

Ascertain the Extent to Which Mentoring Mediates between Psychological Capital and Behaviour Change Based on an Individual's HIV Status: A Case of Kisii County, Kenya

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Abstract Unlike most counties in Kenya, HIV Prevalence rate in Kisii County is increasing rather than either stabilizing or declining. This present study therefore, investigated to ascertain the extent to which mentoring mediates between psychological capital and behaviour change based on an individual's HIV status To address the research problem, the study adopted a descriptive survey design that employed three research instruments: a questionnaire, an interview schedule and a focus group discussion schedule used to collect data. The study was conducted in Kisii central sub-county of Kisii County between June and August 2016. To achieve the objectives of the study, triangulation of data sources was employed by recruiting 366 participants from the population using simple stratified sampling strategies,. Both qualitative and inferential statistics were employed in analysing data by the help of the statistical package for social sciences. The study found that majority of the participants preferred employing professional counsellors and peer mentors for better life outcomes.

Keywords: *psychological capital, behaviour change, HIV*

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1. Background

For nearly 40 years now, more than 78 million people have contracted HIV/AIDS; about half (35 million), of whom have died of AIDS related illnesses. In addition, the pandemic has orphaned approximately 17 million children having lost one or both parents and, currently about 3.4 million children aged 15 years and below are living with the virus [1]. What is more, the pandemic has resulted in an alarming dependence burden especially considering that those who are dying constitute the most active segment of the population.

It is perhaps from such a context that UNAIDS [2] argues that the HIV/AIDS problem should not be viewed merely as a health issue, but it should be seen as a developmental issue also. For that reason, governments globally have continued to commit huge sums of money for research in the hope of developing a cure. However, notwithstanding the various inquiries made; no success has yet been achieved because of the exceptional capability of the virus mutating continually. In the meantime, the available medicines have shown potency in containing the disease's progression if the drugs' regime is followed to religiously. The remaining issues are availability and affordability.

A survey by NACC, estimated that as of 2013, there were 1.6 million Kenyans infected with HIV. This saw Kenya climb to position four globally – a position that it shared with Mozambique and Uganda. The survey further found that in the same year, an estimated 58,000 deaths occurred out of AIDS related illnesses and the number of children orphaned by the pandemic currently stands at 1.1 million (NACC, 2014). This prompted the government to make a huge budgetary allocation to not only help curb the spread of HIV/AIDS by treating the infected, but also to provide support to the vulnerable groups. Therefore, these government actions have increased demand bringing pressure to bear on both the economy and the healthcare system.

After implementing numerous behavioural interventions, finally, the prevalence rates generally seem to be declining. Yet, the decline is not uniform; it displays regional disparities. For example, estimates by the WHO indicate that 36.7 million people globally were infected with HIV, out of whom, about 22.5 million (61.3%) were living in the SSA region with Kenya being home to 1.6 million (4.4%) people [3]. Despite the generally falling HIV rates; in Kenya some counties such as Kisii, depict an increasing prevalence [4]. To worsen an already bad situation, many PLWHA continue exposing themselves to higher risk due to neglecting the seeking of medical assistance, thus, denying themselves a chance of knowing their HIV status

or learning ways of lowering their HIV and STI (sexually transmitted infections) risk. As a result, there is need to review the existing interventional strategies to suggest changes or formulate new ones which can be easily adopted by majority of the PLWHA for sustained behaviour change.

Currently, there are more options for reducing the risk of contracting or transmitting HIV than have ever existed. There are those that employ medications to treat HIV as well as those that aim at preventing transmission such as using condoms, having only low-risk sex, having sex with same HIV status partners only, and abstaining from any sexual activity. Despite all these methods being effective in reducing risk, some options are admittedly more effective than others. Combining prevention strategies can be even more potent. But, in order for any option to work well, it must be used correctly and consistently.

What is more, most of these interventions target change at an individual level and are designed to tackle specific factors known to influence one into adopting unsafe sexual behaviours such as trading sex, engaging in sex with many partners, sharing a husband, having sex while drunk or intoxicated with drugs, and to a lesser extent, promiscuity and unfaithfulness. Seemingly, the aim of some strategies is to address dynamics in relationships among groups. Whereas some include, sexual partnerships in terms of numbers and prevention methodologies, others incorporate community mobilization events [5].

Social networks are a key factor in conducting studies on sexual partnerships in HIV settings [6]. Some of the social network approaches that have been successful in controlling STI epidemics include partner notification and cluster investigations (centre for Disease control & Prevention [CDC], 2008; [7]). For example, a study targeting African American women in relation to risky sexual behaviours was conducted in the USA. The study found large networks in terms of number of members, offer greater opportunity for socialisation among members. But, unfortunately, it also increases the chances of having multiple sexual partners especially where network members offer each other financial support [8]. In addition, having more network members who are addicted to drugs was associated with a majority embracing both unsafe sex and multiple sexual partners, despite adjusting for differences in individual drug use. This study sought to examine interventions that target many individuals concurrently rather than those that target individuals.

