



Effects of Perceived Stigma on Psychological Wellness and Interpersonal Relationships among Adolescents Living with HIV/AIDS in Ruiru, Kiambu County, Kenya

Gutu W. Brenda, * Ndurumo M. Michael and Kariuki W. Priscilla

Department of Psychology, University of Nairobi

*Corresponding author Email: ndurumo@hotmail.com

ABSTRACT

Approximately 2.1 million adolescents in the world are HIV positive with 15% of the HIV-infected females are considered to be young women aged 15 to 24 years. Eighty per cent of them live in sub-Saharan Africa which makes the most predominant place for female between 15 to 19 (UNAIDS, 2014). The UNAIDS Gap Report states that there is a gap in the provision of psychological services addressing stigma among other reproductive health needs among adolescent girls as they prepare for adulthood (UNAIDS, 2014). The study sought to determine the effects of Perceived Stigma towards HIV/AIDS on psychological wellness among adolescents living with HIV/AIDS in Ruiru Sub-County, Kiambu County, Kenya. The study used a quantitative research design using the survey method of data collection. Three questionnaires were adopted to assess the three variables. Study participants were recruited from among adolescents in long-term follow-up in the five HIV Comprehensive Care Centres in Ruiru Sub-County, Kiambu County, Kenya. Purposive sampling was used to select a sample of 75 adolescents between 12-19 years. Regression analysis results revealed perceived stigma to be a significant predictor of psychological wellness, $t = -3.293$, $p = 0.020$.

Keywords: Perceived Stigma, Psychological Wellness, HIV/AIDS Affected Adolescents

INTRODUCTION

Stigma due to HIV/AIDS is an increasing concern globally. Furthermore, self-stigmatization is a major contribution to HIV/AIDS positive people's low self-esteem and feeling socially unfit. According to UNAIDS (2014), there are 2.1 million HIV infected adolescents and approximately 380,000 new HIV infections annually among the 10-24 years old female. Globally, 15% of female infected with HIV/AIDS are aged between 15 and 24 years. Among this population, 80% of them are in the sub-Sahara Africa where females are infected with HIV approximately five to seven years before the males (UNAIDS, 2014).

Among the 18 counties in Kenya with high prevalence, Kiambu County is considered to contribute 3% of all the HIV positive people in Kenya, with female between 15–24 years representing 21% of new HIV diseases (Kiambu County HIV and AIDS Strategic Plan, 2014). Stigma shields people from seeking assistance that can enhance their wellbeing. Jones, Farina, Hastorf, Markus, Miller, and Scott (1985) stated that because of stigma individuals find it difficult to manage the existence of HIV/AIDS leading to grave outcomes such as diminished fitness. Link, Yang, Phelan, and Collins (1989) observed that individuals living with HIV/AIDS have difficulty in confronting disgrace leading to self-disapproval as valuable persons.

Link, Cullen, Struening, Shrout and Dohrenwend (1989) stated that with time, individuals start to believe they are tainted with marks and labelled with terms such as 'rationally sick', 'medication addicts', and 'HIV sick'. People tend to perceive themselves in relation to how



the public treats people with HIV/AIDS. In this respect, stigmatized individuals become affected by generalizations accorded them as least useful. This causes affected individuals to disguise the 'stigmatizing marks'. (Scheff, 1966). Scientists state that stigmatizing issues including HIV/AIDS have a relationship with abnormal amounts of apparent stigma. Fife & Wright (2000) stated that the stigmatization of HIV/AIDS radiates from a philosophy which puts blame on the affected persons. Siegel & Krauss (1991) agree with Goffman's (1963) labels of stigmatization marks ascribed to affected persons such as physical defect, character blemishes, and enrollment in a poorly respected social class. Mahajan, Sayles, Patel, Remien, Sawires, Ortiz, Szekeres and Coates (2008) state that in HIV/AIDS literature, HIV/AIDS stigma is alluded to as "a characteristic of disfavor" (In Kenya, UNAIDS Report (2014) states that stigma influences the perception of People Living with HIV (PLHIV) who tend to be viewed in the lens of sex commercial workers, drug addicts, and homosexuality. Although the number of people showing tolerance towards PLHIV has been expanding, it remains low because of how society reacts to HIV as a disease rather than as a condition which is becoming manageable with medication. Self-stigmatization affects persons considerably from seeking medical services. Considering that self-stigmatization towards HIV is higher among men. For instance, the level of men communicating a tolerating state of mind to PLHIV expanded from 27% in 2003 to 33% in 2009 while that of women went up from 39.4% in 2003 to 47% in 2009 (UNAIDS, 2014). In other words, more women talk about their HIV/AIDS status compared to men.

