

Psychological Factors As Correlates Of Suicidal Ideation Among University Students In Lagos State

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Abstract: *Suicide ideation among undergraduate students all over the world has assumed an alarming dimension. It has become so worrisome that it has gained prominence in social discourse. The prevalence rate of suicide among undergraduate students in different parts of the world gives room for concern. Despite these researches, factors that predict the occurrence adequately investigated in this part of the world. This study therefore investigates psychological factors as correlates of suicidal ideation among university students in Lagos state. A descriptive survey research design was adopted in the study. Two hundred and fifty participants were selected through simple random sampling from five faculties within the University of Lagos. Their ages ranged between 19 and 24 years with mean of 22.40 years (SD= 4.19). Two structured questionnaire; Hopelessness Scale ($\alpha=0.87$) and Perceived Stress Scale ($\alpha=0.86$) were used to collect data. The findings revealed that there was significant positive relationships between perceived stress ($r = 0.338^{**}$, $p < 0.05$), hopelessness ($r = 0.285$, $p > 0.05$) and suicide ideation among the participants. The two variables jointly accounted for 61.1% variance in predicting suicide ideation among the participants. The independent variables made positive relative contribution to suicide ideation in the following order: Perceived stress contributed most to the prediction of suicide ideation among undergraduate students in University of Ibadan ($\beta = 0.345$, $t = 50.077$, $p < 0.05$) hopelessness ($\beta = -0.020$, $t = -.308$; $p < 0.05$) had relative contribution to suicide ideation. Based on this finding, it is recommended that students should be exposed to stress management and hope boosting training as a strategy for curbing suicide ideation. Positive academic environment should also be encouraged.*

Keywords: Hopelessness, Perceived Stress, Suicide ideation, University students.

INTRODUCTION

Every year, almost one million people die from suicide; a global mortality rate of 16 per 100,000, or one death every 40 seconds and as such it is a critically important public health problem (World Health Organization, 2011). Suicide has become an important public health problem and is rated the fourth leading cause of death globally among youth aged 15 to 19 years and the tenth leading cause for adolescents 10–14 years of age (Ovuga, 2005). However, these figures do not include suicide attempts, which are up to 20 times more frequent than completed suicide (WHO, 2011). Research on suicidal behavior specifically in Africa has been scarce, in part because of other pressing health concerns, but also because of political and economic instability (Schlebusch, Burrow and Vawda, 2009).

Suicidal ideation among students is defined as the wish, thought or desires to take one's own life violently due to a variety of internal and external causes, such as personality, undesirable emotions and school life (Vawda, 2009). Information on suicidal ideation can be utilized to predict suicide and can act as a guide for suicide prevention (Rubenstein, 1999).. There are many difficulties associated with the identification of individuals at risk for committing suicide, because individuals resort to suicide for so many different reasons. No matter the reason, any individual thinking about suicide is considered to be in the at risk group. Adolescence can be a difficult time in a person's life. There can be a lot emotional upheaval and stress. Adolescents can experience stress from family discord at home as well as having difficulties with peer relationships at school. All of these may lead a person to suicide (Rubenstein, 1999).

According to Davis (2003), there are many very different motivations for individuals to commit suicide. He asserts that in order to help a suicidal person, one must first know the underlying motivation. One reason someone may commit suicide is to escape an unbearable situation. A second is to try to manipulate or change someone else's behavior. A third is to use suicide as a vehicle to communicate to significant others just how unhappy they are and they need help. According to Davis, these people often have no intention of dying.

Research reveals that a common variable associated with suicide ideation is stress. Stress has been described in different ways over the years. According to Kazmi, Amjad and Khan (2008) opined stress as pressure from the environment, then later as a strain within the person. However today accepted definition one of the interactions between the situation and the individual (Kazmi, Amjad, Khan, 2008). It is the psychological and physical states that result when the resources of the individual are not sufficient to cope with the demands and pressures of the job situation. Thus, stress is more likely in some situations than others. The term "stress" has been defined differently by differently authors because of the complex nature of stress itself.

Stress may be referred to as an unpleasant state of emotional and physiological arousal that people experience in situations that they perceive as dangerous or threatening to their well-being (Hobfoll, 2009). Stress is the naturally occurring patterned experience in response to any demand placed on an organism. Stress is a psychological variable that has been attracting the attention of psychologists for a long time and has been vastly studied in relation to suicidal behavior and suicidal ideation (Akande, 2001).