Mentoring is perhaps the most known intervention which employs similar principles and has been successfully employed with at risk population groups that include PWIDs, adolescents, and MSM [9]. Interestingly, in developing countries, mentoring interventions implemented among married women and female sex workers (FSWs) were found to be effective in increasing HIV/STI knowledge and promoting safe sex behaviours [9,10,11]. In this context, mentoring is the act of teaching, giving help or advice to someone less experienced and often younger. It involves a process, an active relationship, a type of helping, a teaching-learning experience and reflective practices [12,13]. Such support normally takes place between the peer mentor (i.e., a person who has lived through a specific experience) and the mentee (i.e., a person who is new to that experience).

Now, considering that the role of peer mentors is to provide information, education, recreation and support opportunities to mentees; it therefore follows that the peer mentor has a responsibility to confront the mentee with novel ideas, and at the same time persuade him or her to abandon their comfort zone because tarrying in those conditions increases vulnerability to many health issues [14]. Having had the necessary social skills, the reliability and the confidence; do they have any excuse for not moving to a safer zone?

Many of the HIV/AIDS risk factors including drug abuse and unsafe sexual practices are often initiated at the adolescent stage. Therefore, targeting preventive interventions towards adolescence presents a window of opportunity to reduce the future burden of HIV/AIDS and allow time to maximise the future health impact. However, which interventional strategy is the most effective? Studies evaluating community based interventional strategies have reported mixed findings. For example, some studies report mentoring interventions as being effective [15], some report mixed findings [16] while others report the method to be ineffective. For this reason, the aim of the present study was to provide more insight into the effectiveness of the mentoring interventional strategy.

Besides, the present study sought to explore the role mentoring plays in mediating between psychological capital and behaviour change among persons infected with HIV. An individual can draw on positive psychological resources characterised by efficacy, optimism, hope and resilience in the fight against the HIV epidemic. Whereas, self-efficacy is a positive strength in which an individual believes in their own abilities to succeed at demanding tasks [17,18]; hope reflects both the will and means (pathways) for achieving success. Hope motivates one to persevere through the journey to the desired goal. On the other hand, resilience is a positive capacity that deals with bouncing back to attain success, from problems, adversity and even beyond failure. Lastly, optimism in here employed in reference to a positive explanatory style regarding both self-attribution and expectation; not only about succeeding now; but also in the future [19].

Evidence accumulated from several studies point to increasing consensus among researchers that Psychological capital is critical in improving not only the subjective wellbeing for employee; but also, job performance and satisfaction in workplaces. In addition, psychological capital can be positively employed in fighting stress, depression, and burnout among employees [20,21,22]. Moreover, there is further evidence which shows that psychological capital plays a critical role in intervening between conducive organizational climate and work performance [21,23]. Hence it seems plausible to postulate that psychological capital can be used as a resource for the general population to decide how to restructure their life styles to suit their sero status.

Bandura [17] identifies four broadly accepted sources of efficacy development: (1) successfully completing a tough task; (2) learning vicariously by observing others accomplish a task (i.e., modelling); (3) being persuaded by a respected and /or significant other; and, (4) peer leaders providing caring emotional support and appreciation. Generally, people develop confidence in their abilities to perform a task if they have done it before. Mastering a

task is the basis for increasing personal efficacy over that specific task. Also, if someone is extremely good at a given task, those watching are filled with awe and admiration. They get motivated to attempt the same feat. This increases their personal efficacy. However, the success of such modelling is dependent on whether individuals see themselves as being similar with respect to the part played by the successful model. Thus efficacy development is enhanced the more similar or relevant the role models are seen to be.

Further, if a respected leader, say a teacher, tells a student that he believes the student can pass the exam; this enables the student to develop confidence and views passing of the exam as something doable. In other words, the success in developing efficacy using this approach depends on the extent to which the persuader commands respect with the addressee. Finally, efficacy can be developed through support in failure or in success so that the individual sees that he or she is not alone. The aim is twofold: to prevent reckless behaviour and to help underscore the significant influence that efficacy has on an individual's decision making.

Research evidence affirms that peer support can be an extremely helpful approach in mentoring individuals to abandon bad behaviour. It allows people to feel not only less isolated and lonely but also more knowledgeable, confident and happy [24]. This approach has a way of encouraging people to be responsible in taking more care of their own health which, in the long run brings about improved health outcomes such as better regulated blood pressure, controlled blood sugar, or decreased anxiety. However, what is lacking is the empirical evidence to support enjoyment of such benefits plus the cost effectiveness of the approach.