ICRW (2005) stated that loss of respect, hope, income, marriage, and childbearing choices, feeling uselessness of hopelessness, withdrawal, and inability to provide for self are generally outcomes associated with HIV-stigma.

Statement of the Problem

The Kiambu County Health Sector Strategic and Investment Plan (KHSSIP) 2014 – 2019 state that HIV/AIDS is the main sources of ill health and death rate in the county. As per "Stigma Index" (2016), the Kenya AIDS Indicators Survey (2007) found that women had a higher rate of HIV infection of 8.4 % compared to men at 5.4 %. On the other hand, KDHS (2008-09) noted that women had a rate of 8% compared to 4.3% for men. Sexual orientation differential is widely found among young women between 15 to 24 years who have a tendency of having HIV predominance four times higher compared to men of a similar age. For instance, KAIS (2007) found that this was 5.6% for women and 1.4% for men. KDHS (2008-09) put it at 4.5% for women and 1.1% for men. KAIS (2012) state that young women between the age of 15-24 years are viewed as defenseless in the matrix of HIV transmission. Young women also contribute up to 21% of every single new disease found among key populaces such as dissonant couples and individuals living with HIV irrespective of educational level and geographic locations. Stigma and the fear of stigma prevent individuals from knowing their HIV status, uncovering their HIV status, looking for care and treatment (Global, 2017).

Purpose of Study

The purpose of the study was to determine the effects of perceived stigma on the psychological wellness and interpersonal relationships of adolescents living with HIV/AIDS in Ruiru Sub-county, Kiambu County.



Hypotheses

1. There is no significant effect of perceived stigma towards HIV on psychological wellness among adolescents living with HIV/AIDS.
2. There is no significant effect of perceived stigma towards HIV on interpersonal relationships among adolescents living with HIV/AIDS
3. There is no significant relationship between psychological wellness and interpersonal relationships among adolescents living with HIV/AIDS

Justification of the Study

Berger, Ferrans & Lashley (2001) noted that few investigations have been conducted on stigma and HIV/AIDS with a view on open stigma and disguised stigma. Furthermore, perceived stigma has not been satisfactorily characterized and investigated, most times found as influencing adherence to prescription regimens and HIV risk conduct; and on the dread of stigma and how it influences medicate adherence among teenagers and adults (Odhiambo, 2013). Despite the fact that several studies (Kamau, 2012; Colombini, Mutemwa, Kivunaga, Stackpool Moore and Mayhew, 2014) have been conducted in the field of stigma in Kenya, perceived stigma remains a genuinely disregarded issue due to an absence of settled upon estimation instruments to measure the degree and effect of the stigma. There have been challenges in isolating stigma from discrimination and measuring the viability of stigma-diminishment endeavours.

Bunn et al. (2007) found that stigma related to HIV/AIDS adversely affects the lives and conduct of individuals living with HIV/AIDS. This hence requires a closer examination of the effect that stigma has particularly on young people, who are more defenceless against mental issues and interpersonal relationship challenges. Puberty is the period of life changes between adolescence and adulthood which envelops components of natural development and real social changes (Sawyer, Azzopardi, Wickremarathne and Patton, 2018). It is the time for identity development and urges of being involved with individuals of the opposite sex that could or could not possibly lead to marriage. This age has not been comprehensively investigated, concerning the impacts of HIV related stigma particularly to their emotional well-being status and furthermore to the associations with their companions and other individuals in the general public. The study believes there is need to delve into the psychological and interpersonal challenges that adolescents face when living with HIV/AIDS regarding how they perceive stigma from their significant others and community as a whole.

Significance of the Study

It is anticipated that the findings of the study will fill the existing gap in literature on the prevalence of stigma among adolescents aged 12-19 years in Ruiru, Kenya. Hopefully this will assist future researchers understand perceived stigma among other forms of stigma, to better classify forms of stigma and a guide in refining measurement tools to quantify the extent and impact of the stigma. It is hoped that knowledge emanating from this study will benefit doctors, counsellors and psychologists and other health workers who work closely with the HIV infected adolescents to understand them better in terms of effects on their social life on their adherence to medication and how to mitigate the influence of stigma on disease progression. Additionally, the findings from this study will help inform health and social policy and advice on intervention and management programmes aimed at promoting stigma reduction and healthy psychosocial adjustment in HIV positive adolescents.



