

# Psychosocial Status of HIV Orphaned and Vulnerable Children (OVCs) Paediatric Populations in Sub-Saharan Africa: Case of Eldoret Municipality, Kenya

Mary W. Chege<sup>1</sup>, Joshua Akong'a<sup>2</sup> Elijah Oyoo-Okoth<sup>3</sup>

<sup>1</sup>College of Health Sciences, Department of Health Policy and Management, Moi University, PO Box 3900, Eldoret Kenya

<sup>2</sup>School of Social and Cultural Development Studies, Department of Anthropology, PO Box 3900, Eldoret Kenya

<sup>3</sup>School of Natural Resources and Environmental Studies, Department of Natural Resources, Karatina University, P.O Box 1957-10101, Karatina – Kenya.

**Abstract:** *Acquired Immuno-deficiency syndrome (AIDS) has devastated population in Sub Saharan African leaving many children orphaned. The Orphaned and Vulnerable Children (OVCs) occasioned by death of one or both parents through HIV are exposed to challenges in life that may affect their psychosocial status. Although data on the extent of HIV/AIDS on paediatric population is well known, the psychosocial status of the children are rather obscured that hinder plan of assistance to help these children cope with trauma. This study assessed psychosocial status of the HIV positive children in Eldoret Municipality, in Kenya. It was conducted through survey design and targeted 384 OVC and 214 guardians. Data were collected through structured questionnaires and interviews. Personal problems experienced by the children included depression, trauma, stress, seclusion and grief, leading to overall low levels of psychosocial status in children. It is recommended that a comprehensive update on the issues that bring psychological trauma, stress and depression such as discrimination of the children should be addressed by HIV therapists and other healthcare practitioners working with HIV-infected persons through regular anti-discriminatory campaigns and provides a chance to treat such children to reduce situations that cause psychosocial problem.*

**Keywords:** Orphaned and Vulnerable children (OVCs), HIV/AIDS, Psychosocial status, Eldoret Municipality

## 1. Introduction

Since it was diagnosed in the 1981, the magnitude of the HIV pandemic has been the most devastating in modern human history [1]. By the year 2010, UNAIDS estimated that up to 2.2 million children under the age of 15 years were living with HIV/AIDS and up to 22 million children under the age of 15 having lost one or both parents to HIV/AIDS [2]. The world's hardest-hit region, Sub-Saharan Africa (SSA) has just over 10% of the world's population, but is home to more than 70% of all children living with HIV and more than 85% of all children under 15 living with the disease [3]. Between 1990 and 2009, SSA population of children orphaned by AIDS increased from less than 1 million to more than 12 million [4]. In Kenya, by the year 2003, indicate that there are up to 1.2 million orphaned children without any parent due to HIV death [5].

Children infected and affected by HIV have similar needs as every other child, except that the fulfilment of these needs is potentially in jeopardy since they lack either or both parents. Lack of either or both parents can bring about a range of psychosocial challenges to the affected children. This may lead to children feeling deprived of their childhood, causing misery and sometimes thoughts of suicide. Children of the HIV deceased parents may be at risk due to the social isolation associated with HIV resulting in both physical mental, spiritual, economic and psychological effects due to the prevailing conditions [6]. Therefore, the need to address the long-term needs of paediatric HIV orphaned children stems from recognition of the psychosocial challenges facing

this population. Although literature on children and HIV is extensive, as is the literature on HIV related stigma, the specific research on HIV/AIDS-related psychosocial status among OVC are relatively sparse. Therefore this study determined the psychosocial status of HIV OVCs paediatric populations in SSA using a case of Eldoret Municipality in Kenya.

## 2. Research design and Methodology

### Study area, population and sample

This study was conducted in Eldoret Municipality in Kenya (34°50'E to 37°30' East and 0°03' to 0°55'S). The area has moderate levels of HIV infections ranging between 2.5 to 4% of the National HIV infection rates, but recent trends indicate that HIV/AIDS levels may be marginally on the increase [7]. This study adopted a cross sectional survey design. A sample size of 384 children, was determine based on calculations using [8]. The children were sampled from the homesteads at random. From the homesteads, the guardians were also sampled to get their views about the children. We sampled 174 guardians in charge of the 384 children. During the study, the inclusion criteria used were: HIV children aged 11-19 years. The exclusion criteria in this study were: orphaned children who were critically ill. The socio-demographic data for the OVCs and guardians is shown in Table 1.

