Self-Efficacy Orientations and Gender in Death Anxiety amongst HIV Sero-positive Patients: A Comparative Study

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Abstract

This is a cross-sectional study that investigated self-efficacy and gender in death anxiety among HIV sero-positive patients. A convenience sample of eighty (80) HIV sero-positive patients comprising forty (40) males and forty (40) females was selected. Self-efficacy Scale Inventory and Death Anxiety Scale were the two questionnaires used in this study. A 3-way analysis of variance was used for data analysis on SPSS version 15. The questionnaires were distributed to the participants on clinic day and collected on the same day. The results showed there was a significant difference between low self-efficacy oriented HIV sero-positive patients and high self-efficacy oriented HIV sero-positive patient in death anxiety ($F_{1,72} = 53.84$, $p < 0.001$). There was also significant difference between male HIV sero-positive patients and female HIV sero-positive patients in death anxiety ($F_{1,72} = 13.48$, $p < 0.001$). The study found that death anxiety levels were higher for male HIV sero-positive patients as compared to female HIV sero-positive patients. While the first hypothesis was rejected: death anxiety levels differ between those with low self-efficacy HIV positive patients and those with high self-efficacy scores in terms of their self-report of death anxiety. Discussion of the results was done, limitations of the study were stated and recommendations given.

Keywords: *Gender; Self-efficacy; Death anxiety; HIV positive patient.*

Introduction

Research into the human immunodeficiency Virus (HIV), the virus that causes acquired immunodeficiency syndrome (AIDS), has made remarkable progress since it began in the early 1980s. Preventive efforts have reduced the number of new cases of the disease, and for people already living with HIV/AIDS. The survival rate is increasing because of advances in drug and psychotherapy. Majority of those affected by the disease live in developing nations, who, like many minority communities of the developed nations, are unable to afford the latest drug therapies and are still seriously threatened by the disease (UNAIDS, 2013). Nigeria has the biggest population in Africa with 1 in 6 Africans being Nigerian. Although HIV prevalence rates are much lower in Nigeria than in other African countries such as South Africa and Zambia, the size of Nigeria's population meant that by the end of 2008, there were an estimate 2,900,000 people living with HIV/AIDS. This is the largest number in the world after India and South Africa (WHO, 2006).

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HIV/AIDS has already badly affected the Nigerian society and its economy. If the epidemic continues at its current rate, or worsens, there could be knock-on effects in other West African countries and the whole region could be affected. HIV sero-positive patients are found to be exposed to emotional stressors and anxiety in general. Anxiety is an unpleasant emotional state characterised by an often vague apprehension, uneasiness, or dread. Anxiety is often accompanied by physical sensations similar to those of fear such as perspiration, tightness of the chest, difficulty in breathing or breathlessness, dry mouth, and headache. Unlike fear, in which the individual is usually aware of its cause, the cause of anxiety is often not clear. Everyone experiences anxiety. It is a natural and healthy human response. Many theorists have evolved to warn of impending dangers so that better coping strategies could be developed. If the anxiety becomes excessive in strength or duration, or happens without sufficient objective reasons, it might be considered unhealthy. Death anxiety is one of the psychological factors associated with HIV sero-positive patients. Death anxiety is defined as anxiety caused by conscious and unconscious fear of death and dying (Hamama-Raz, 2000).

Terror Management Theory revolves around an individual's fear of death. Stemming from the writings of Becker, a social anthropologist, this theory hypothesises that a person's death anxiety is an underlying motivation for his or her behaviour (Butler, 1991). Humans experience death anxiety because, unlike other species, there is an awareness of one's own mortality. Another instinctual behavior for humans is the will to survive. In essence, they are aware of the inevitability of death which can lead to death anxiety or a deep sense of “terror” (Hamama-Raz, 2000). Individuals with high death anxiety may also experience an overall or general anxiety that exudes into their daily lives. Research has shown that there is a positive correlation between death anxiety and general anxiety (Abdel-Khalek, 2001). In 1997, Abdel-Khalek sampled 208 Egyptian undergraduate students at Alexandria University, Egypt. After administering the Death Anxiety Scale (Bussey & Bandura, 1999) and two subscales of the State-Trait Anxiety Inventory, they found that death anxiety and general anxiety were significantly and positively correlated.

A number of clinical investigators have found that psychological distress is significantly increased in HIV positive subjects (Miller & Dollard, 1990; Perry *et al*., 1990). Prior to the advent of potent antiretroviral treatment, the most prevalent manifestations of this were increased anxiety and depressive symptoms. Possible etiologies include: 1) multiple psychological stressors, including loss of physical health and wellbeing, social isolation due to death of friends or fear of contagion, societal reaction to the disease, and loss of income due to physical illness; 2) the possibility that persons who are depressed may behave in ways that put them at risk for acquiring HIV; and 3) central nervous system effects of HIV (Kalichman *et al*., 2000).