Scope and Delimitations

The study included adolescents between ages of 12 to 19 years who have had their HIV status disclosed to them. This is to avoid accidental disclosure and hence social harm. Adolescents in day and boarding schools were used in the study. Those who had transferred to these specific CCCs from other hospitals, as well as those who shall have reached the age of 12 by the time of data collection were also included in the study, thus increasing the sample size. The study excluded adolescents whose mental capability was limited. It also excluded those who were too unwell to be reasonably consulted.

Theoretical Framework

The study used the theory of social stigma by Erving Goffman (1963). Goffman argued that individuals assume their contrasts are recognized and clear. Goffman claims that there are flaws of individual character where characteristics are gathered from a record of having a psychological issue, habit, homosexuality, and for this situation being HIV infected. An individual can neglect to satisfy what others request of him but be generally immaculate by his disappointment, protected by his estrangement, and ensured by personality convictions of his own. He may feel that he is an undeniable level-headed person and that others are the ones who are not by any stretch of the imagination human. An individual endures a disgrace, however, does not appear to be awed or humbled by it.

A disgraced person seems to have similar convictions which other people have towards them. An individual may perceive that whatever other people profess, they do not acknowledge him and are not ready to interact with him on the same level. Additionally, the principles he adopted from the community enabled him to be completely careful of how individuals consider as his weakness; definitely making the individual agree that he doesn't make the grade regarding what he should be. Disgrace turns into a focal probability emerging from the person's view of one of his own characteristics similar to a debasing thing to have, and one he can promptly consider himself to be not having.

Individuals learn and incorporate the standing point of the 'normal' people through the socialization process, hence acquiring the personality convictions of the extensive society and general thought of what it resembles to have a specific disgrace. There are designs in the socialization procedure: one includes people with an inherent disgrace, who wind up associated into their unfavourable circumstance while learning and consolidating the benchmarks against which they miss the mark (Lindesmith and Strauss, 1956).

Another arrangement is at the limit of a family or nearby neighbourhood to constitute itself a defensive manner for its young. A naturally vilified kid can be precisely maintained utilizing info regulation. Self-belittling depictions of him are ceased from infiltrating the enchanted circle. Wide section is given to different impressions held in the more extensive network that guides the secured kid to see themselves as a completely common person of normal personality. The third example of socialization is the point at which one ends up labelled at an older age or realizes at an older age that he has been shameful. Such individuals have found out about the 'ordinary' and the demonized, well before they should consider themselves to be insufficient. These individuals may have an exceptional issue in reclassifying themselves, and a unique probability of creating dissatisfaction with self.



METHODOLOGY

The study used the survey method where data was collected through the questionnaire.

Research Design

The study used a cross-sectional research design. Cross-sectional designs concentrate on analyzing and drawing conclusions from differences existing between phenomena, subjects or people. It is centered on finding associations between variables at one moment in time (USC Libraries, 2016).

Study Area

The study was conducted in five hospitals in Ruiru Sub-County, Kiambu County. The hospitals have Comprehensive Care Centres for HIV. The hospitals were Ruiru Sub-County Level Four Hospital and Nazareth Private Hospital based in Ruiru Town, Githurai-Lang'ata Health Centre in Githurai 45. St. Joseph Medical Centre is private and located in Kahawa Wendani along Thika Super-Highway. Githunguri Health Centre is located in Githunguri near Kenya Prison in Ruiru. Kiambu County is situated in the Central Highlands of Kenya, previously Central Province. In addition, it is located near Nairobi, the capital of Kenya. Ruiru Sub-County was preferred because of its proximity to Nairobi City County which has 6.8% HIV prevalence (ranked 8th nationally). Additionally, Ruiru Sub-County falls under the category of counties with high incidence and has influence over Ruiru. Furthermore, Ruiru town is considered one of the fastest growing towns as a result of its locality which is along the Thika superhighway and between Juja and Kenyatta University (Kenya Information Guide Website, 2018),

Target Population

The target population was adolescents living with HIV in Ruiru Sub-County found in five hospitals with Comprehensive Care Centres in Ruiru Sub-County.