According to Acholu (2005) although much is known about stress but there is no consensus or agreement as to the definition of the terms among scientist. According to Nweze (2004) stress is a process in which environmental events or forces threaten the well-being of an individual in the society. It is a disruption of the emotional stability of the individual that induces a state of disorganization in personality and behaviour. According to Wiley (2000) it is a biological phenomenon that is experienced by all persons regardless of their socio-economic status, occupation or age. Egor (2000) viewed stress as the way the individual responds to conditions that scare, threaten, anger, bewilder or excite them. McGrath (2006) defines stress generally as a dynamic condition in which an individual is confronted with an opportunity constraints, or demand on being having it doing what he or she desires.

According to Mark (2006), it is widely accepted that with hope, human beings act, move, and achieve. Individuals who are hopeful are usually described as active, vigorous, and energetic. Conversely, individuals who are hopeless are described as inactive, apathetic, and dull. Hope and hopelessness are two experiences that represent opposite expectations. The concept of hope can be expressed as a way of feeling (affectively), as a way of thinking (cognitively), and a way of behaving or relating behaviourally (Ungoren & Ehtiyar, 2009). As a way of feeling, hope has been described as an energizing force. It propels persons forward when the odds seem to be against them. As a way of thinking, hope is associated with a sense of fortitude, as described as an assumed certainty that a dreaded possibility will not happen. As a way of behaving, hope expresses itself as an active process in which the individual seeks possible and appropriate alternatives (Ungoren & Ehtiyar, 2009).

Like hope, Hopelessness expresses a way of feeling (affectively), a way of thinking (cognitively), and a way of acting (behaviourally) (Gencay, 2009). As a feeling, hopelessness is expressed as discouragement, despair, or a de-energizing force. When people feel hopeless, their thinking is also impaired. They have difficulty making their plans concrete and realizing alternative methods of resolving issues. These feelings and ways of thinking also influence the way persons behave which is associated with feelings of alienation from society. Hopeless individuals believe their personal future is largely out of their control and others cannot be counted on. Outcomes associated with hopelessness have ranged from negative emotional responses to physical and mental illness and premature death. Feelings of hopelessness have consistently been shown to be one of the best predictors of depression and suicidal ideation (Ceyhan, 2004).

According to Williams (2007) stated that in the past within adult populations has focused on the importance of hopelessness as a factor in a variety of psychopathological conditions such as depression and suicide. He stated further that he had studied children to understand continuities and/or discontinuities in hopelessness or depressive tendencies across the developmental spectrum (MacLeod, Rose & Ve Williams, 2007). In research pertaining to childhood psychopathology, risk factors have been identified as those factors, which, if present, increase the likelihood of an individual developing a behaviour disorder (MacLeod, Rose & Ve Williams, 2007). Suicidal thoughts and depression may be a precursor or a consequence of this hopelessness. As stated earlier, this pathological type of hopelessness is associated with psychiatric disorders such as depression, suicidal ideation, or sociopathic disorders (Beck, 2008).

Statement of the problem

Suicidal behaviour is complex. It is an irrational desire to die. Suicide effects are tragic and felt long after the individual has taken his own life. A person who dies by suicide leaves behind a tangled confusion of family members and friend who try to make sense of a senseless and a purposeless act. Suicidal ideation among adolescents is associated with several psychosocial indicators for well-being including: depression, loneliness, anxiety, substance use, poverty, bullying, mood disturbance, feelings of sadness, despair and discouragement, resulting from personal loss and tragedy, poor relationship quality with parents and low social support and thus when perplexed adolescents may see suicide as last option. Adolescents can experience stress from family discord at home as well as having difficulties with peer relationships at school. All of these may lead suicide ideation. WHO (2010) reported that 4,924 adolescents committed suicide in the age ranges of 15-24. This accounts for 12.9 suicides for every 100,000 adolescents in this age bracket. This rate has tripled since 2011, increasing 522% in a 30-year period. The suicide rate of adolescents now equals that of the general population. Given this gap, this study intends to assess the psychological factors as correlates of suicidal ideation among undergraduate students in Lagos state.