**Table 1: Socio-economic and demographic characteristics of the respondents**

		Orphaned children (n = 384)		Guardians (n =214)	
<i>Demographic</i>	<i>Characteristics</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Gender	Male	140	36.5	67	31.3
	Female	244	63.5	147	68.7
Age	< 12	59	15.4	0	0.0
	12-15	156	40.6	0	0.0
	16-18	120	32.3	0	0.0
	19-25	49	12.8	2	0.9
	26-35	0	0.0	15	7.0
	36-50	0	0.0	93	43.5
	>50	0	0.0	104	48.6
Religious affiliation	Atheist	52	13.5	44	20.6
	Catholic	184	47.9	94	43.9
	Protestants	134	34.9	68	31.8
	Muslim	14	3.6	8	3.7
Marital status	Single	381	99.2	34	15.9
	Married	3	0.8	156	72.9
	Divorced	0	0.0	11	5.1
	Widows	0	0.0	13	6.1
Highest levels of education	None	7	1.8	0	0.0
	Lower primary	34	8.9	1	0.5
	Upper primary	114	29.7	23	10.7
	Completed primary	183	47.7	71	33.2
	Secondary	46	12.0	98	45.8
	College	0	0.0	13	6.1
Occupation	University	0	0.0	8	3.7
	Unemployed	366	95.3	16	7.5
	Farmer	5	1.3	85	39.7
	Salaried employee	0	0.0	79	36.9
	Business	13	3.4	29	13.6
	Banker	0	0.0	5	2.3

**Data collection instruments and scoring**

The researcher used questionnaires and interviews as the main tools for data collection. There were two types of questionnaires used for the purpose of this study: the orphan questionnaires and the guardian questionnaires. The orphan questionnaire was researcher administered and the contents of the questionnaires were explained in the most simplistic way to the orphan. Guardian questionnaires were used to gather information from the guardians of the children and often involved explanation of the content of the questionnaires to the respondents. The researcher also used interview schedule (based on the content of the questionnaires) to compliment the questionnaire in getting first hand information and reduce ambiguity in responses, for the HIV orphaned children and guardians. The respondents who could not adequately fill the questionnaires were also interviewed. Validity of the instruments was determined through solicited expert opinions. Instrument reliability was determined as described in [9].

In the questionnaires the marked items were scored to obtain the levels of each variable being studied. The scoring of items determining the psychosocial status was based on the Likert score of five items for the orphan and the guardians. In the scoring the orphan questionnaire and guardian questionnaire, 14 items were used. The items would yield a minimum of 14 if all the questions are marked 1 while a maximum of 70 would be obtained if all the responses are marked 5. Since all the questions were in the negative, the

psychosocial status of the OVCs were projected (as Low, neutral and high), the scores were interpreted as follows: 14 to 39.5 represented low psychosocial status, 39.6 to 44.6 represented neutral and 44.5 to 70 represented high psychosocial status. In order to obtain the rank scores when computing the nature of psychosocial problems, the following formula was applied. %Rank score = A/B

Where: A = Overall calculated score for all respondents and B = Number of respondents\*Maximum possible score (5).

**Piloting:** The researcher undertook a pilot study to standardize the data collection methodologies by anticipating the types of response expected from the field. A total of 8 orphans and their guardians were sampled in each of the piloted areas. The pilot was more specifically carried out: to test the questionnaires which were used in the study, to get an impression of the problems of the orphaned and vulnerable children in the research area and to help identify problems during the study and which may not be seen during the planning stage.

**Ethical issues:** The major ethical issues addressed were: informed consent, privacy and confidentiality, anonymity and researcher’s responsibility. In this study, the researcher verbally informed the participants on the purpose of the research and asked them to sign a consent form before providing the questionnaires outlining the purpose of the study. All the participants signed the form. The respondents were assured of the confidentiality of the information given.

A written consent was shown to the participants. All participants remained anonymous. Authorization to conduct the research was granted by the Institute of Research and Ethical Committee (IREC).

