Gendered stress levels and support group attendance among persons with HIV in Kenya

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Abstract
The study purposed to determine the difference in stress levels of PLWHAS based on gender and support group attendance in Kisii municipality. The study used a case study design. The target population was 300,000 people affected and infected by HIV and AIDS epidemic within Kisii Municipality. From an accessible population of 500 people, a sample size of 239 was purposively selected, out of which 128 PLWHAS were support group members, whereas 74 were not, and 25 were family caregivers. Data were collected using questionnaires. The reliability of the tools was checked through a pilot study. The questionnaires yielded a reliability coefficient of 0.7815. SPSS version 12.5 for windows was used to analyse data. The t-tests were employed to establish whether there were any differences between support group attendances, gender and stress levels of PLWHAS. A t-test for equality of means to establish the difference between stress levels by gender yielded a two-tailed level of 0.051, which is not significant at a 0.05 level of significance. The study concluded that there is no difference in stress levels by gender. Both men and women go through stress; therefore, it is important for them to undergo counselling. This can be done through empowering community-based care programmes. Mass education and campaign using media, barazas and churches should be carried out on the rights and privileges of PLWHAS as a first step to recognise PLWHAS as human beings deserving respect and dignity.

Key terms: Gender, stress level, support group attendance.
INTRODUCTION
Mwanyagetinge community-based care is found in the western part of Kenya, Nyanza Province, Kisii District. This is a home for very many people who are infected with HIV/AIDS. Mwanyagetinge community-based care uses the palliative care model and embraces medical and nursing care as well as the wider needs of individual families and communities. As HIV/AIDS epidemic expands, caring for patients with HIV-related diseases is increasingly taking place in the community and at home. This is because of economic implications since the disease sucks all family resources; hence they are not able to pay for a long time stay in hospital. Jackson (2002) defines community-based care as a holistic concept that would incorporate the full needs of patients and also address those of family carers and children who are orphaned. The PLWHAs is being recognised as an important instrument for the prevention of the further spread of the disease and recognition that they too ought to die with dignity. Another unique aspect of HIV/AIDS is the secrecy, stigma, and isolation that accompany it. Despite improvements in understanding of HIV/AIDS, those who are infected continue to face possible fear, rejection and prejudice if and when their diagnosis become known. It is only friends and community members who are not told of an individual's illness. Adults who are infected may impact communication patterns, attitudes toward HIV infection and willingness to access social and psychological support systems. In Kisii Municipality, various organisations and churches have set up community-based care programmes since the focus is now changing from prevention to caring for PLWHAs, who have already overstretched the health and family resources to the limit. This research will focus on the impact of community-based care on social discrimination and stress levels in helping people infected with HIV/AIDS in Kisii Municipality.

People infected with HIV/AIDS are discriminated against in society. They are labelled by society as immoral and deserving of their predicament. They undergo self-blame, humiliation and social discrimination, which greatly affect their stress levels, and affect them psychologically. Many hospital wards are congested and unaffordable to many poor PLWHAs. HIV/AIDS is a terminal illness that compromises the immunity of the infected person and requires a long period of management of opportunistic infections, which is either done in the community, at home or in the hospital. Irrational thinking results in inappropriate emotions and ineffective behaviours resulting in dysfunctional families. People with HIV often suffer severe bouts of depression and, later in the illness, can experience many cognitive problems due to the viruses in the brain. This can not only lead to feelings of being scatter brained but can also cause a significant amount of anxiety as the cognitive becomes more noticeable. According to HIV/AIDS strategic plan 2003 – 2007, Kisii municipality showed a stable but high prevalence of HIV/AIDS; hence about one person in every five is infected or affected by the disease. Community-based care approach has emerged as a holistic and collaborative effort by the hospital, the family and the home of the patients to enhance the quality of life of PLWHAs. This approach involves those infected and affected by HIV/AIDS and encompasses social support, counselling and nursing care (NASCOP, 2008). The PLWHAs are encouraged to learn and discuss HIV/AIDS openly, dispel myths about its transmission, and reduce stigma and bullied stress levels of clients by mobilising the family and community. The study focused on the impact of determining the difference in stress levels of PLWHAs based on gender and support group attendance in Kisii municipality.