Purpose of the Study

The general purpose of this study is to investigate the psychological factors as correlates of suicidal ideation among undergraduate students in Lagos state. Specifically the study seeks to:

- examine the relationship that exists between the independent variables (hopelessness and perceived stress) and the dependent variable (suicide ideation) among undergraduate students in Lagos state.
 - investigate the joint contribution of the independent variables (hopelessness and perceived stress) and the dependent variable (suicide ideation) among undergraduate students in Lagos state.
 - explore the relative contribution of each of the independent variables (hopelessness and perceived stress) and the dependent variable (suicide ideation) among university students in Lagos state.
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Research Questions

- (1) Is there a relationship between the independent variables (perceived stress and hopelessness) and suicide ideation among undergraduate students in Lagos state?
- (2) What is the relative contribution of the independent variables (perceived stress and hopelessness) and suicide ideation among undergraduate students in Lagos state?
- (3) What is the joint contribution of the independent variables (perceived stress and hopelessness) and suicide ideation among undergraduate students in Lagos state?

METHODOLOGY

Research Design

This study will adopt the descriptive survey research design of the ex-post facto type to achieve the purpose of the study. This is used because the researcher is not interested in manipulating the variables

Population

The target population for this study consists of undergraduates in Oyo state. The populations under this study are undergraduates in University of Ibadan in Oyo state, Nigeria.

Sample and sampling technique

The participants for the study were drawn from five faculties randomly selected within the university. The five faculties are: Education, Agric, Tech, Science and Arts. One department was equally randomly selected through balloting from each of the faculties. Fifty participants were engaged in each department based on availability and willingness to respond to the questionnaire.

Instruments

The questionnaire used in this study comprised of five standardized instruments divided into six sections::

Section A contains the bio-data which sought demographic information such as age, gender, level, parent marital status, parent's educational qualification & occupation, person responsible for education etc. the other section contains the following:

Suicide Cognition Scale

This instrument developed by Rudd (2010) measured suicide ideation. The Suicide Cognitions Scale is an 18-item self-report measure that assesses suicide-cognition. The respondent indicates level of agreement with each statement using a 5 point Likert-type scale, with responses ranging from Strongly Disagree to Strongly Agree. The author reported an internal reliability co-efficient (alphas) ranging from .78 to .93.

Hopelessness Scale

The Beck Hopelessness Scale (Beck, 1993) assesses an individual's negative expectations about the future. The BHS contains 20 items that assesses hopelessness with a response format ranging from Strongly Disagree to Strongly Agree. The author reported an internal reliability co-efficient (alphas) ranging from .87 to .91

Perceived Stress Scale

Perceived stress was developed by Cohen (1990). It consists of 10 items with a response format ranging from Strongly Disagree = SD to Strongly Agree = SA. The author reported a split-half reliability of .86 and .67 were observed for part 1 and 2 respectively, with a Cronbach alpha of .95

Procedure of Data Collection

The researcher got the consent of each participant in the study. Explanations were made on the essence of the research and the procedure of administration. The researcher further assured participants of the confidentiality of the information provided. Questionnaires were distributed and collected immediately after participants responded.

Method of Data Analysis

Pearson product moment correlation was used to test the relationship among the independent variables and the dependent variable while Multiple Regression Analysis was used to analyse the joint contribution and the relative effect of the independent variables on the dependent variable.

RESULTS

Research Question 1:

What is the relationship between the independent variables (perceived stress and hopelessness) and the dependent variable (suicide ideation).

Table 1: Correlation matrix showing the relationship between study variables

Variables	Mean	Std.Dev	1	2	3
Suicide ideation	22.4000	4.19887	1.000		
Perceived stress	35.8980	2.43981	.338**	1.000	
Hopelessness	34.7200	.53172	..285**	.448**	1.000

*Correlation is significant at 0.05(2-tailed)

Table 1 revealed the relationship of each independent variables (perceived stress and hopelessness) with the dependent variable (suicide ideation); Suicide ideation positively correlated with perceived stress ($r = .338, p < 0.01$) and hopelessness ($r = .285, p < 0.01$).

Research Question 2:

What is the joint contribution of the independent variables (perceived stress and hopelessness) on the dependent variables (Suicide ideation).