Sample and Sampling Procedure

The sample of the study was 75 adolescents between 12-19 years living with HIV enrolled in the CCCs registers. Purposive sampling was used to identify hospitals with CCCs and the respondents. To ensure that the sample did not reduce, the study used social mobilization with the help of the peer mentors attached to each CCC. A peer mentor is an adolescent living with HIV and who lives positively and has gone public and is a long-term survivor who follows treatment responsibly.

Research Instruments

Likert structured Perceived Stigma Scale and the Experiences in Close Relationships-Revised Questionnaire were used to collect data. The instrument had two sections. The first section collected demographic information. Section B had three parts measuring perceived stigma, psychological wellbeing, and interpersonal relationships. The Perceived Stigma Scale (PSS) is referred to as a 10 item questionnaire which is employed in assessing of perceived stigma construct. The PSS was modified for use from a measure of perceived stigma utilized in mental health patients and then was used with participants living with HIV/AIDS (Link, 1997). The term "mental health patient" got interchanged with individuals living with HIV/AIDS, and items were scored on a seven-point Likert-type scale numbered 1–7 with 7= "Very Strongly Disagree", 6= "Strongly Disagree", 5= "Disagree", 4= "Neutral", 3= "Agree", 2= "Strongly Agree", and 1= "Very Strongly Agree". The scoring is done by



summing the items and followed by dividing by 12. Consequently, higher scores demonstrate more perceived stigma. According to Link (1997), the original mental health measure depicted adequate reliability (alphas = .73-.82). This scale was used by (Luoma et al., 2007) in their study on stigma involving individuals being treated for substance abuse and the instrument obtained coefficient alpha= .89.

Dupoy's scale that was originally referred to as the General Well-Being Schedule, and was revised into Psychological General Well-Being Index (PGWBI), has been extensively employed as such in various medical specialties as well as in various countries. The scale is comprised of 22 polytomous items and a high score indicates high levels of psychological well-being. Six emotional states are evaluated within subscales: vitality, general health, self-control, positive well-being, depressed mood, and anxiety. On the other hand, a reliability index (Person Separation Index – PSI) is also reported. The PGWBI was evaluated with Rasch- and factor analysis by Lundgren-Nilsson, Jonsdottir, Ahlborg, & Tennant, (2013). They registered that where data are usually dispersed this can be demonstrated as alike to Cronbach's alpha, and therefore the value of 0.7 is an indicative of reliability sufficient for a group use while 0.85 is an indicative of reliability sufficient for individual use. The Experiences in Close Relationships-Revised (ECR-R) questionnaire by Fraley, Waller, and Brennan (2000), is a revised version of Brennan, Clark, and Shaver's (1998) Experiences in Close Relationships (ECR) questionnaire. Both the ECR and the ECR-R are outlined to evaluate individual differences in respect to attachment-related anxiety (i.e., the degree to which individuals are uncomfortable when they are close to others versus secure depending on others).

The first 18 items are considered to comprise the attachment-related anxiety scale. Items 17 to 34 contain the attachment-related avoidance measure. Rating of each item is done on a 7-point scale where 1= Very Strong Agree and 7 = Very Strong Disagree. To get a score for attachment-related anxiety, please average a person's responses to items 1 – 16. However, because items 7 and 9 are "reverse keyed" (i.e., high numbers represent low anxiety rather than high stress), you'll need to reverse the answers to those questions before averaging the responses. (If somebody answers with a "6" to item 9, you'll need to re-key it as a two before equating.) To get a score for attachment-related avoidance, please average an individual's responses to items 17 – 34. Items 18,20, 24, 25, 26, 27, 28,29, 31, 32, 33, and 34 will need to be reverse-keyed before one calculates this aggregate. In this study, we have modified the items to refer to "others" rather than "romantic partners." A high score in this scale is indicative of low attachment-related avoidance and anxiety.

Data Analysis

Analysis of the data that was collected through the questionnaires was achieved through the Statistical Package for Social Scientists (SPSS). The independent and dependent variables in this study are qualitative, and they employ the ordinal scale of measurement in the form of Likert scale. The use of Spearman-Rho statistic measured the hypotheses comparing the relationship between the independent and dependent variables. Correlations (r) was employed in measuring of the strength of affiliation between two variables and ranges between -1 which is considered to be a perfect negative correlation to 1 which is considered to be a perfect positive correlation. Cohen (1992) outlined the elucidation of the absolute value of the correlation: -1.0 to -0.9 or 0.9 to 1.0 is very strong, -0.9 to -0.5 or 0.5 to 0.9 is strong, -0.5 to -0.3 or 0.3 to 0.5 is moderate, and -0.3 to +0.3 is weak. Data were represented using a scatter plot. The regression analysis test produces three important results that



assisted in checking the relationships. That is a model summary, Analysis of Variance (ANOVA) and model coefficients.