### 3. Study findings and discussion

Information on the nature of psychosocial problems faced by the OVCs based on their responses is provided in Table 2. The results presented in the table indicate that all the OVCs suffered immeasurable psychosocial problems. However, the problems suffered most by the OVCs were: trauma, stress, misery and grief which had a rank scored of over 82%. These concur with other studies [10-13]. It has been noted that depression, anxiety, stigma, stressful and traumatic life

events occur in epidemic proportions in HIV-infected affected paediatric populations [14], which according to UNAIDS, continue to increase in the HIV pediatric population. In cases of stigma, children begin to be rejected early as their parents fall ill with AIDS [15]. Some children may be teased because their parents have AIDS, while others may lose their friends because it is assumed that proximity can spread the virus [6] leading to trauma and depression or seclusion among these children. This can also add to the feelings of anger, sadness, and hopelessness that was observed for some of the children in the study area. One study in Kenya found that most of the children orphaned by AIDS had no one outside of their families to talk to leading to sever cases of depression and seclusion [16], which might have added more psychological problems to the OVCs [17].

**Table 2:** Nature of psychosocial problems faced by the OVCs based on the OVCs views

<i>Psychosocial problems by the OVCs</i>	<i>All the time</i>	<i>Often</i>	<i>Occasionally</i>	<i>Unknown</i>	<i>Never</i>	<i>% Rank scores</i>	<i>Rank</i>
It is painful to loose the parents (trauma)	321	11	10	9	33	90.1	1
Feeling that the world is coming to an end (stress)	262	56	33	18	15	87.7	2
Not sure about the future (misery)	252	54	21	22	35	84.3	3
Likes to mourn (grief)	211	84	51	18	20	83.3	4
Feeling of deep thought (stress)	183	126	45	14	16	83.2	5
Feeling of loneliness (seclusion)	201	88	61	11	23	82.6	6
Avoid other children (seclusion)	173	124	51	21	15	81.8	7
I am annoyed with what killed my parent (misery)	187	102	55	21	19	81.7	8
Fear many people including other children	183	99	67	19	16	81.6	9
You can bring back the parents (hopelessness)	205	87	33	31	28	81.4	10
I encounter a lot of nightmares (trauma)	161	133	51	16	23	80.5	11
Feeling like you don't want to play (seclusion)	134	122	54	53	21	75.4	12
Feeling like I don't want to live (suicide feelings)	89	87	79	109	20	66.0	13
Feeling sad (depression)	101	91	55	27	110	62.4	14

In order to obtain the rank scores when computing the nature of psychosocial problems, the following formula was applied. % Rank score = A/B

Where: A = Overall calculated score for all respondents and  
B = Number of respondents\*Maximum possible score (5)

The nature of psychosocial problems based on the guardians is provided in Table 3. The most important among them were found to be trauma, followed by depression, unhappiness associated with grief, unhappiness and finally lack of confidence, which all scored a % rank scores of over 80%. On the other hand other psychosocial challenges that were prevalent among the OVCs as espoused by their guardian but in low proportion were: loss of weight perhaps due to lack of appetite or too many emotional thoughts, traumatic experiences of nightmares and loss of appetite which all scored a rank of below 70%. This indicates that there was a high prevalence of stress, depression, trauma, grief or misery associated with HIV orphanhood, which may aggravate cases of psychological problems.