Table 2: Summary of regression for the joint contributions of independent variables to the prediction of suicide ideation.

R = .340						
R Square = .115						
Adjusted R square = .611						
Std. Error = 3.99226						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	498.725	2	249.362	7.823	.000 ^b
	Residual	3825.152	242	15.938		
	Total	4323.877	244			

Table 2 reveals significant joint contribution of the independent variables (perceived stress, and hopelessness) to the prediction of suicide ideation. The result yielded a coefficient of multiple regressions $R = 0.340$ and multiple R -square = 0.115. This suggests that the two factors combined accounted for 61.1% ($Adj.R^2 = .611$) variance in the prediction of suicide ideation. The other factors accounting for the remaining variance are beyond the scope of this study. The ANOVA result from the regression analysis shows that there was a significant effect of the independent variables on the suicide ideation, $F_{(2, 242)} = 7.823, P < 0.01$.

Research Question 3:

What is the relative contribution of the independent variables (perceived stress and hopelessness) on the dependent variables (Suicide ideation).

Table 3: Relative effect of the independent variables to the prediction of suicide ideation

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Remark
	B	Std. Error	Beta			
(Constant)	4.449	3.314		1.343	.000	Sig
Hopelessness	2.063	.324	.327	2.512	.004	Sig
Perceived-stress	2.714	.535	.345	5.077	.000	Sig

Table 3 shows that the two predictors (perceived stress and hopelessness) are potent predictors of suicide ideation. The most potent factor was perceived stress (Beta = .345, $t = 50.077, P < 0.01$), hopelessness (Beta = .327, $t = 2.512, P < 0.05$). This implies that, perceived stress and hopelessness increases suicide ideation tendency among undergraduates.

Discussion of findings

In response to research question one that stated what pattern of relationship exists between the independent variables (perceived stress and hopelessness) on suicide ideation among undergraduate students in Lagos. The result from this study also shows that there was significant relationship between hopelessness and suicide ideation. This finding is in line with Konick and

Gutierrez (2005) found that hopelessness is one of the risk factors believed to commonly precipitate suicide ideation. Banjoko (2009) found that some adolescent however do not report precipitants for their suicidal behaviour and the occurrence of life events may be related to young people's poor problem solving skills or psychiatric difficulties. McCarthy (2008), found that suicide behaviour in a group of college-aged suicide ideators, indicated that college student's suicide ideators experienced higher level of negative life stress, were more hopeless, and had higher level of hopelessness than their non-ideating peers. Poor problem solvers under high hopeless were found to be significantly higher on suicide intent than any other group.

Also, Ciarrochi, Deane, and Anderson (2002) found that hopelessness was associated with: (1) greater reported hopelessness, and suicidal ideation among people high in emotional perception and (2) greater suicidal ideation among those low in managing others' emotion. Berman and Jobes (2011) suggested that factors like hopelessness may mediate between hopelessness and suicidality. Izadinia, Amiri, Jahromi, and Hamidi (2010) concluded that, suicidal ideations had a significant and negative relationship with hopelessness. Hopelessness and daily stresses had a negative relationship with suicidal ideations. Berman and Jobes (2011) assessed correlates of suicide risk in a South African school-based population from three secondary schools in Cape Town. Their results indicated hopelessness as predictors for suicide risk

The result shows that there was significant relationship between perceived stress and suicide ideation. This finding is in line with Hirsch and Ellis (2016) who found that college students who experience suicide ideation have greater levels of life stress. In addition, Singh and Joshi (2008) have found that there were significant associations between stress and suicide ideation among college students, indicating that people with a high level of life stress may have a greater tendency to experience suicide ideation. Moreover, Singh and Joshi (2008) found that stress is a strong predictor of suicide ideation among college students. Thus, it is reasonable to maintain that stress, measured in terms of a person's perceived stress, would predict suicide ideation. These stresses may put a strain on a young person's self-concept and self-esteem.

In response to the research question two which states whether there is any joint contribution of the independent variables on the suicide ideation among undergraduate students in University of Lagos. The result shows that there was joint effect of the factors (perceived stress and hopelessness) on suicide ideation. It was further revealed that 61.1% variance in the prediction of suicide ideation among undergraduate students in Lagos, this was due to the prediction of the independent variables. The ANOVA results from the regression analysis also attests to the causal effect of the independent variables on the dependent variables; hence, the rejection of the null hypothesis. In line with this finding, a combination of variables like self-esteem and family environment has been observed by Carroll (2017) on suicide ideation.