RESULTS

Effects of Perceived Stigma on Psychological Wellness of Adolescents with HIV/AIDS

The first hypothesis stated that there is no significant effect of perceived stigma towards HIV on psychological wellness among adolescents living with HIV/AIDS. Table 1 shows that perceived stigma and psychological wellness have a correlation of -0.255 . The figure confirms that the affiliation between perceived stigma and psychological wellness is indeed negative.

Table 1: Correlation between Perceived Stigma and Psychological Wellness

	Perceived Stigma	Psychological Wellness
Perceived Stigma	1	-.255
Psychological Wellness	-.255	1

The figure below shows a pictorial view of the correlation between perceived stigma and psychological wellness. From the figure, it is evident that the two variables have a negative correlation. That is, psychological wellness reduces and perceived stigma increases.

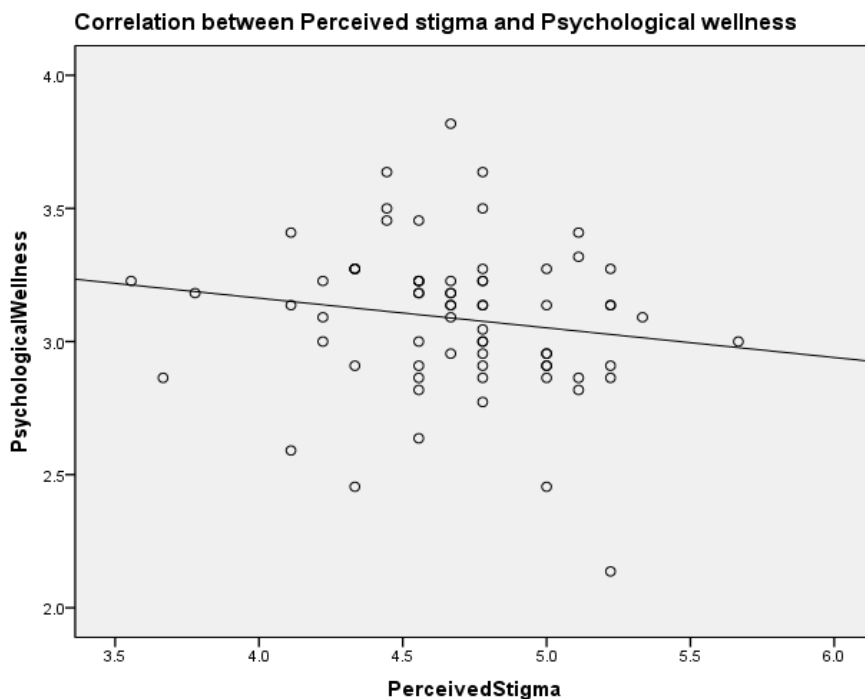


Figure 1: Correlation between Perceived Stigma and Psychological Wellness

The results in table 2 revealed that perceived stigma explains 9.4% of the total variation in psychological wellness ($r^2 = 0.094$).



Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	-.255 ^a	.094	.010	.279

a. Predictors: (Constant), Perceived Stigma

Regression analysis was carried out with perceived stigma as the independent variable and psychological wellness as the dependent variable. The results in table 3 below indicated the model was statistically significant in assessing the relationship between perceived stigma and psychological wellness among adults living with HIV/AIDS, $F = 4.672$, $p = 0.02$ (The p-value is less than 0.05). Table 4 checks on the impact of perceived stigma on psychological wellness among adults living with HIV/AIDS.

Table 3: Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.364	1	.364	4.672	.020
Residual	5.304	68	.078		
Total	5.435	69			

a. Predictors: (Constant), Perceived Stigma

b. Dependent Variable: Psychological Wellness

The results in Table 4 revealed that perceived stigma is a significant predictor of psychological wellness among adolescents living with HIV/AIDS, $t = -3.293$, $p = 0.020 < 0.05$. From the results, a unit increase in perceived stigma leads to a 21.1% decrease in psychological wellness ($\beta = -.211$). The regression model is as given below:
 Psychological wellness = $3.609 - 0.211$ (Perceived stigma)

Table 4: Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	3.609	.405		8.903	.000
Perceived Stigma	-.211	.086	-.155	-3.293	.020

a. Dependent Variable: Psychological Wellness

From the results above, there is enough evidence to reject the null hypothesis and conclude that there is a significant effect of perceived stigma on psychological wellness among adolescents living with HIV/AIDS.

