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Original Research Article

Behaviour Change Counselling and Health Promotion for Youth Living with HIV in Calabar, Nigeria

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ABSTRACT

The prevalence of HIV among youths in Nigeria is 4.1% and likely to increase unless youths adopt behaviours to reduce transmission. A cost-effective, health promotional behaviour change strategy is therefore important. Little is known about health promotional behaviour change among youths living with HIV (YLH) in Nigeria. The purpose of the study was to identify the health promotion activities adopted by YLH and to determine health promotional behaviour change after behaviour change counselling (BCC). Mixed method design was used, involving qualitative (focused group discussion, in-depth interview) and intervention (counselling and education to motivate behaviour change using pre-test/post-test design). Twenty three youth living with HIV were purposively selected after obtaining ethical permission and informed consent. Eight participants preferred to participate through e-mail and telephone. Qualitative data were transcribed and analysed thematically using NVivo 9.0 while quantitative data analysis involved PASW 18.0. Themes from qualitative data were "understanding risk behaviour" and "achieving life goals". Participants (60.9%) reported initial loss of interest in life and negligence of health promotion activities after the diagnosis but reported engaging in behaviours inimical to healthy living, as shown in responses "I had unprotected sex with my friend; why use condoms when we are both HIV-positive?" and "Why take the medications if I will not live long enough to fulfill my aspirations?" Overall scores on health promotion activities increased significantly after the intervention ($p < 0.001$). We conclude that behaviour change counselling enhances engagement in health promotion activities and positive living in youths living with HIV infection.

Key words: Behaviour change counselling, health promotion, youth living with HIV.

INTRODUCTION

Almost a quarter of people living with HIV globally are under the age of 25, and young people 15-24 represent 45% of all new infections. [1] In Nigeria, the prevalence of HIV/AIDS among youths (15 to 24 years) is 4.1% and this translates into 1.4 million people in that age bracket. [2] Being infected with HIV makes life more challenging for the young person, especially as HIV-related stigma and discrimination are still strong in Nigeria. The HIV-infected young person may have to live with frequent going in and out of hospital because of

opportunistic infections and other challenges attached to the chronicity of the infection. The prevalence, morbidity and mortality from HIV infection in youth are likely to increase unless they adopt healthy lifestyles and health promotional behaviours for positive living. [2,3] This is because youths are energetic, dynamic and adventurous and more likely to experiment with dangerous activities (behavioural and sexual) that expose them to HIV infection. [4,5] As the number of youth living with HIV (YLH) increases the need for secondary prevention becomes critical. This is because this group of persons tends to avoid HIV-related care facilities because of the fear of stigma and the judgmental attitude of health care providers, and this may result in poor health outcomes and increased transmission of the virus. [6] The above scenario calls for considering a cost-effective strategy for secondary health promotion and self-management to enhance quality of life and positive living. Health promotion has been found to strengthen the capacity of YLH to control, improve and maintain their health for everyday life; increase their quality of life and increase self-care behaviours that would reduce transmission. [7] It also empowers individuals to exert control over the determinants of health and modify their lifestyles to improve their health and wellbeing. This would significantly reduce morbidity and mortality from HIV infection in YLH. [3]

Social change communication is an appropriate tool for health promotion as it involves the strategic use of advocacy, communication, empowerment and social mobilization to systematically facilitate and accelerate change in the underlying drivers of HIV risk, vulnerability and impact. [1] Although infected, YLH can adopt certain activities to stay healthy if they are informed and empowered. There is insufficient evidence on the health promotional activities engaged in by youth living with HIV and how behaviour change counselling can modify their practice of health promotion in Nigeria in general and Cross River State, in particular. This study bridges that gap by providing data on health promotional activities adopted by YLH in Calabar and the effectiveness of Behaviour Change Counselling (BCC) on health promotional attitude and behaviour of youths with HIV infection. Findings will provide information for healthcare providers working with youth living with HIV and also add to available data base on health promotion in HIV.

The objectives of the study were to identify the health promotion and self-management activities adopted by Youth Living with HIV (YLH); highlight the perceived challenges and concerns in using these activities among YLH; and determine the level of health promotional behaviour change in participants after behaviour change counselling (BCC).