LITERATURE REVIEW
When evaluative responses are associated with one, they are known as stress levels. Campbell (1990), cited by Tesser and Schwarz (2001), compared a person with high and low-stress levels and found that a person with high-stress levels show s greater confidence and stability of beliefs, therefore consistency in how they report self-belief. Tesser and Schwarz (2001) view stress levels as related to self-concept. This is the way a person perceives himself or herself. If a person thinks of himself as kind, moral and smart, he will tend to have high-stress levels. When a person is infected with HIV/AIDS, his own sense of self-worth is challenged. Thus, the feeling of guilt leads to a low
quality of life, which consequently leads to low-stress levels since one adopts awareness of how others are evaluating him. According to Blascovich et al. (1993), stress levels cannot be taught; rather, it is developed through individual experiences patterned social experiences emanating from the institutions like schools and the family. PLWHAS, too ought to be helped to realise its potential. Nwoye (1994) observes that when PLWHAS stress levels become deflated, the motivation to continue with life is reduced drastically. The infected individual may isolate himself/herself from the interaction with other members of society. The fact that they are diagnosed with a terminal illness does not make them less human. Community-based care approach is one effective way through which care is provided to those who are HIV/AIDS infected and affected so as to move up Maslow's hierarchy of needs for a better and longer life.

The stress levels continuum has two extremes, namely: low and high-stress levels. Low-stress levels are an enormous public health problem. People who report low-stress levels usually say that it has been present since early childhood or at least adolescence. Observers have commented that PLWHAS generally suffer more from low-stress levels (Edward, & Maxwell, 1976). Depression, often associated with low-stress levels, is also thought to be closely linked to PLWHAS. Low-stress levels result from one having a poor self-image caused by his negative attitudes about himself, his health status (HIV positive), his purpose in life and the job he does. Edward and Maxwell (1976) have given a summary of the emotional conduct of people with low-stress levels, and they include: critical of others; pessimistic, complaining about circumstances; short tempered, carrying heavy guilt and unloads it on others; trying to manipulate others; overly dependent on others and God; may be devoid of rational character guidelines; easily addicted to alcohol, drugs, job and love; lacks adequate self-confidence and finally but not least rejects help from others.

On the other hand, high-stress levels are the opposite of low-stress levels. It is a very important aspect of one's life. In American culture, for instance, high esteem is viewed as the basis for good relationships with other people and career success. Van Pelt (1980) observes that high-stress levels form the cornerstone of interpersonal relationships and positive attitudes toward living. High-stress levels have the following characteristics: confidence, self-respect, self-love, self-acceptance, happiness, assertiveness, high attitudes, good interpersonal relationships and motivation to succeed. Most PLWHAS do not possess these characteristics, hence low-stress levels. PLWHAS should be encouraged to live positively because being diagnosed with a terminal illness does not make them less human.

Powell (2000) states that when perceived demands outweigh capabilities, there is an imbalance, and one begins to suffer physical and emotional symptoms. The symptoms manifested, particularly in the body, are determined by the family background and genetic temperaments. Powell continues to state that it is important to remember that any stress one experiences are a result of one's interpretation of the demands and capabilities themselves. He has outlined several signs. He starts by talking about a panic attack. He states that a panic attack is triggered by an overload of stresses, worries and life events that reverberate between one's conscious mind and unconscious mind. This can make one experience frightening symptoms, which causes the body to react to fight/flight. Another sign of stress is hyperventilation. This is irregular breathing in which one breathes more quickly than usual. This can result in too much oxygen and too little carbon dioxide, which can alter the acidity in the bloodstream and could cause dizziness, shaking, sweating and tension. Powell gives another sign of stress, and that is obsessive behaviour. This means that one is prone to intrusive, worrying, repetitive and often non-sensational thoughts. He states that in an attempt to neutralise or put right such thoughts, one may develop ritualistic behaviours or compulsions, such as repetitive washing of hands, counting or hoarding (Powell, 2000).

Fears and phobias are among the symptoms of stress. A phobia is an intense fear of an object or situation that is out of all proportion to a situation that evokes it. They are subdivided into three categories, namely, simple phobia. This may be fear of animals or nature, for example, fear of snakes. Social phobia is a manifested abnormal fear of meeting new people,
eating with others, etc. Agoraphobia is a network of fears and avoidance that is associated with a feeling of being trapped, where there is an easy escape to a place of security. Other symptoms of stress include irritability and anger, eating disorder, excessive drinking, sleeping problems, addiction to tranquilisers, chronic fatigue, headaches, low self-esteem, high blood pressure, irritable bowel syndrome, nervousness, social withdrawal, lack of coherent thought process and inhibited sexual desire (Melgosa, 2001).