Among hospitalised patients with AIDS, depression has been shown to be the strongest predictor (23% of the variance) of quality of life (Kastenbaum, 2000). The most serious complication of depression and anxiety is suicide. Studies have found that between 1.9 and 4.6 of persons in the United States admit having attempted suicide (Kaplan & Sadock, 1995). HIV infection has been found to be related to suicidal ideation and attempts (Graham & Weiner, 1996). Furthermore, a number of other risk factors

common among persons with HIV which include lack of employment, financial difficulties, substance use, physical and sexual abuse, and social isolation have been shown to predict suicidality (Hyman, 2000; Chung *et al*., 2000). Therefore, HIV sero-positive HIVþ subjects may be at higher risk of suicide than the general population. However, findings in the literature are unclear concerning the prevalence of suicide in the HIVþ population.

Anxiety

There are numerous theories as to the causes and functions of anxiety. This entry will cover the four most extensive and influential theories: the existential, psychoanalytic, behavioural and learning, as well as cognitive (Florian *et al*., 2001).

Existential Theory of Anxiety

Existential theorists generally distinguish between normal and neurotic anxiety. They believe normal anxiety is an unavoidable and natural part of being alive. It is the emotional accompaniment of the fear of death and of the immediate awareness of the meaninglessness of the world we live in (Wu *et al*., 2002). Anxiety is also felt on experiencing freedom and realising we can create and define our lives through the choices we make. In this sense, anxiety is positive, showing us we are basically free to do whatever we choose. Neurotic anxiety is a blocking of normal anxiety which interferes with self-awareness. Rather than facing and dealing with the threat causing the normal anxiety, the individual cuts him or herself off from it (Page, 1999).

Psychoanalytic Theory of Anxiety

Sigmund Freud, the Austrian physician who founded the highly influential theory and treatment method called psychoanalysis, distinguished three types of anxiety - reality, neurotic, and superego or moral. Reality anxiety is fear of real and possible dangers in the outside world. Neurotic anxiety is fear of being punished by society for losing control of one's instincts, for instance by eating large amounts of food very rapidly, or openly expressing sexual desire. Moral or superego anxiety is fear of negative self-evaluation from the conscience or superego. The anxiety may be felt as guilt, and those with strong superego may experience guilt or anxiety when they do (or even think of doing) something they were raised to believe was wrong. In Freudian theory, anxiety functions to warn individuals of impending danger, and it signals the ego to take actions to avoid or cope with the potential danger (Fortner & Neimeyer, 1999).

Freud's Psychoanalytic Theory of Death Anxiety

Freud has juxtaposed life instincts with death instincts and the two were referred to as Eros and Thanatos in Beyond the Pleasure Principle. Although Freud could not provide clinical data that directly verified the death instinct, he thought it could be inferred by observing the repetition compulsion, the tendency of persons to repeat past traumatic behaviour. Freud felt that the dominant force in biological organisms had to be the death instinct. He viewed it as a tendency of all organisms and their component selves to return to an inanimate state. Freud's notion of the death instinct was clearly linked to the constancy principle and was also associated with what he termed the Nirvana principle, which postulates that an organism strives to discharge internal tension and to seek a state of rest (Freud, 1993).

Social Cognitive and Self-Efficacy Theory

In 1941, Miller and Dollard proposed a theory of social learning and imitation that rejected behaviourist notions of associationism in favour of drive reduction principles. It was a theory of learning, however, that failed to take into account the creation of novel responses or the processes of delayed and non-reinforced imitations (Miller & Dollard, 1990). In 1963, Bandura and Walters wrote Social Learning and Personality Development, broadening the frontiers of social learning theory with the now familiar principles of observational learning and vicarious reinforcement. By the 1970s, however, Bandura was becoming aware that a key element was missing not only from the prevalent learning theories of the day but from his own social learning theory (Bandura, 1978). In 1977, with the publication of "Self- efficacy: Toward a Unifying Theory of Behavioural Change," he identified the important piece of that missing element – self-beliefs.