MATERIALS & METHODS

Design: Mixed method design was used (qualitative/narrative and quantitative/ intervention). Qualitative methods were used to collect narratives on health promotion activities used by participants and their perceived challenges and concerns. Quantitative methods elicited data on health promotion behaviours before and after formal behaviour change counselling among participants using pre-test/post-test design.

Sample and sampling technique: Twenty three (23) youths aged 15 to 24 years living with HIV infection and registered with Network of People Living with HIV/AIDS (NEPWHAN) were purposively selected. Ethical clearance was obtained from the Research Ethics Committee of the University of Calabar while permission was obtained from NEPWHAN and informed consent from participants and from the parent/guardian in 4 cases. Ethical

procedures conformed to institutional ethical guidelines and standards.

Intervention: The BCC module on health promotion tagged *"Stay healthy, Stay safe, Live life"* was used to motivate YLH to change behaviour and promote healthy living. The module was developed based on themes identified from the FGD and involved discussion on understanding risk behaviours (through safer sex behaviour e.g. abstinence, consistent, correct use of condoms; abstinence from drugs, alcohol, smoking etc.); adherence to medications (if on ART); empowerment for positive living and achieving life goals (through effective decision making and control). The intervention lasted for four weeks and involved educational and empowerment strategies to address the emerging issues and encourage positive behaviour change. Two sessions were organized for each participant lasting between 45 to 60 minutes (including time for discussion and questions) and focussing on specific aspects of behaviour change, health promotion and self-management. There were both individual and group sessions according to participant's preference.

Data collection: Data collection involved focus group discussion (FGD) and in-depth interview (IDI), recorded on audio tape and field notes (for qualitative). Only 15 participants agreed to participate in the FGD before the intervention and were put into 2 groups with the aim of stimulating discussion to identify health behaviours, lifestyle, health promotional activities, concerns and challenges since being diagnosed with HIV infection. For quantitative data (health promotional and self-management behaviour), a researcher-developed structured interview schedule with Cronbach's alpha coefficient of 0.87, was used. Data on health promotional behaviours and activities were collected three times, before intervention and twice after intervention at six months interval. The second post-test was to determine the stability of change over time.

Eight participants, although registered with NEPWHAN, preferred to participate in the study through the phone and e-mail and so were not involved in the FGD. Face to face or telephone conversation was used to probe more into health promotional attitudes and behaviours. Responses from both the FGD and in-depth interviews were used to develop tailored, individual BCC modules.

Data analysis: Data from FGD and in-depth interview were manually checked for completeness, transcribed, coded and then analysed using NVivo 9.0. Quantitative data were analysed using PASW 18.0 and t-test was used to determine the significance of differences before and after the intervention (at level of significance 0.05). Maximum scores for each participant were 6 (for self-acceptance, reduced risk behaviour & healthy social relationships); 9 for ART adherence and 12 for healthy lifestyle.

RESULTS

Socio-demographic data:

Table 1: Socio-demographic characteristics of participants (n=23)

Characteristics	Number	Percentage
Age (in years):		
15 - 19	4	17.4
19 - 24	19	82.6
Gender:		
Male	16	69.6
Female	7	30.4
Social status		
Student	15	65.2
Out-of-school	8	34.8
Education (highest obtained)		
Primary	9	39.1
Secondary	14	60.9
Religion		
Christianity	15	65.2
Islam	5	21.7
Others (including traditional)	3	13.0

Participants comprised 65.2% students (in secondary school and university) and 34.8% out-of-school youths;

82.6% were older than 19 years of age; 69.6% were males and 30.4% females and 65.2% were Christians (Table 1).