Stress has two origins. These are internal and external factors. Internal factors include one's personality, temperaments and level of one's self-control. External factors include environment, job, family or studies. Melgosa (2001) states that when the external stress is particularly strong, even the best-equipped people suffer stress. On the other hand, when someone is psychologically fragile, even the weakest stress factors affect them.

Stress in the workplace can have many sources, or it can be from a single source. In addition, stress affects both the employees and the employer equally. As stated by the Canadian health association: fear of job redundancy, lay-offs, economic uncertainties, working overtime etc., act as negative stressors (Tooley, 1996). Employees who are pressured to perform can get caught in a downward spiral of increasing efforts to meet the set targets, though with little or no job motivation. The demand to achieve the set targets by the employees can kill the creativity and motivation of employees. Employee turnover, reduced efficiency, sickness, drugs, negative internal competition, poor decision makings etc., are all by-products of an overstressed workplace. (Borthwick 1996).

Selye (1956) proposed that we react to physical and psychological stress in three stages that he called the general adaptation syndrome; stress does not sneak up on its victim, capturing him or her in an unpredictable surprise attack. Stress passes through the following stages from the time it appears until it reaches its most acute level.

<table>
<thead>
<tr>
<th>Normal level</th>
<th>Alarm</th>
<th>Resistance</th>
<th>Exhaustion of Resistance</th>
</tr>
</thead>
</table>

In the alarm stage, the body recognises that it must fight off some physical or psychological danger. Emotions run high. There is a high level of sensitivity and alertness. The body reacts to a threat in the environment (Mitchell & Larson, 1987). Respiration and heartbeat quicken muscles tense, and other physiological changes occur. These changes help us to mobilise our coping resources in order to regain self-control. If neither of these actions reduces stress, then one moves to the second stage (resistance stage). In this stage, physical symptoms and signs of strain appear as we struggle against increasing psychological disorganisation. Resistance occurs when a stressor is stubborner. This leads to physiological and mental changes (Mitchell & Larson, 1987). In this case, stress extends beyond the initial alarm, and one experiences a loss of energy and lowered production level (Melgosa, 2001).

The final stage of stress is exhaustion. This occurs when the person uses increasingly ineffective defence mechanisms in a desperate attempt to bring the stress under control. This final stage of stress is characterised by fatigue, anxiety and depression, which may occur sequentially or simultaneously. Other people may show signs of burnout such as inability to concentrate, irritability, procrastination and cynical belief that nothing is worthwhile (Morris, 1988). Anger, tension, irritability and nervousness are among the indicators in the phase. At times physical symptoms such as skin or stomach problems occur, and some victims of burnout opt for drugs in an effort to cope with stress. If stress continues, irreparable physical or psychological damage may occur, even death (Morris, 1988).

Mulligan (1998) states that stress can affect one in four different ways that cause physical pain. They include behaviourally by affecting the way one acts, mentally by impairing local thinking, emotionally
creating tension, anxiety and irritability, headaches and stomach upsets. According to Selye (1956), the general adaptation syndrome (GAS) represents the body's defence against stress. According to Selye, the body responds in the same way to any stressor, whether it is external and environmental or it arises from within the body itself. What makes a potential stressor stressful is the individual's reaction to it (Berger, 1988).

The seriousness of stress in one's life depends on how one interprets it. Mitchell and Larson (1987), as quoted in Mumiukha (2003), state that stress clearly causes chemical changes in the brain. Many of these chemicals are related to high blood pressure, coronary heart disease, gastric distress and immunological dysfunction leading to infections, asthma, some cancers and various somatic pain syndromes such as chronic headaches and low back pains. Psychological processes lead to depression, anxiety disorders and schizophrenia. Stress also results in behavioural consequences such as smoking, alcohol and drug abuse and the accident process (Mumiukha, 2003).

Tables 1 and 2 show the consequences of too much stress on cognitive and behavioural areas. Clearly, many changes take place when an individual is stressed. When a person perceives that he or she cannot cope with a situation, the hypothalamus gland sends hormonal messages to the adrenal glands to produce stress hormones that are adrenaline, noradrenalin, and cortical. These cause increased activity of the sympathetic nervous system. This means that the blood pressure, heart, respiration and perspiration rates increase. At the same time, blood vessels and muscles constrict, making an individual feel tense. The release of stress hormones activates the enteric nervous system, which is situated in the stomach, causing, in severe cases, irritable bowel syndrome and colitis (Edworthy 2000).