The result of the third research question on the relative effect of each of the variables was also significant. In all, academic work as a whole, it is revealed that the degree of perceived stress and hopelessness is very relevant to suicide ideation among undergraduate students in Lagos. This finding corroborates the study of Simon (2007) who found that the perceived stress and hopelessness have independent effect on suicide ideation among students. It is also in contrary with the findings of Holley (2011) who found that self-esteem, family environment could act as a negative factor that could increase suicide ideation among college students.

Conclusion

This study was reinforced with the realization that the lingering suicide ideation had permeated in to the school system. This study has therefore, established linking pathways between some variables and suicide ideation. These include hopelessness, family environment, self-esteem and perceived stress among undergraduates' students. Changing the face of suicide ideation in Lagos requires a lot of psychological re-orientation especially considering interventions that employ the independent variables in this study (hopelessness and perceived stress). This research work has established that, there is a positive joint contribution between hopelessness and perceived stress on suicide ideation. Positive joint contribution between hopelessness and perceived stress on suicide ideation. This study has provided more details to the existing information on the suicide ideation as a factor that required immediate solution. From this study, it becomes clear that various strategies should be design to access the issue of suicide ideation in different schools, attention should also be given to the identified means or factors through which the researcher has been able to identify that can affect the suicide ideation of undergraduate students.

Recommendations

In the light of these findings, the following recommendations are hereby proffered:

1. Proper monitoring and socialization of children should be given from the family. Parents must make sure some conflicting issues bothering the home should be solved earlier. Children's behaviour should be monitored right from home before they mingle with the larger society. Parents should also serve as good models, understand their child emotion and should attend promptly to the needs of their children at home and in school.
2. Health educators could try to make their target population self-esteem by teaching adolescents how to understand, cope and esteems, how to manage stress, and how to let other people understand their emotions.
3. Government should control the activities of suicide ideation among adolescents through the board of censors to see through all programmes that are put on air. All programmes that are suicide ideation based should be properly regulated and monitored by the board put in place by board.
4. Government should provide social amenities, create employment and train young people about creativity and innovation and other programmes that can improve the economic capacities of people. Also public enlightenment programmes should be mounted by the

government (Federal, State and Local) to broaden the knowledge of the populace especially parents to understand what lies behind young people's suicide ideation.

5. It is also very important to strengthen the human resources of the adolescents through constant workshops and seminars. There should be establishment of well managed youth-friendly centres to positively engage the adolescents both in-school and out-of-school youths.

There should be improvement in guidance and counselling services - Guidance services in schools should be functional enough to take care of all categories of behaviours exhibited by students. School administrators should understand and appreciate the importance of counselling services in the school and should render all the necessary support to the counsellor.

6. Personalized counselling services should also be easily accessed to help these youngsters out of their deep psychological, personal and social problems that blur their vision about self and future. The nature of the counselling services should be developmental, preventive, curative, remedial and therapeutic. It is worthy of note that specific counseling techniques could be used in modifying violent acts and developing or instilling disciplined behaviour in our youths.