With the publication of Social Foundations of Thought and Action: A Social Cognitive Theory, Bandura (1986) advanced a view of human functioning that accords a central role to cognitive, vicarious, self-regulatory, and self-reflective processes in human adaptation and change. People are viewed as self-organising, proactive, self-reflecting and self-regulating rather than as reactive organisms shaped and shepherded by environmental forces or driven by concealed inner impulses. From this theoretical perspective, human functioning is viewed as the product of a dynamic interplay of personal, behavioural, and environmental influences. For example, how people interpret the results of their own behaviour informs and alters their environments and the personal factors they possess which, in turn, inform and alter subsequent behaviour (Bandura, 1991). This is the foundation of Bandura's (1995) conception of reciprocal determinism, the view that (a) personal factors in the form of cognition, affect, and biological events, (b) behavior, and (c) environmental influences create interactions that result in a triadic reciprocity. Bandura altered the label of his theory from social learning to social "cognitive" both to distance it from prevalent social learning theories of the day and to emphasise that cognition plays a critical role in people's capability to construct reality, self-regulate, encode information, and perform behaviours (Bandura, 1993).

Methods

Participants

The study consisted of eighty (80) participants who were selected based on convenience sampling during the four weeks of the study from Aminu Kano Teaching Hospital (AKTH) S.S. Wali HIV Centre, Blood Donor Clinic and Voluntary Counselling and Testing Centre (AKTH- VCT). The sample consisted of 40 female HIV sero- positive patients and 40 male HIV sero-positive patients. Therefore, there were equal numbers of both male and female participants which was a total number of 80 participants. Demographic variables such as marital status, educational level, occupation and gender were recorded. All participants agreed to take part in the study voluntarily. They were all HIV sero-positive clients attending the S.S. Wali HIV Centre of the AKTH from different ethnic backgrounds.

Instruments

The study participants completed two sets of instruments - the Death Anxiety Scale (DAS) and the Self-Efficacy Scale (SES) (Sherer *et al*., 1982). The DAS was originally designed by Tomer (1994) to measure death anxiety as a clinical condition. The scale has 10 items designed to measure the concerns such as fears, apprehensions and forebodings people often have about dying. The DAS is administered individually and/or in groups after establishing adequate report with the clients. Florian *et al*. (2002) provided the original psychometric properties for American samples while data for Nigerian samples were provided by Tomer (1994). The norms reported here (Table 1) are the mean scores obtained by different age groups and gender.

Table 1: *Differences in age and gender of participants in previous research*

GROUPS	AMERICAN SAMPLES		NIGERIAN SAMPLE
	M	F	M & F
Youths	7.50	7.54	8.32
Young Adults	7.25	7.60	7.62
Middle Aged	6.85	7.90	8.00
Elderly	5.74	5.90	7.20

The DAS has a reliability co-efficient reported by Templar (1970), KR-20 (Kuder-Richardson Formula 20) internal consistency = .76 and 3-week test-retest = .83 Adebakin (1990), 3-week test-retest = .15

Concurrent validity co-efficients were obtained by correlating DAS with Fear of Personal Death Scale (FPDS) developed by Florian *et al*. (2002); Tomer (1994) obtained .74 while Swanson *et al*. (1998) obtained .45. The scores are to be interpreted for the Nigerians using norms or mean scores as the basis for interpreting the scores for the clients. Scores higher than the norms indicate that the client manifests high or abnormal death anxiety while scores lower than the norms indicate the client has none or manifests normal death anxiety level.

The DAS is a 10-item uni-dimensional scale requiring true or false response to personal death related questions which was modified in the present study to a 5-point Likert-type scale. The five response alternatives including Strongly disagree, Disagree, Neither agree nor disagree, Agree and Strongly agree were assigned values of 1, 2, 3, 4 and 5 points respectively. Scores range from 10 (lowest death anxiety) to 50 (highest death anxiety).

The SES was originally developed by Sherer *et al*. (1982) for American samples and later adopted for the Nigerian samples by Tan *et al*. (2002). The scale is designed to measure self-perceived competence and effectiveness in work performance and efficacy in handling social relationship. It is a 10-item inventory designed to measure social component of self-efficacy from both interpersonal and intrapersonal perspectives. The concept of efficacy is predicated on the assumption that an individual's deep-rooted expectation of his or her capabilities directly affects the cognitive, affective and the psychomotor components of the individual's abilities and the outcome of performance.

The SES emphasises the outcome of the performance in the relation to the self and others within a social matrix (Swanson *et al*., 1998).

The SES is administered individually or in groups after establishing adequate rapport with the clients. The scale has psychometric properties with a norms score reported mean scores obtained by Nigerian youths - 61 males = 77.93, 61 females = 78.25 while 126 males and females = 78.97. The reliability of SES obtained by Sherer *et al*. (1982) reported Cronbach alpha internal consistency reliability co-efficient of .86 and validity obtained by Tan *et al*. (2002) reported concurrent validity coefficient of .23 by correlating SES with Mathematics Anxiety Rating Scale- Revised by Pontillo (2001). Interpreting the SES for Nigerian norms or mean scores is on the basis that scores higher than the norms indicate adequate and higher self-efficacy while scores lower than the norms indicate inadequate or poor self-efficacy.