Perceived Stigma on Quality of Interpersonal Relationships among Adolescents Living with HIV/AIDS

The second hypothesis stated that there is no significant effect of perceived stigma towards HIV on interpersonal relationships among adolescents living with HIV/AIDS. Findings in Table 5 show that perceived stigma and interpersonal relationships have a correlation of -39.1% . Moreover, the results reveal that perceived stigma explain 15.3% of the total variation in interpersonal relationships.



Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	-.391 ^a	.153	.141	.268

a. Predictors: (Constant), Perceived Stigma

Regression analysis was carried out with perceived stigma as the independent variable and interpersonal relationships as the dependent variable. The results in Table 6 indicated the model was statistically significant in evaluating the relationship between perceived stigma and interpersonal relationships among adults living with HIV/AIDS, $F = 12.284$, $p = 0.001$ (The p-value is less than 0.05).

Table 6: Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.885	1	.885	12.284	.001 ^a
Residual	4.898	68	.072		
Total	5.783	69			

a. Predictors: (Constant), Perceived Stigma

b. Dependent Variable: Interpersonal Relationships

Table 7 checks on the impact of perceived stigma on interpersonal relationships among adults living with HIV/AIDS. The table indicates that perceived stigma was indeed a significant predictor of interpersonal relationships, $t = -3.505$, $p = 0.001 < 0.05$. From the results, it is evident that a unit increase in perceived stigma leads to a 29% decrease in interpersonal relationships ($\beta = -.290$). From the model coefficients, the regression model is as given below:

Interpersonal relationships = $3.156 - 0.29$ (perceived stigma)

Table 7: Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.156	.390		8.101	.000
Perceived Stigma		-.290.083	-.391	-3.505	.001

a. Dependent Variable: Interpersonal Relationships

From the results above, there is enough evidence to reject the null hypothesis and conclude that perceived stigma had a significant effect on interpersonal relationships among adolescents living with HIV/AIDS.

Relationship between Psychological Wellness and Quality of Interpersonal Relationships among Adolescents Living with HIV/AIDS

The third hypothesis stated that there is no significant relationship between psychological wellness and interpersonal relationships among adolescents living with HIV/AIDS. Table 8 shows that psychological wellness and interpersonal relationships have a correlation of 34%. Additionally, the results reveal that psychological wellness explains 11.2% of the total variation in interpersonal relationships.



Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.340 ^a	.112	-.013	.291

a. Predictors: (Constant), Psychological Wellness

Regression analysis was carried out with psychological wellness as the independent variable and interpersonal relationships as the dependent variable. Results in Table 9 indicated the model was statistically significant in assessing the relationship between psychological wellness and interpersonal relationships among adults living with HIV/AIDS, $F = 12.284$, $p = 0.018$ (The p-value is less than 0.05). Table 10 checks whether psychological wellness had an effect on interpersonal relationships of adults living with HIV/AIDS.

Table 9: Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.351	1	.351	4.131	.018 ^a
Residual	5.772	68	.085		
Total	5.783	69			

a. Predictors: (Constant), Psychological Wellness

b. Dependent Variable: Interpersonal Relationships

Table 10 indicates that psychological wellness was indeed a significant predictor of interpersonal relationships, $t = 3.362$, $p = 0.018 < 0.05$. The results indicate that a unit increase in psychological wellness leads to a 30.5% increase in interpersonal relationships. From the model coefficients, the model as given below:
Interpersonal relationships = $4.377 + 0.305$ (psychological wellness)

Table 10: Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	4.377	.387		11.301	.000
Psychological Wellness	.305	.125	.044	3.362	.018

a. Dependent Variable: Interpersonal Relationships

From the results above, there is enough evidence to reject the null hypothesis and conclude that psychological wellness had a significant effect on interpersonal relationships among adolescents living with HIV/AIDS.