Further, in his study, Nesta [24] concluded that various benefits accrue from employing different types of peer support approaches. Among the peer approaches, the most promising types appears to be: (i) face-to-face emotional support for groups that are run by trained peers; (ii) a one-on-one support for groups which offer a face-to-face or telephone interaction specialising in sharing experiences, practical activities or education; (iii) online type forums that aim at improving knowledge and anxiety; and, (iv) groups that offer regular support such as weekly, monthly, quarterly or half yearly.

Whereas research has brought to the fore promising types of peer support approaches, yet, there is much left to learn about these types of groups. Some of the issues that need to be concluded include why certain peer support approaches are more successful than others and what might promote participation in peer support groups. What seems to make peer support difficult is that they require organisation and that may imply costs. Although hardly any research has explored the cost-effectiveness of this approach, the present study does not intend to deal with this knowledge gap.

2. Methodology

The present study utilised a mixture of both qualitative and quantitative paradigms to study the research problem. This is because whereas some variables under investigation

were amenable to manipulation, others were not. Among the many reasons why this present study adopted a descriptive survey design, the compelling ones were: their capability for being highly representative (i.e., capable of representing a large population); presenting a more cost effective and convenient way of collecting data, in a comparatively short time from a large population of participants; and finally, they encourage truthfulness due to respondents providing answers anonymously. This encourages respondents to discuss sensitive personal data without feeling the risk of being identified [25]. In addition, they normally yield good statistical significance.

This present study was conducted in Kisii County which lies to the South Western part of Kenya. Kisii County is located between 0 30' and 1 0' South latitudes and 34 38' and 35 0' East longitudes. A number of factors contributed to Kisii County being selected as the area to conduct the study. Among them, the main ones include: (i) the concern over the findings of a recent study which shows that HIV prevalence rate in Kisii county were increasing while the rates in other counties were either stabilizing or declining [26]; (ii) the observation that the magnitude of new infections in the county was higher than the average in the country [26]; (iii) the researcher's interest in finding a solution to the HIV burden in Kisii county having been born and brought up in county; (iv) the fact that the researcher is able to quickly develop rapport with study respondents being a member of the community ([27], p.151); (v) lastly, the researcher has a vast knowledge of both the study area and culture helping to contextualise the respondents' responses [28].

The 2009 Population and Housing Census put the population of Kisii County at approximately 1,152,282 persons today of whom, 550,464 are males and 601,818 females (KNBS, 2010). Considering that the county has an estimated growth rate of 2.1%, it then follows that by now (2017), the population for Kisii County is projected to have reached 1,362,779 with 650,982(47.8%) males and 711,797(52.2%) females. Of all the sub-counties, Kisii central is both the most populous and a commercial hub for conducting businesses. The sub-county has a population of 55,988 persons aged over 18 years.

To determine the size of the sample, the present study employed a formula proposed by Frankfort-Nachmias and Leon-Guerrero [29]. The formula is given as follows: -

$$\text{Sample size} = \left[(z\text{-score})^2 \times p(1-p) \right] \div (\text{margin of error})^2$$

Where

Z-score: refers to the number of standard deviations a data point is away from the mean. Alternatively, it may refer to the number of standard deviations a raw score is below or above the population mean.

P: the estimate of what the proportion is likely to be.

The z-score, also called the z value or standard score, can be easily found in the statistical tables and the value is dependent on the chosen confidence interval. The most commonly used confidence interval values are 90%, 95% and 99%. For this study a confidence level of 95% was chosen which is normally acceptable in social science studies. More often than not, P is estimated from previous research, but, if no studies are available, then 0.5 can be used.

For this present study, the Z-score values were obtained from the tables, the Z-score value was 1.96; while 0.5 was used for both *p* and the margin of error. By substituting these values into the formula, the sample size was determined as 384, i.e.,

$$\begin{aligned} \text{Sample size} &= \left[(1.96)^2 \times 0.5 (1-0.5) \right] / (0.5)^2 \\ &= 3.8416 \times 0.0025 / 0.0025 \\ &= 384. \end{aligned}$$

The study further attempted to understand the mediating role of mentoring on an individual’s psychological capital to bring about behaviour change. Since HIV is majorly spread through sexual contact, it therefore follows that due to lack of a cure, abstinence from sexually risky behaviours may be the only main way to win the war against the pandemic. To do so, one needs to summon all their psychological energies to assist in behaviour change.