Qualitative Results (from Focus Group Discussion and in-depth interview): Two themes emerged from FGD and IDI - "understanding risk behaviours" and "achieving life goals" At the initial stage (6 to 9 months of knowing about the diagnosis), 60.9% participants reported total loss of interested in life, and therefore did not engage in any health promotional activities. Many of them rather engaged in behaviours inimical to their health. Typical responses showed lack of understanding of risk behaviours before the intervention. "I smoked heavily (up to 3 packets of cigarettes a day) when I was newly diagnosed, just to deal with the stress; now I am down to 2 packets a day" (IDI, Male), "I have frequent sex with a 'positive' friend I made here at the centre. What is the use of condoms when we are both positive?" (IDI, Male). "What is the point of taking the medications when they will not cure me and I am not sure I will live to a ripe old age? (IDI, Female). "I don't use condom or encourage my partners to use it. After all someone infected me, so why should I die alone" (IDI, Female)

Responses relating to "achieving life goals" were "How can I hope to have children when we are told to use condoms all the time in order to prevent transmission?" (FGD, Female); "I am studying Civil Engineering, but of what use is continuing with academics when I may never be able to achieve a profitable career in life, unless maybe I become self-employed?" (IDI, Male). "With the discrimination in this country, how can a person living with HIV ever hope to fulfil life dreams? This is very worrisome" (FGD, Male), "Hmm, you can say that again, the discrimination is terrible. Even doctors and nurses are judgmental and it scares me to even go to the HCT clinic. I will try to live my life anyhow I can for as long as I can" (FGD, Female)

Only 39.1% participants reported engaging in health promotional activities of some sort before the study. Table 2 shows healthy life styles and self-care activities generally adopted for health promotion. These include: Routine & regular exercise 13.0%; Relaxation & Stress relief 17.4%; Getting adequate sleep up to 8 hours at night 21.7%; Healthy eating 39.1%; Taking vitamins/ supplements & immune-boosters 39.1% and Care seeking when unwell /keeping medical appointments 26.1%. Health Promotional (HP) activities adopted depended on duration of knowledge of diagnosis (43.5%) and belief about their usefulness (30.4%).

Table 2: Health promotional activities generally adopted by YLH before BCC (n=9)*

Health promotional activities	Number*	Percentage
Healthy life styles		
Routine & regular exercise	3	13.0
Relaxation & Stress relief	4	17.4
Getting adequate sleep (up to 8 hours at night)	5	21.7
Healthy eating	9	39.1
Taking vitamins, supplements & immune-boosters	9	39.1
Care seeking when unwell /keeping medical appointments	6	26.1
Reducing risk factors		
Reduced sexual risk (consistent & correct use of condom and reduced number of unprotected sex acts)	8	34.8
Reduced substance use e.g. alcohol, cigarettes, marijuana & hard drugs)	3	13.0
Not sharing hair clipper and "sharps"	5	21.7

* Only participants reporting health promotional activities; Responses are not mutually exclusive

Participants reported having certain concerns and challenges since learning of their HIV-positive status. These include "fear of discrimination and social isolation" (100%); "concern about achieving a profitable career" (100%); "managing a chronic disease from an early age" (100%); "desire to start a family without infecting the partner and child" (91.3%); "not fulfilling one's dreams in life" (91.3%); concerns about "disclosure without being stigmatized" (65.2%) and "attending counselling sessions alongside 'judgmental' adults" (91.3%). On the basis of their concerns some participants expressed the need for the establishment of youth-friendly HCT clinics and trained health workers to provide youth-friendly, non-judgmental HIV-related services. They also expressed a preference for "faceless" counselling through the use of e-mail, phone voice calls and text messages for health promotion messages, adherence counselling and ART reminders.

Other results showed that some participants (47.8%) reported that they purchased antibiotics from the chemist or drug store to treat any infections they had. These were not prescribed by the doctor and were not based on any laboratory tests for culture and sensitivity. Commonly used antibiotics were Co-trimoxazole (Septrin), Ampiclox (Ampicillin+ Cloxacillin) and Metronidazole (Flagyl). Asked why they did not utilise available Heart-to-Heart (HIV) services and seek proper medical attention for appropriate tests and treatment, majority reported that health care providers are generally judgmental of them so they preferred to browse the internet for information to solve their health problems. Moreover they were also afraid of running into their parents' friends at the clinic, and of the judgmental and negative attitude of adults at the clinics. They therefore preferred "faceless" information-seeking.