DISCUSSION

The study was conducted with several objectives: to assess the effects of perceived stigma on psychological wellness experienced by adolescents existing with HIV/AIDS, to find out the effects of perceived stigma on quality of interpersonal relationships among adolescents living with HIV/AIDS, and lastly to determine the relationship between psychological wellness and quality of interpersonal relationships among adolescents living with HIV/AIDS. First, the study aimed to assess the effects of perceived stigma on psychological wellness among adolescents living with HIV/AIDS. Correlation analysis revealed that perceived stigma was negatively related to psychological wellness. When perceived stigma



increases, psychological wellness reduces and vice versa. The regression analysis results revealed that perceived stigma was a significant predictor of psychological wellness. A study by Markowitz (1998) checked the effects of stigma on the psychological wellbeing and life satisfaction of individuals. The study used longitudinal data obtained from 610 individuals who were outpatient treatment and in self-help groups. Results obtained from cross-sectional and regression models revealed that stigma had adverse effects on psychological wellbeing and life satisfaction of individuals.

Secondly, the research study sought to find out the effects of perceived stigma on the quality of interpersonal relationships among adolescents living with HIV/AIDS. Results of a correlation analysis revealed that perceived stigma and interpersonal relationships are negatively related. When perceived stigma increases, the quality of interpersonal relationships reduced and vice versa. Regression analysis further showed that perceived stigma was a significant predictor of the quality of interpersonal relationships among adults living with HIV/AIDS. Lloyd et al. (2005), checked on the perceptions of social stigma and its impacts on interpersonal associations young males. The study targeted a focus group, with intentions of assessing the perceived experience of six young men who suffered psychotic disorder in order to acquire a comprehension of the effect this portrayed on interpersonal relationships. Findings from the study revealed significant effects of labelling and stigma on interpersonal relationships of the young men. The findings further showed that labelling and stigma cause significant changes in self-perception among young people.

Thirdly the relationship between psychological wellness and quality of interpersonal relationships among adolescents living with HIV/AIDS was determined. Correlation analysis results indicated that psychological wellness and quality of interpersonal relationships are positively related. That is, when psychological wellness increases, the quality of interpersonal relationships increases and vice versa. A study was conducted by Arnold (2015) to check on the relationship between interpersonal relationships and psychological well-being. The study focused on the effect of family estrangement on the psychological well-being of lesbian, gay and bisexual (LGB) individuals. The study used a sample of eight LGB individuals aged between 18-41 years, who were experiencing family estrangement due to their sexuality. Findings from the study revealed that estranged individuals had psychological difficulties. This confirms that interpersonal relationships indeed have an effect on the psychological wellness of people.

CONCLUSION

The study assessed the effects of perceived stigma on psychological wellness among adolescents living with HIV/AIDS. Correlation analysis revealed that perceived stigma was negatively related to psychological wellness. When perceived stigma increases, psychological wellness reduces and vice versa. The regression analysis results revealed that perceived stigma was a significant predictor of psychological wellness. Therefore, it is evident that perceived stigma significantly reduces the psychological wellness among adolescents living with HIV/AIDS. Additionally, it is evident that perceived stigma significantly reduced the quality of interpersonal relationships among adolescents living with HIV/AIDS. Lastly, the findings revealed that improvement in psychological wellness significantly improves the quality of interpersonal relationships among adolescents living with HIV/AIDS.



RECOMMENDATIONS

1. Community awareness about living with people who are HIV/AIDS positive should be increased to reduce stigmatization and enable people to emotionally support the affected people.
2. Group and individual counselling sessions should be made available for adolescents living with HIV/AIDS to help them stay fit psychologically.
3. More social activities targeting teenagers should be made available in schools and in society to enable teenagers to interact better with their peers.
4. The government through interested bodies should employ psychologists in hospitals to follow- up on the psychological wellness of adolescents living with HIV/AIDS.

For further research other groups of individuals living with HIV/AIDS apart from adolescents should be studied.