The scores ascribed to each response were extracted from the questionnaire and entered into the Statistical Package for Social Sciences (SPSS), version 20.0. Then, the study performed a cleansing procedure in which data were inspected to identify incomplete, incorrect, inaccurate, irrelevant data or outliers, mis-posting and other errors introduced when entering data into the SPSS programme.

3. Findings

Although, the present study recruited participants from the general population living in Kisii County – the area of study; care was taken to select individuals engaged in highly vulnerable occupations such as the Boda bodas, bars attendants, CSWs and long distant drivers. Primarily, the study targeted individuals aged 18 years and above. This age cut-off requirement was necessary to avoid seeking consent from participants’ parents or guardians. Plus, the study recruited key informants from groups that are disproportionately affected by HIV. The study settled on CSWs. Lastly, Professionals or medical personnel in charge of the HIV programme or treating HIV patients were recruited too.

The extent to which mentoring mediates between an individual’s psychological capital and behaviour change was the third issue that the study sought to investigate. In other words the question of interest was to find out the role mentoring plays in mediating ones psychological capital towards behaviour change in the context of HIV. To answer this question, the study analysed items that were used to probe psychological capital and correlated their scores with those obtained from analysing mentoring.

In this study, psychological capital is made up of hope, self-efficacy, resiliency and optimism. These constructs represent resources that an individual can summon to assist surmount serious life challenges. Further, this present study employed both mentors and mentees. On the one hand, the term ‘mentor’ refers to someone having accepted his or her positive HIV status and has come out publicly about it. This brings out the notion of a peer. On the other hand, the term ‘mentee’ refers to someone who has recently tested positive of HIV and is in their early

stages of care and treatment. For instance, the mentor would be of much help having undergone through a similar experience and understands the problem the mentee is still struggling to come to terms with. The mentors that the study inquired into their role were professional counsellors, peer educators and physicians.

Results from the analysis showed that 268 (73.2%) participants indicated their preference for mentors. Of that number, 118 (44%) preferred professional counsellors while 111 (41.4%) preferred peer educators. The preference was nearly on an equal basis except for a two-percentage point difference in favour of professional counsellors. Fewer participants 39 (14.6%) preferred to be mentored by physicians. The study attributes the reasons for this preference to the perception that, on their part, professional counsellors inspire hope to the dejected as a result of the HIV infection. As for peer educators, they are likely to offer positive motivation on how to develop resiliency despite testing positive or how to continue staying negative, if ones has not already tested positive. Also, many do not trust physicians due to confidentiality breaches. Table 1 shows the preference of the kind of mentor for participants. Participants ranged between 100 and 115.

Table 1. Mentor Preference

Mentor	Description	HIV - +ve	HIV - -ve	Total
Counsellor	Number	31	84	115
	% within Mentor	27.0	73.0	100.0
	% within HIV status	44.9	43.3	43.7
Physician	Number	8	31	39
	% within Mentor	20.5	79.5	100.0
	% within HIV status	11.6	16.0	14.8
Peer educator	Number	30	79	109
	% within Mentor	27.5	72.5	100.0
	% within HIV status	43.5	40.7	41.4

Table 1 shows that majority of the HIV positive participants (31 or 44.9%) preferred professional counsellors compared with peer educators (30 or 43.5%) and Physicians (8 or 11.6%). A trend like what was observed with HIV positive participants was repeated with HIV negative participants. A total of 84 (43.3%) HIV negative participants preferred professional counsellors, while 79 (40.7%) preferred peer educators, and 31 (16%) preferred Physicians.

4. Conclusions

Mentoring aims at promoting positive outcomes for wellbeing. As a result, this present study found majority (over 70%) of the participants employing mentors to mediate their life experiences for better outcomes. Out of the participants employing mentors, the study found about 45% to prefer professional counsellors, about 43% peer educators and 12% Physicians. A similar trend was observed among the uninfected persons: .43% professional counsellors, 41% peer educators and 16% Physicians. This is because whereas professional counsellors inspire hope to those rejected and discriminated against, peer educators offer positive motivation for developing resiliency despite testing positive or how to continue staying negative, if one has not already tested positive.

Further, evidence from the study indicates that mentoring is an important and effective approach that can be employed in the prevention, care and treatment of HIV. Unlike other approaches, mentoring targets the community instead of the individual.

5. Recommendations

Although, it is challenging to tackle economic factors such as poverty, educational attainment and unemployment; but, it is not completely insurmountable, if the county lays out a well targeted long term plan and apply sustained effort.

Despite the fact that levels of AIDS awareness being high across the county, getting people to change their behaviours is difficult due to socio-economic and cultural barriers impeding adoption of health seeking behaviours.

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