Results from behaviour change intervention: The proportion of participants who were involved with health promotion activities increased significantly after the intervention. Self-acceptance/need to get on with life changed from 26.1% at pre-test to 87.0% (post-test 1) and 100% (post-test 2). Reported adoption of healthy lifestyles increased from 30.4% (pre-test) to 82.6% (post-test 1) and 91.3% (post-test 2). The number reporting reduction in risk behaviour increased from 21.7% at pre-test to 87.0% (post-test 1) and 91.3% (post-test 2). Significant changes also occurred in reported adherence to ART, from 0.0% at pre-test to 85.7% (post-test 1) 100% (post-test 2) and in healthy social relationships (17.4% at pre-test, 78.3% at post-test 1 and 87.0% at post-test 2). Results showed no significant difference in the overall mean scores and t-values for health promotional activities in relation to gender and social status both before and after intervention. However changes occurred in individual health promotional categories, for example, males had higher scores in self-acceptance and healthy social relationships while females had higher scores in healthy lifestyles and adherence to ART. There were no significant gender differences in the area of reducing risk behaviours. In-school youths had significantly higher overall scores in all areas of health promotion than out-of-school youths.

There was no significant difference in care seeking when unwell and in keeping medical appointments, despite the intervention.

After the BCC intervention, significant changes occurred in participants' level of behaviour change as revealed by the mean differences in scores and t-values. Table 3 shows significant differences in scores between the pre-test and post-test 1 for Healthy lifestyles (mean difference 4.17, $t = -13.9$, $p < .001$); Reducing risk

behaviours (mean difference = 2.94, t= -12.25, p < .001); Adherence to ART (mean difference = 5.22, t= -13.05, p < .001); Self-acceptance/will to live (mean difference = 2.65, t= -12.04, p < .001); and Healthy social relationships (mean difference = 2.38, t= -9.92, p < .001). These results suggest significant changes for all areas of health promotion between pre-test and post-test 1.

Results also showed differences between pre-test and post-test 2, indicating stability of change over time (Table 4). Values for Healthy lifestyles were (mean difference = 2.17, t = -6.58, p .01); Reducing risk behaviours (mean difference = -0.75, t = -2.5, p = 0.01); Adherence to ART (mean difference = 0.99, t = -1.88, p = .05); Self-acceptance/the will to live (mean difference = 1.2, t = -5.45, p < .001 for; and Healthy social relationships (mean difference = 1.19, t = -4.58, p .001). These results suggest that changes were significant for health promotion activities between pre-test and post-test 2 except in adherence to ART.

Five YLH claimed they are bisexual and that did not change after the intervention.

Table 3: Paired t-test for health promotion activities at Pre-test and Post-test 1 (n=23)

Areas of health promotion	Pre-test (n=23)		Post-test 1 (n=23)		Mean Diff	t-value	Sig. level (2-tailed)
	Mean	SD	Mean	SD			
Healthy life styles (physical health promotion activities)	4.09	0.90	8.26	1.14	4.17	-13.9*	<0.001
Reducing risk behaviours (physical)	1.45	0.54	4.39	0.84	2.94	-12.25*	<0.001
Adherence to ART (n=14) (physical)	1.57	0.91	6.79	1.3	5.22	-13.05*	<0.001
Self-acceptance & getting on with life (psychological HP activities)	1.48	0.73	4.13	1.01	2.65	-12.04*	<0.001
Healthy social relationships and seeking social support (social HP activities)	1.53	0.66	3.91	0.74	2.38	-9.92*	<0.001

*p < 0.05, Significant

Table 4: Paired t-test for health promotion activities at Pre-test and Post-test 2 (n=23)

Areas of health promotion	Pre-test (n=23)		Post-test 2 (n=23)		Mean Diff	t-value	Sig. (2-tailed)
	Mean	SD	Mean	SD			
Healthy life styles (physical health promotion activities)	4.09	0.90	10.43	1.16	2.17	-6.58*	0.001
Reducing risk behaviours (physical)	1.45	0.54	5.14	0.68	0.75	-2.5*	0.01
Adherence to ART (n=14) (physical)	1.57	0.91	7.78	0.92	0.99	-1.88**	0.05
Self-acceptance & getting on with life (psychological HP activities)	1.48	0.73	5.53	0.65	1.2	-5.45*	0.001
Healthy social relationships (social HP activities)	1.53	0.66	5.1	0.79	1.19	-4.58*	0.001