REFERENCES

- Acholu, M. L. 2005. Parental Behavior and Adolescent Self-Esteem. *Journal of Marriage and the Family*, 48, 37-46.
- Akande, R. M. 2001. Family differentiation, peer differentiation, and adolescent adjustment in a clinical sample. *Journal of Adolescent Research*, 8, 205-225.
- Banjoko, A.K 2009. Comparing suicide attempters, suicide ideators, and nonsuicidal homeless and runaway adolescents. *Suicide Life Threat. Behav.* 1999, 29, 26–36.
- Berman, M and Jobes, S 2011. Inter-parental conflict and children's academic attainment: A longitudinal analysis. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 48, 1223–1232
- Carrol, G. S. 2017. Psychological factors as determinants of suicide ideation. *Journal of Applied Psychology*, 250, 1678-1683
- Ceyhan, B. 2004 Prevalence and correlates of suicidal behaviour among adolescents in Southwest Nigeria. *Int. J. Soc. Psychiatry* 2004, 54, 34–46.
- Ciarrochi, S.T; Deane, A.M and Anderson, S 2002. The Impact of Marriage on Academic achievement of college students. *Los Angeles Times*, retrieved March 14, 2009 from <http://www.latimes.com>.
- Davis, S. M. 2003. Individuality and connectedness in the family as a context for adolescent identity formation and role-taking skill. *New Directions for Child Development*, 22, 43-59.
- Egor, C.D. 2000 Global patterns of mortality in young people: A systematic analysis of population health data. *Lancet* 2000, 374, 881–892
- Gencay, N. 2009 Suicide Prevention and Religious Traditions on the African Continent. In *Suicidology and Suicide Prevention: A Global Perspective*; Wasserman, D., Wasserman, C., Eds.; Oxford University Press: Oxford, UK, 2009; pp. 63–69.
- Hirsch, C.S and Ellis, A.M 2016. Suicide Thought: Measuring socioeconomic status in studies of child development. *Child Development*, 65(6), 1541–1545.
- Hobfoll, C. 2009. Stress effect and restraint in early adolescents: Relationships with family structure, family process, and friendship support. *Journal of Early Adolescence*, 8, 279-296.
- Holley, M 2011. Interparental conflict and child self-esteem: Testing the mediational role of appraisals in the cognitive-contextual framework. *Child Development*, 71, 1648–1661. doi:10.1111/1467-8624.00255
- Izadinia, S; Amiri, T; Jahromi, M.F and Hamidi, T 2010. Children's understanding of the simultaneity of two emotions: A five-stage developmental acquisition sequence. *Developmental Psychology*, 23, 388-399.
- Kazmi, K. M., Amjad, H and Khan, M. F. 2008. Relationship between perceived parental behaviors and the self-esteem of gifted children. *Psychological Reports*, 65, 931-937.
- Konick and Gutierrez 2005. A prospective investigation of appraisals as mediators of the link between perceived stress and hopelessness on suicide ideation among college students. *Journal of Abnormal Psychology*. Vol 2(3)pp128-139
- MacLeod, Rose and Ve Williams, 2007 Suicidal ideation and associated factors among in-school adolescents in Zambia. *Tanzania Health Res. Bull.* 2007, 9, 202–206.
- McCarthy, F. 2008 The Suicide ideation and Socio-Economic Situation of Youth in Africa: Problems, Prospects and Options; 2009. Available online: www.yesweb.org/gkr/res/bg.africa.reg (accessed on 11 October 2009).
- McGrath, D. 2006 Prevalence of suicide ideation in two districts of Uganda. *Arch. Suicide Res.* 2005, 9, 321–322.
- Nweze, M. 2004. Evaluating FACES III and the Circumplex Model: 2,440 families. *Family Process*, 30, 55-73.
- Ovuga, E. 2005. Integrating mental health into primary health care: Local initiatives from Uganda. *World Psychiatry* 2005, 6, 60–61.
- Rubenstein T. L. 1999. Is being gifted a social handicap? *Journal for the Education of the Gifted*, 11(4), 41-56.
- Schlebusch, D. A., Burrow, C. J., and Vawda, C. 2009. The family and children's peer relations. *Journal of Social and Personal Relationships*, 8, 315-346.
- Simon, M. J. 2007. The relation of hopelessness to adolescent suicidal thought. *Child Development* 58, 1244-1257.
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- Singh, T and Joshi, N. M 2008. Actiology, Treatment and Preention of juvenile delinquency among Secondary School Adolescents in Nigeria. *Journal of Research in Education.*, 2 (11)1-8.
- Ungoren, J and Ehtiyar, F 2009. Measures of socioeconomic status in child development research: Data and recommendations. *Merrill-Palmer Quarterly*, 31(1). 85–92.
- Vawda, C 2009. A study of students', parents', and teachers' attitudes toward gifted programs and gifted students. *Gifted Child Quarterly*, 27(3), 107-110.
- Williams, D.R. 2007 Prevalence and correlates of non-fatal suicidal behavior among South Africans. *Br. J. Psychiatry* 2007, 192, 310–311.
- World Health Organization, 2011. Working with Street Children: A Training Package on Substance Use, Sexual and Reproductive Health Including HIV/AIDS and STDs; 2011. Available online:<http://www.who.int/>