in favour of the counselor in Comprehensive Health Centres.

Table 6: Analysis of Variance (ANOVA) to compare the means skills for effective counseling between Teaching Hospitals, General Hospitals, Voluntary Agency Hospitals and Comprehensive Health Centres:-

Source	Sum of squares (ss)	df	X	f-cal	f-crit	Probability
Between Group	0.306	3	102	0.526	0.665	P>0.05
Within Group	39.349	203	194			
Total	39.655	206				

Table 6 above shows that significant difference does not exist in the skills for effective counseling between the HIV-preventive counselors in Teaching Hospitals, General Hospitals, Voluntary Agency Hospitals and Comprehensive Health Centres. The obtained F-ratio value (0.526)

is less than the critical value (F-crit) of 0.665 at 0.05 level of significance. Therefore, the null hypothesis which states that significant difference does exist in the mean scores of the skills of the HIV-prevention counselors in Tertiary, Secondary and Primary Health Institutions is accepted.

Table 7: Analysis of Variance (ANOVA) to compare the mean scores for ensuring High Quality HIV-Prevention counseling between Teaching Hospitals, General Hospitals, Voluntary Agency Hospitals and Comprehensive Health Centres.

Source	Sum of squares (ss)	df	X	f-cal	f-crit	probability
Between Groups	6.513	3	2.171	8.993	0.000	P<0.05
Within Groups	49.007	203	241			
Total	55.520	206				

In table 7, significant difference exists between the HIV-prevention counselors in Teaching Hospitals, General Hospitals, Voluntary Agency Hospitals and Comprehensive Health Centres in ensuring high quality HIV-prevention counseling. The calculated f-ratio value of 8.993 is more than the critical value (f-crit) of 0.000 at 0.05 level of significance. Therefore, the null hypothesis

which states that significant difference does not exist in the mean scores of ensuring high quality counseling among the HIV-prevention counselors in the Tertiary, Secondary and Primary Health Institution is rejected. Scheffee test of multiple comparison (Akuezulo & Agu 2002) was used to determine the order of significant difference across the four types of Health Institutions.

Table 8: Scheffee: Test of Multiple Comparison of the Means Across the Health Institutions for Ensuring High Quality HIV-Prevention Counseling.

(i) Hospital	(J) Hospital	Mean Difference (IJ)	Standard Error	f-crit (Sig).
Tertiary (/Teaching) Hospital	General Hospital	-0.28170	0.11454	0.089
	Voluntary Agency Hospital	-0.52899*	0.12548	0.000
	Comprehensive Health Centres	-0.07428	0.12548	1.000
General Hospitals (Secondary Health Institution)	Tertiary Hospital	0.28170	0.11454	0.089
	Voluntary Agency Hospital	-0.24728*	0.08873	0.035
	Comprehensive Health Centres	0.20743	0.08873	0.122
Voluntary Agency Hospital (Secondary Health Institution)	Tertiary Hospital	0.5289	0.12548	0.000
	General Hospital	0.24728*	0.08873	0.035
	Comprehensive Health Centres	0.45471	0.10245	0.000
Comprehensive Health Centre (Primary Health Institution)	Tertiary Hospital	0.07428	0.12548	1.000
	General Hospital	-0.20743	0.08873	0.122
	Voluntary Agency Hospital	-0.45471*	0.10245	0.000

KEY:* = The mean difference is significant at 0.05 level.

In table 8, significant differences exist between the HIV-prevention counselors in the three level of healthcare delivery with regard to ensuring high quality counseling. The mean difference of 0.52899 between Teaching Hospital and Voluntary Agency Hospitals is in favour of the counselors in Voluntary Agency Hospitals. The mean difference of 0.24728 between General Hospitals and Voluntary Agency Hospitals is in favour of Voluntary Agency Hospitals. Also the mean difference of 0.45471 between Voluntary Agency Hospitals and Comprehensive Health Centres is in favour of Voluntary Agency Hospitals.

DISCUSSION

Table 1 shows that HIV-Prevention Counselors in Comprehensive Health Centres (CHC) adhere mostly to the elements of HIV-prevention counseling. This finding shows that the provider in the CHC conduct

more periodic assessment as recommended by CDC HIV CTR (1999).

Findings from the study indicate that the counselors in CHC possess the best skills in HIV-prevention counseling. This will go a long way in reducing risky behaviours among their clients. Kelly & St. Lawrence (1987) stated that HIV-prevention counseling seeks to reduce HIV acquisition and transmission.

Table 3 shows that the counselors in Voluntary Agency Hospitals are best in ensuring high quality HIV prevention counseling. This finding shows that the counselors in Voluntary Agency Hospitals comply to the requirements/recommendations of CDC HIV CTR (1999) that all CTR providers should conduct routine periodic assessments for quality assurance to ensure that the counseling being provided includes the recommended essential counseling elements.

The significant difference observed in the counseling strategies of counselors in the three levels of Health Care (table 4) is evidence of differences in the styles adopted by the three levels of health care providers in planning and implementing CDC recommended HIV-Prevention counseling.

Table 6 indicates no significant difference in the skills possessed by the HIV-prevention counselors in the three levels of health care institutions, but the mean score of 3.1008 for skills (table 2) scored by the providers in Comprehensive Health Centres comparatively places them superior to other levels of health care providers.

The result of the study indicates significant differences among the providers of the three levels of healthcare in ensuring high quality HIV-Prevention Counseling (tables 7 & 8). These findings calls for development of a common curriculum for training of all the providers of HIV-Prevention counseling, monitoring by supervisors and uniform periodic evaluation of major programme activities, interventions and services for quality assurance and quality improvement.

CONCLUSIONS

The findings of the study indicate the HIV-Prevention Counselors in the different levels of Health care delivery are skillful, and they adopt different strategies in ensuring quality counseling.

RECOMMENDATIONS

Training and quality assurance, HIV-Prevention capacity building activities and period evaluation of major services should be intensified to ensure efficient HIV-Prevention counseling of clients.

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