* p< 0.05 Significant; ** p = 0.05 Not significant, (t-value for df 22 is 2.074at 0.05)

DISCUSSION

Prior to the intervention in this study, a little less than two-fifth participants engaged in some form of health promotional activities. Most participants neglected health promotional activities because of loss of interest in life after the diagnosis. This finding corroborates other studies on how people respond to the news that they are HIV positive [8] which reported that a HIV-positive diagnosis causes profound shock and distress to people, especially youths, as they associate the disease with immediate death and stigmatisation and therefore tend to neglect health promotional activities because they think that the diagnosis means that they have a short time to live. The diagnosis therefore results in loss of known self, envisioned loss of present life and of future life. The implication of this as further revealed in this study was that, the infected persons engaged in activities that promote spread of the disease for example, not complying with medication and deliberately having unsafe sex to infect more people. Unhealthy lifestyle among youths living with HIV has been found to increase the prevalence, morbidity and mortality from the disease. [2,3] This situation jeopardizes the health of those living with HIV as well as their unguarded uninfected sex partners.

Several concerns and challenges expressed in this study by the participants were both at the health facility and personal levels. At the health facility level, they were concerned about stigmatization following disclosure of their status as well as encountering judgmental healthcare providers. Stigmatization has posed challenges to the control of HIV. Some authors [9] revealed that the participants in their study expressed challenges of managing HIV stigma. This they did by hiding their status from friends, family, and doctors. As a result of this the authors reported that 50% of respondents indicated that they skipped doses of HAART because they feared family or friends would discover their status. By implication, these results suggest that HIV stigma impacts treatment for youth at various points ranging from the accuracy of communication with health care providers to medication adherence. This ultimately results in poor health outcomes and the emergence of treatment resistant strains of the virus. [9] Other authors, [6] *have* opined that the judgmental attitude of healthcare providers towards youths living with HIV prevents them from attending post-test and adherence counselling sessions as a result of fear of condemnation. At the personal level, the participants expressed several concerns about themselves including the dialectics of preventing spread of the disease through use of condom and at the same time, the need to bear children; fear of the possibility of achieving profitable career, fulfilling ones dream in life as well as the task of managing a chronic disease from a tender age. These translated into a state of despair among these youths which needed an intervention to give them hope. These findings are not peculiar to this study but similar to another study [10] where authors commented that although antiretroviral treatments are a necessary component of care, the care of young persons living with HIV should also address other areas of their health care needs, for example, mental and social wellbeing in order for care to be comprehensive. In the present study, an attempt was made to build capacity for comprehensive self-care through a health promotion intervention strategy using behaviour change module. Following the intervention as described earlier, significant positive changes occurred in physical, psychological and social health promotion activities such as healthy lifestyles, reducing risk behaviours, adherence to ART, self-acceptance, and healthy social relationships. This finding is similar to other studies [3,7] where it was observed that health promotion strengthened the capacity of YLH to improve and maintain their health, enhanced their quality of life and also empowered them to modify their lifestyles for overall wellbeing. A study in Zambia on self-care practices and experiences of youth living with HIV [11] however concludes that while self-care practices may promote physical and psychosocial well-being and mitigate AIDS-related symptoms, at least in the short term, they however tend to undermine access to ART care thereby putting persons living with HIV at risk of early AIDS-related mortality. This may be because persons believe that engaging in vigorous self-care and secondary health promotion activities could prevent them from requiring ART.