**Table 3:** Response on the nature of psychosocial problems faced by the OVCs based on the guardians responses

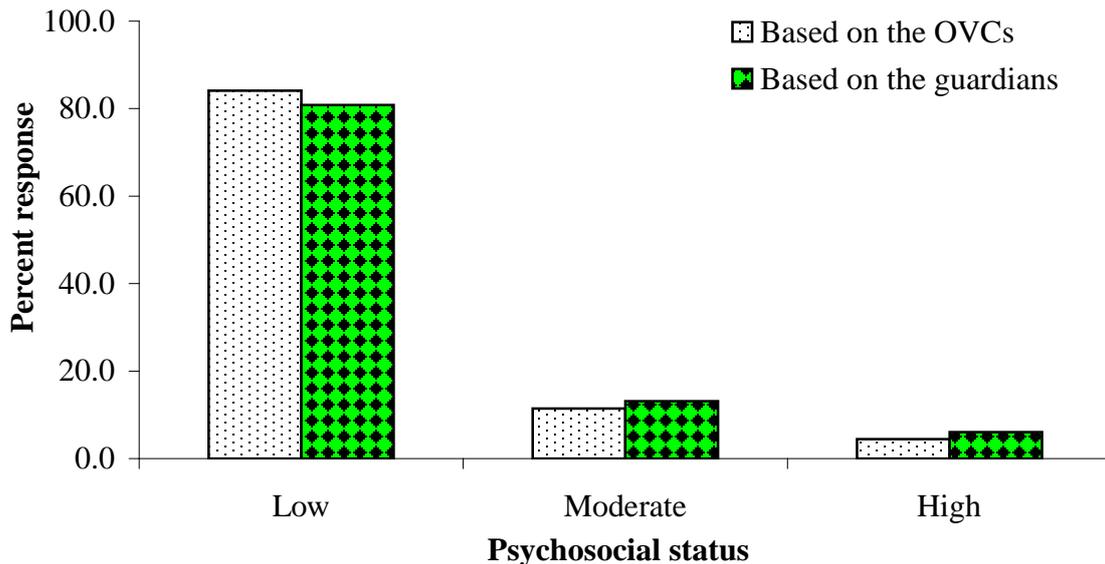
<i>Psychosocial problems by the guardians</i>	<i>All the time</i>	<i>Often</i>	<i>Occasionally</i>	<i>Unknown</i>	<i>Never</i>	<i>% Rank scores</i>	<i>Rank</i>
Trauma	112	76	10	9	7	85.9	1
Depression	133	34	28	11	8	85.5	2
Unhappiness	133	32	22	18	9	84.5	3
Lack of confidence	112	33	51	18	0	82.3	4
Loss of religious faith	112	38	21	22	21	78.5	5
Sense of hopelessness	94	56	22	16	26	76.4	6
Seclusion from others	87	55	18	53	1	76.3	7
Wish to commit suicide	78	71	21	32	12	76.0	8
High tempers	69	56	67	19	3	75.8	9
Self blame	100	26	45	14	29	74.4	10
Emotional drain	75	41	61	11	26	72.0	11
Loss of weight	81	33	55	21	24	69.8	12
Trauma e.g. nightmares	55	35	41	27	56	60.6	13
Loss of appetite	54	26	51	37	46	60.5	14

In order to obtain the rank scores when computing the nature of psychosocial problems, the following formula was applied. % Rank score = A/B

Where: A = Overall calculated score for all respondents and B = Number of respondents\*Maximum possible score (5)

The psychosocial problems highlighted by the OVCs and guardians were then scored. The levels of psychosocial problems by the OVCs obtained as presented in Fig. 1. The results based on the results of the two respondents indicate that the psychosocial status among the OVCs was low based

on the OVCs response (84.1%) and the guardians responses (81.9%), which may be attributed to the above discussed problems faced by the children. These psychosocial factors (e.g. depression, trauma and coping with stress) have consistent and clinically relevant influences on children development; the effects of psychosocial factors may be mediated biologically through changes in the sympathetic nervous system, “stress hormones” and the immune system, as well as behaviourally through changes in such behaviours as traumatic adjustment syndrome [18].



**Figure 1:** Psychosocial status of OVCs based on response from the OVCs and guardians in Eldoret Municipality

**4. Conclusions and recommendations**

There were several psychosocial problems among the OVCs in Eldoret Municipality but the most common ones were depression, trauma, stress, seclusion and grief. It was also concluded that there was low level of psychosocial status of the HIV/AIDS associated OVCs in Eldoret Municipality. Based on the above finding, a comprehensive update on the issues that bring psychological trauma, stress and depression

such as discrimination of the children should be addressed by HIV therapists and other healthcare practitioners working with HIV-infected persons through regular anti-discriminatory campaigns and provide a chance to treat such children to reduce situations that cause psychosocial problems.