Administration of questionnaire

The questionnaires were distributed to participants on various clinic days within Aminu Kano Teaching Hospital at the S.S. Wali HIV Centre Counselling Hall within the Clinic. All questions and instructions were written in English. The researcher briefed participants on the purpose of the study. Participants were also required to fill in a consent form to indicate the understanding that their participation in the study was voluntary and that they could withdraw at any time should they wish to do so. Participants were also assured of confidentiality and were given sufficient time to complete the questionnaires and any questions they had were answered by the researcher. The questionnaires were collected upon completion.

Results

Of the total number of 80 participants, 35 (43.75%) were single and 30 (37.5%) were married with 15 (18.75%) from other statuses. 45 (56.25%) participants completed secondary education, 20 (25%) completed pre-university education, 5 (6.25%) had diplomas, and 10 (12.5%) had degrees.

Table 2: *Comparison of mean scores of self-efficacy and gender on death anxiety measures*

Variables		**Death Anxiety Scores**	
		mean	**SD**
Self-Efficacy	High SE (n=61)	22.66	8.21
	Low SE (n=19)	38.84	8.43
Gender	Male (n=40)	30.08	11.00
	Female (n=40)	22.93	9.29

From the above findings, the researcher observed that participants in the high SE show lower mean score in death anxiety (mean = 22.66; SD = 8.21) than HIV sero-positive patients in low SE (mean = 38.84; SD = 8.43). While gender shows that male HIV sero-positive patients scored higher in the mean score of death anxiety (mean = 30.08; SD = 11.00) than female HIV sero-positive patients (mean = 22.93; SD = 9.29).

Table 3: *ANOVA summary table of self-efficacy orientations and gender in death anxiety among HIV sero-positive patients*

Source	SS	df	Msq	*F*	Significance
Self-Efficacy	2859.20	1	2859.20	53.83	***
Gender	715.86	1	715.86	13.48	***
Error	3824.26	72	53.12		
Corrected Total	9114.00	79			

*** indicates significance, $p < .001$

Table 3 (above) shows that the difference observed between low SE and high SE participants was statistically significant ($F_{1,72} = 53.84$; $p < 0.001$). Thus, the first hypothesis which stated that there would be no statistically significant difference between low self-efficacy oriented HIV sero-positive patients and high self-efficacy oriented HIV sero-positive patients in their self-report of death anxiety was rejected. Similarly, gender was also significant ($F_{1,72} = 13.48$; $p < 0.001$). Consequently, the second null hypothesis was also rejected. Interaction effect among all the variables were checked, but none were found to be statistically significant.

Discussion

The study showed that low self-efficacy oriented HIV patients reported high scores in the levels of death anxiety than those patients who scored high in self- efficacy. Therefore, the first null hypothesis was not supported.

The study explored if any differences exist in terms of level of death anxiety between males and females. Hypothesis 2 stated that there would be no statistically significant difference between male HIV sero-positive patients and female HIV sero-positive patients in their self-report of death anxiety. The hypothesis was not supported as results revealed that significant differences exist between both male HIV positive patients and female HIV positive patients in terms of death anxiety. The mean scores on death anxiety showed that males have slightly higher death anxiety scores as compared to females. Other studies have found that death anxiety is higher in females as compared to males (Schumaker *et al*., 1988; Suhail & Akram, 2002). Even though the results showed that males have higher death anxiety scores, it does not mean that females are not afraid of death. They could just be suppressing it or denying it. Studies which have found higher death anxiety levels amongst men as compared to women have used scales which measure death anxiety through cognitive constructs rather than through emotional constructs (Schumaker *et al*., 1988). If so, then the degree to which death anxiety questionnaires measure different dimensions as well as the way they measure these dimensions (whether emotionally or cognitively) would affect the results found.

This study has some theoretical and practical implications. Theoretically, the results obtained could be used to improve existing theories of death anxiety (Fortner & Neimeyer, 1999) or could be added to current death anxiety models. Practically, death

anxiety studies among HIV sero-positive patients are extremely useful in improving the quality of life and healthcare services for those who have high levels of death anxiety among such patients.

Conclusion

The study found that death anxiety levels were higher for male HIV sero-positive patients as compared to female HIV sero-positive patients. Future research should look into longitudinal studies as they are better equipped to study death anxiety. Future research should also look into cultural issues as some concepts of death anxiety might not be relevant or might not even exist in other cultures and thus the usage of the same death anxiety scales which are used to measure Western beliefs might yield inaccurate results.

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