### Table 1: Consequences of Excessive Stress on the Cognitive Area (thoughts and ideas)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration &amp; attention</td>
<td>Difficulty in concentrating on a demanding activity: frequent loss of attention</td>
</tr>
<tr>
<td>Memory response speed</td>
<td>Short-term and long-term memory problems which need an immediate and spontaneous response are solved in haphazard and unpredictable ways.</td>
</tr>
<tr>
<td>Analysis of present and future situations</td>
<td>The mind is unable to accurately analyse the present situations or project them into the future.</td>
</tr>
<tr>
<td>Logic and organisation of thought processes</td>
<td>Thinking does not follow logical and coherent thought patterns but is disorganised.</td>
</tr>
<tr>
<td>Nervousness hypochondriacal</td>
<td>Difficulty relaxing emotionally and physically, in addition to normal physical illness, new illnesses are suspected.</td>
</tr>
<tr>
<td>Personality traits</td>
<td>Development of impatience, intolerance, authoritarianism and the lack of consideration for others</td>
</tr>
<tr>
<td>Ethics</td>
<td>Ethical and moral principles which govern life relax, and there is less self-control.</td>
</tr>
<tr>
<td>Depression and discouragement</td>
<td>Increased discouragement, decreased desire to live.</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>Thoughts of worthlessness and inferiority</td>
</tr>
</tbody>
</table>

*Source: Melgosa, 2001*

### Table 2: Consequences of Too Much Stress in the behavioural areas (attitudes and behaviours)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Effects</th>
</tr>
</thead>
</table>
| Source: Melgosa, 2001
RESULTS AND FINDINGS

Stress Levels

This section focused on testing objective five, which sought to find out the difference in stress levels of PLWHAS based on gender. To do this, the researcher first examined the overall stress levels by gender and then examined the difference to determine whether the difference was statistically significant. Consequently, the objective was tested by a corresponding null hypothesis: There is no significant difference in stress levels of persons living with HIV/AIDS by gender. The results of the findings are discussed below.

Table 3: Overall Stress Levels of PLWHAS by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Sd</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>58</td>
<td>2.58</td>
<td>0.17</td>
<td>1.97</td>
<td>148</td>
<td>0.05</td>
</tr>
<tr>
<td>Female</td>
<td>92</td>
<td>2.55</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that the mean stress index for male PLWHAS was 2.58 while that of their female counterparts was 2.55. A t-test for equality of means to establish the difference between stress levels based on gender yielded $t = 1.97$ and a P-value of 0.051, which is greater than the $\alpha = 0.05$ level of significance, indicating that there is no statistically significant difference in stress levels by gender. The null hypothesis was not rejected. This meant that no relationship was found between gender and stress levels of PLWHAS attending a support group. The implication is that the gender factor in support group attendance is not responsible for a higher level of stress for PLWHAS. However, in contrast, during the general group discussion, PLWHAS felt that the following activities reduced their stress levels in Mwanyagetinge Community-based care programme:

(i) Support group attendance provides an opportunity to share experiences on learning practical approaches to positive living.

(ii) Being in support groups and listening to others express their problems makes one’s problem seem lighter compared to others.

(iii) The assurance that treatment of opportunistic infection will be provided regardless of the availability of the resource in the programme.

(iv) Working and generating income by the PLWHAS keeps them busy, focusing more on living than dying. Such activities revive their feelings of worthiness.

PLWHAS cared for by Mwanyagetinge Community-Based Care Programme indicated that they appreciated the role played by the support group in...
providing first-hand life-proven coping skills to the older members of the support group. One of the support group members cared for by Mwanyagetinge Community-Based Care Programme said this:

“After a long period of crisis with HIV virus, finally I realised it’s only through negotiation with the HIV virus can I prolong my life. We have now agreed; it lives in my blood but must let me live too. For 18 years, life has been a bearable crisis” (Interview notes 30/10/2010)

This statement ideally shows that a support group helps in reducing stress levels, which will provide the impetus needed to overcome self and social stigma. Nevertheless, reducing stress levels is a complex phenomenon that may require interrelated factors other than gender and support group attendance. According to Maslow’s hierarchy of human needs, stress levels can only be achieved after providing for basic needs like food, security, love and medication to treat opportunistic infections, as a foundation for higher needs in the hierarchy. Mwanyagetinge Community-Based Care Programme is finding it very difficult to adequately provide for all these basic needs considering the majority of PLWHAS are poor.