The practice of not utilizing HIV health facilities and services for proper tests and treatment is detrimental to the health and wellbeing of youth living with HIV because it deprives them of proper care and monitoring and adequate healthcare supervision. [10] It is also a pointer to the need for healthcare providers to be more proactive in locating and engaging these youths, even as Anderson et al [8] suggested that healthcare practitioners should engage closely with persons living with HIV in

order to understand their needs and potential reactions to a positive diagnosis. The reported self-prescription of antibiotics to treat HIV-related infections, also found in the Zambia study, raises concerns about future development of microbial drug resistance amongst person living with HIV. [11] This calls for intensive health education and engagement of youth living with HIV. Participants upheld their preference for faceless counselling, continued to browse the internet for health information and also called for the use of mobile phones and e-mail for counselling YLH. This has implication for advocacy and health policy and should be considered by health planners and care providers.

The limitation of the study is the small size of youth living with HIV who were accessible and agreed to participate in the study.

Implications of study for health action and nursing practice: The concern of youths regarding lack of youth-related, youth-friendly HIV counselling and other services calls for advocacy for health facilities to establish youth-friendly clinics and train nurses to engage youth and provide youth-friendly services. The preference of participants for "faceless" counselling brings out the need for using mobile-health technology (mobile phones for voice calls, text messages and e-mail) to counsel, track and engage youths living with HIV in Nigeria and also retain them in care.

CONCLUSION AND RECOMMENDATIONS

We conclude that behaviour change counselling (BCC) modifies attitude and behaviour and enhances health promotion and positive living among YHA. Structural and attitudinal issues in the Health Care System pose a threat to utilization of HIV-related services by youth living with HIV in Nigeria. It is recommended that Behaviour Change Counselling should be used in HCT clinics not only for youths but also for adults. Youth-friendly HIV services should be provided and health care providers should explore the use of the mobile phone to engage, educate, counsel, and track youth living with HIV infection in Nigeria.

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REFERENCES

1. UNAIDS Joint United Nations Programme on HIV/AIDS. Report on the global AIDS epidemic. Geneva: UNAIDS; 2008.
2. National Agency for the Control of AIDS (NACA). Facts sheet 2011: Update on the HIV/AIDS epidemic and response in Nigeria. Abuja: NACA; 2011.
3. LaGrange RD, Mitchell SJ, Lewis M, et al. Health protective behaviours among young people living with HIV/AIDS. J AIDS Clin Res.2012; Suppl 1(13): 7348.
4. Idoko J. Addressing Youth vulnerability to HIV/AIDS in Nigeria. Paper presented by the Director-General NACA, July 05, 2012. Available from http://www.cpedngonline.org/.../Addressing%20Youth%20vulnerability%20to%20. [Accessed 20th June, 2015].
5. Ahonsi, BA. Targeting Youth for HIV Prevention and Care in Nigeria: What Role for Governments? Unpublished paper presented at the Launching of the Special Edition of the African Journal of Reproductive Health on February 21, 2014 at the National Centre for Women Development, Abuja, Nigeria.
6. Dowshen N, Kuhns LM, Johnson A, et al. improving adherence to ART for youth living with HIV/AIDS: a pilot study using personalized, interactive, daily text message reminders. J. Med Internet Res. 2012; 14(2) doi: 10.2196/jmir.

7. Lightfoot M, Rotheram-Borus MJ, Tevendale H. An HIV-preventive intervention for youth living with HIV. BehavModif. 2007; 31(3): 345-63.
8. Anderson M, Elam G, Gerver S, et al. “It took a piece of me": Initial responses to a positive HIV diagnosis by Caribbean people in the UK. AIDS Care. 2010; 22 (12): 1493-8. doi: 10.1080 / 09540121 . 2010.482125.
9. Rao D, Kekwaletswe TC, Hosek C, et al. Stigma and social barriers to medication adherence with urban youth living with HIV. AIDS Care. 2007; 19(1): 28-33.
10. Ayres JR, Vera P, Franca I, et al. Vulnerability, Human Rights, and comprehensive health care needs of Young people living with HIV/AIDS. Am J Public Health. 2006; 96(6): 1001-1006.
11. Musheke M, Bond V, Merten S. Self-care practices and experiences of people living with HIV not receiving antiretroviral therapy in an urban community of Lusaka, Zambia: implications for HIV treatment programmes. AIDS Res Therapy. 2013; 10:12 doi: 10.1186/1742-6405-10-12.

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