## References

- [1] UNAIDS and World Health Organization (WHO). (2005). *AIDS Epidemic Update: December 2005*. Geneva: UNAIDS/WHO, 2005.
- [2] UNAIDS, UNICEF, and USAID, (2010). *Children on the Brink 2004: A Joint Report of New Orphan Estimates and a Framework for Action*. New York City: p. 3.
- [3] CDC. [Centers for Disease Control & Prevention], National Center for HIV, STD & TB Prevention: Surveillance. August 1998.
- [4] UNAIDS (2010). UNAIDS report on the global AIDS epidemic.
- [5] K'Oyugi, B.O. and Muita, J. (2002). *The impact of a growing HIV epidemic on the Kenyan children*. In *AIDS, Public Policy and Child Well-being*, Giovanni Andrea Cornia, ed., June 2002.
- [6] Hanna, J. and Mintz, M. (2010). Neurological and neurodevelopmental functioning in pediatric HIV infection. In Boyd-Franklin N., Steiner G. and Bolano. M. (Eds.): *Children, Families, and HIV/AIDS: Psychosocial and Therapeutic Issues*. Guilford Press: New York, NY.
- [7] KAIS, Kenya AIDs Indicator Survey. (2012). Available at: [http://www.nacc.or.ke/attachments/article/403/KAIS\\_I\\_I\\_2014\\_Final\\_Report.pdf](http://www.nacc.or.ke/attachments/article/403/KAIS_I_I_2014_Final_Report.pdf)
- [8] Mugenda, O.M. and Mugenda, A.G (2003). *Research Methods Quantitative and Qualitative Approaches*, ACT : Nairobi, Kenya.
- [9] Kothari, C.R. (2005). *Research methodology: Methods and techniques*. Daryaganj, New Delhi: New Age International (P) Ltd.
- [10] Kashani, G.H, Konig, P., Shepperd, J.A., Wilfley, D. and Morris, D.A. (1995). Psychopathology and self-concept in HIVaffected children. *Journal of Pediatric Psychology*. **13(4)**: 509-520.
- [11] UNAIDS. (2001). *Investing in Our Future: Psychosocial Support for Children Affected by HIV/AIDS*. UNAIDS Case Study, July 2001, [<http://www.unaids.org>].
- [12] Friedman, A.G. and Mulhern, R.K. (2002). Psychological aspects of childhood affected by HIV/AIDS. In Lahey BB & Kazdin AE (Eds.): *Advances in Clinical Child Psychology*. New York: Plenum Press.
- [13] Leserman, J. (2011). Psychosocial influences in HIV/AIDS: Biobehavioral mechanisms, interventions and clinical implications. *Clinical Medicine*. **14**: 154-161.
- [14] Daniels, D., Moos, R., Billings, A. and Miller, J.J. (1997). Psychosocial risk and resistance factors among children with chronic illness, healthy siblings, and healthy controls. *Journal of Abnormal Child Psychology*. **15**, 295-308.
- [15] Moss, H, Bose, S., Wolters, P. and Brouwers, P.A (1998). Preliminary study of factors associated with psychological adjustment and disease course in school-age children infected with the human immunodeficiency virus. *Journal of Developmental and Behavioral Pediatrics*. **19**, 18-25.
- [16] Okeyo, M., Oduor, K.L. and Mwanzia, L. (2002). Problems faced by the HIV children in Kisumu District: Studies of the children's home and in the villages. *Kenyan Journal of Pediatric Psychology*. **23**: 133-141.
- [17] Human Rights Watch. (2001). *In the Shadow of Death: HIV and Children's Rights in Kenya*, Human Rights Watch Publications, vol. 13, no. 4(A), p. 17, [<http://www.hrw.org/reports/2001/kenya/>].
- [18] Drotar, D.D., Agle, D.P., Eckl, C.L. and Thompson, P.A. (1995). Psychological response to HIV1 among children. *Pediatrics*. **96(6)**: 1062-1069.

## Author Profiles

**Mary W. Chege** has Masters of Public Health from Moi University, Eldoret. She has extensive knowledge in pediatric psychology spanning over 10 years working with orphaned children at Moi teaching and Referral Hospital, Eldoret. The current study was part of her Master's Thesis titled "Challenges faced by the HIV children on their psychosocial status in Kapsaret and Kesses Divisions – Eldoret municipality, Kenya".

**Prof. Akon'ga** is the current director, School of Social and Cultural Development Studies, Moi University. He is an astounding researcher in social sciences and psychology with several papers in referred journals.

**Dr. Elijah Oyoo-Okoth** graduated with A PhD in aquatic Ecology and Ecotoxicology from the University of Amsterdam in 2012. During the PhD, he studied paediatric epidemiology and nutrition and developed interest to learn more about paediatrics psychology. He has authored several papers in health-related problems to the paediatric population in Sub Saharan Africa.