REFERENCES

- Berger, B., Ferrans, C., & Lashley, F. (2001). Measuring stigma in people with HIV: Psychometric assessment of the HIV stigma scale. *Research in Nursing & Health*, 24(6), 518-529. doi: 10.1002/nur.10011
- Bunn, J. Y., Solomon, S. E., Miller, C., & Forehand, R. (2007). Measurement of Stigma in People with HIV: A Reexamination of the HIV Stigma Scale. *AIDS Education and Prevention*, 19(3), 198-208. doi:10.1521/aeap.2007.19.3.198
- Colombini, M., Mutemwa, R., Kivunaga, J., Stackpool Moore, L., & Mayhew, S. (2014). Experiences of stigma among women living with HIV attending sexual and reproductive health services in Kenya: a qualitative study. *BMC Health Services Research*, 14(1). doi: 10.1186/1472-6963-14-412
- Fife, B. L., & Wright, E. R. (January 01, 2000). The Dimensionality of Stigma: a Comparison of its Impact on the Self of Persons with HIV/AIDS and Cancer. *Journal of Health and Social Behavior*, 41, 1, 50-67
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item-response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78, 350-365.
- Global, F. (2017). Stigma and Discrimination. *Healthpolicyproject.com*. Retrieved 4 November 2017, from <http://www.healthpolicyproject.com/index.cfm?id=topics-Stigma>
- Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, N.J: Prentice-Hall
- Hilbert, R., Jones, E., Farina, A., Hastorf, A., Markus, H., Miller, D., & Scott, R. (1985). Social Stigma: The Psychology of Marked Relationships. *Contemporary Sociology*, 14(3), 401.<http://dx.doi.org/10.2307/2071381>
- Kamau, M. N. (2012). *Aids Stigma and Discrimination in Public Schools: A Case Study Of Hiv-Positive Children In Kenya*. The University of Western Ontario.
- Kenya AIDS Strategic Framework 2014/2015 – 2018/2019 (2014)
- Kenya Demographic and Health Survey 2008-2009.
- Link, B., Cullen, F., Struening, E., Shrout, P., & Dohrenwend, B. (1989). A Modified Labeling Theory Approach to Mental Disorders: An Empirical Assessment. *American Sociological Review*, 54(3), 400.<http://dx.doi.org/10.2307/2095613>
- Link, B. G., Mirotznik, J., & Cullen, F. T. (January 01, 1991). The Effectiveness of Stigma Coping Orientations: Can Negative Consequences of Mental Illness Labeling be avoided? *Journal of Health and Social Behavior*, 32, 3, 302-20.
- Link, B., Struening, E., Rahav, M., Phelan, J., & Nuttbrock, L. (1997). On Stigma and Its Consequences: Evidence from a Longitudinal Study of Men with Dual Diagnoses of Mental Illness and Substance Abuse. *Journal of Health and Social Behavior*, 38(2), 177.<http://dx.doi.org/10.2307/2955424>
- Lundgren-Nilsson, A. Jonsdottir, I., Ahlborg, G., & Tennant, A. (2013). Construct Validity of the Psychological General Well-being Index (PGWBI) in a Sample of Patients Undergoing Treatment for Stress-related Exhaustion: a Rasch Analysis. *Health and Quality of Life Outcomes*, 11(1), 2.<http://dx.doi.org/10.1186/1477-7525-11-2>
- Luoma, J., Twohig, M., Waltz, T., Hayes, S., Roget, N., Padilla, M., & Fisher, G. (2007). An Investigation of Stigma in Individuals Receiving Treatment for Substance Abuse. *Addictive Behaviors*, 32(7), 1331-1346. <http://dx.doi.org/10.1016/j.addbeh.2006.09.008>



- Mahajan, A., Sayles, J., Patel, V., Remien, R., Sawires, S., & Ortiz, D. et al. (2008). Stigma in the HIV/AIDS Epidemic: A Review of the Literature and Recommendations for the Way Forward. *AIDS*, 22(Suppl2), S57S65. <http://dx.doi.org/10.1097/01.aids.0000327438.13291.62>
- Odhiambo, J. (2013). Factors influencing anti-retroviral therapy adherence of HIV-positive adolescents in Nairobi, Kenya: a qualitative study (Post Graduate Diploma). University of Nairobi.
- Sawyer, S., Azzopardi, P., Wickremarathne, D., & Patton, G. (2018). The age of adolescence. *The Lancet Child & Adolescent Health*, 2(3), 223-228. doi: 10.1016/s2352-4642(18)30022-1
- Siegel, K., & Krauss, B. (1991). Living with HIV Infection: Adaptive Tasks of Seropositive Gay Men. *Journal of Health and Social Behavior*, 32(1), 17. <http://dx.doi.org/10.2307/2136797>
- UNAIDS. (2014). The Gap Report. (2018) Retrieved from http://files.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2014/UNAIDS_Gap_report_en.pdf
- (2016). Retrieved 3 April 2016, from International Center for Research on Women (ICRW, 2005) 'HIV-related Stigma across Contexts: Common at its Core' - See more at <http://www.avert.org/professionals/hiv-social-issues/stigma-discrimination#sthash.bFcnlR82.dpuf>
- Kiambu County HIV & AIDS Strategic Plan (2015/2016-2018/2019). Re-Orienting HIV & AIDS Control in a Devolved System of Government.