Table 3 shows that women constituted 60.7% of the sampled population while men were 39.3%. According to Smith and McDonough (2003), in Africa, 13 women are infected for every man. Therefore HIV prevalence is much higher in women than men in Kenya. Consequently, they are mainly the ones who have overcome social discrimination to enable them to identify with a support group at Mwanyagetinge Community-Based Care Programme. Low-income women are under extreme socio-economic pressure to be promiscuous and hence vulnerable to HIV infection. However, PLWHAS in the middle and upper class seem not to come out, indicating that stress levels and social discrimination could be high among them, and they have resources to manage opportunistic infections in a hospital setting. Probably that is why it’s the lower cadre of women who come public with their HIV status. Women are therefore disadvantaged in the negotiation of safe sex strategies and only implement them when male partners cooperate. Upon infection, they provide care to their male partner till death does them apart. When the situation is reversed, men tend to desert their female spouses more often. A summary of the t-test analysis is found in table 5.

Table 4: Stress Levels of PLWHAS Attending Support Group and Those not attending

<table>
<thead>
<tr>
<th>Group Attendance</th>
<th>Low %</th>
<th>Count</th>
<th>Medium %</th>
<th>Count</th>
<th>High %</th>
<th>Count</th>
<th>Total %</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>30.50%</td>
<td>39</td>
<td>47.70%</td>
<td>61</td>
<td>21.90%</td>
<td>28</td>
<td>100.00%</td>
<td>128</td>
</tr>
<tr>
<td>No</td>
<td>40.50%</td>
<td>30</td>
<td>40.50%</td>
<td>30</td>
<td>18.90%</td>
<td>14</td>
<td>100.00%</td>
<td>74</td>
</tr>
<tr>
<td>Total</td>
<td>34.20%</td>
<td>69</td>
<td>45.00%</td>
<td>91</td>
<td>20.80%</td>
<td>42</td>
<td>100.00%</td>
<td>202</td>
</tr>
</tbody>
</table>

The PLWHAS that attended HIV group meetings were 128 as compared to 74 that did not attend. Among those who had a low-stress level, 30.5% attended support groups; with medium stress level, 47.5% attended groups, whereas, of those with high-stress level, 21.9% attended group meetings. On the other hand, among those who did not attend the support group, 40.5% were experiencing low-stress levels, 40.5% medium and 18.9% high-stress levels.

Table 5: T-test Result of Stress Levels between PLWHAS Attending Support and Those not attending

<table>
<thead>
<tr>
<th>Group Attendance</th>
<th>N</th>
<th>Mean</th>
<th>sd</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>128</td>
<td>2.03</td>
<td>1.05</td>
<td>1.48</td>
<td>196</td>
<td>0.14</td>
</tr>
<tr>
<td>No</td>
<td>74</td>
<td>1.79</td>
<td>1.185</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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There is, however, no significant influence of group attendance on the level of stress on the PLHWAS. The t-test for stress levels means differences between those attending the support groups and those who do are not statistically different. It is reinforced by the fact that the stress levels for those attending the support group and those not attending are approximately equal at 78% and 80%, respectively, for low and medium levels of stress. It could thus be concluded that the impact of attending support groups on the stress levels of PLWHAS could best be estimated by monitoring the stress levels before and after attending the said groups.

CONCLUSION AND RECOMMENDATION

Conclusion: A t-test for equality of means to establish the difference between stress levels by gender yielded a two-tailed $\alpha$-level of 0.051, which is not significant at a 0.05 level of significance. The study concluded that there is no difference in stress levels by gender.

Recommendation: Both men and women go through stress; therefore, it is important for them to undergo counselling. This can be done through empowering community-based care programmes. Mass education and campaign using media, barazas and churches should be carried out on the rights and privileges of PLWHAS as a first step to recognise PLWHAS as human beings deserving respect and dignity. This can considerably reduce stress levels and instil a positive perception towards PLWHAS hence encouraging disclosure of people's status and consequently heading to preventive measures.

REFERENCES


Jackson, H. (2002). *AIDS Africa-Continent in Crisis*. Published by Sat AIDS.


