International Journal of Research Studies in Medical and Health Sciences
Volume 2, Issue 6, 2017, PP 22-24
ISSN : 2456-6373

Socio-Economic Factors on ARV Uptake in Children Aged Below 14 Years

Rodgers Omondi Kongina

School of Public Health, Jomo Kenyatta University of Agriculture and Technology, Kenya

***Corresponding Author:** Rodgers Omondi Kongina, School of Public Health, Jomo Kenyatta University of Agriculture and Technology, Kenya.*

ABSTRACT

Facility-based cross sectional study design was adopted for this study and was conducted in three pediatrics comprehensive care clinics (PCCC). The study showed that none of the socio demographic factors were significantly associated with ARV uptake in children aged below 14 years. There was a suggestive trend for an increase in odds with increase in level of education, among care givers with no education as the reference group, an increase in the education level increased the odds of ARV uptake in children aged below 14 years for the first time by 0.96 and 1.74 times for primary and ECD education respectively.

Keywords: *ARV, Nutrition, Psychosocial Support, Socio-economic factors*

INTRODUCTION

HIV and AIDS constitute the leading causes of infant and childhood mortality and morbidity in the developing world, particularly in the sub-Saharan region. Approximately 780,000 children are estimated to be in need of antiretroviral (ARV) therapy worldwide [1].

The high rates of maternal HIV infections reported across the sub-Saharan region, coupled with limited access to feasible interventions (including ART) exposes many children to the burden of HIV and AIDS [2]. On the contrary, only 115,500 had access to ARVs by 2010[3].

HIV-infected children living in sub-Saharan Africa are diagnosed and managed very late or miss treatment opportunities completely. In Kenya, an estimated 150,000 children under the age of 15 years are infected with the HIV. The critical concern is that only 12,000 of these children were receiving ARV treatment by 2010[4].

HIV infection in children represents a family and often a multigenerational disease. For a child with prenatal HIV infection, mother and child may both be on ART. Other family members may also be infected and on medications. HIV may be only one of many problems the family is dealing with [5]. Younger children typically assume less responsibility than older children assume for medication taking and may not know their HIV diagnosis [6].

As a caregiver of an HIV positive child, there are many different challenges to deal with aside from disclosing. HIV positive children require a lot of care and support in order to stay healthy, like having a well-balanced diet for the ARV drugs to be effective, making sure they are staying clean and hygienic, and maintaining the strict schedule that medications require [7]. Many common challenges among caregivers were the inability to provide enough nutritious food to their child because they have a very low income or no job at all [8].

In Kenya today, unemployment stood at 25% for the age group 15-19, 24.2% for 20–24-year-olds, 15.7% for those aged 25-29 and 7.5% for the age group 30-34 [9]. It is devastating to note that youth unemployment constitutes 70% of total unemployment in Kenya. With this kind of data it is clear that unemployment is still a major problem in Kenya and that it affects all groups of people, youth and adults who among them are HIV positive and are also caregivers to children living with HIV and AIDS today. Despite this, these children still need to attend school, which must be catered for by their caregivers through their various sources of livelihoods.

Most studies conducted within the sub-Saharan context have revealed a deficit in the level of adherence to ART. These studies have also identified multiple factors that contribute to the existing gap. The main problem is that countries in the sub-Saharan region have failed to monitor

the utilization of ART accurately and consistently [10].

Health Belief Model

In interventions that are complex and require lifestyle modifications, it is worthwhile to address patients' beliefs, intentions, and self-efficacy (perceived ability to perform action). This is because knowledge alone is not sufficient to enhance adherence in recommendations involving complex behaviour change [11]. Management of HIV entails taking ARV, maintaining special dietary practices and lifestyle. Successful management would therefore require attention not just to observable behaviour but to the underlying attitudes and belief systems which drive that behaviour. Data was collected to identify socio-economic factors with regard to affordability of food and ARV uptake in children aged below 14 years; this was done through establishing the correlation between nutrition, psychosocial support and ARV uptake in children aged below 14 years.

Materials and Methods

The study employed a facility-based cross sectional study design. The study was conducted in three pediatrics' comprehensive care clinics (PCCC) at Bondo Sub County Hospital, Kenya. The hospital introduced pediatrics comprehensive care centre (PCCC) services to provide individualized care to children and adolescents infected or at risk of HIV. The target population included HIV-positive pediatrics patients who were receiving antiretroviral treatment. The inclusion criteria encompassed adult HIV-positive and at-risk children aged 0-14 years. These patients had received their ARV regimens at the hospital for at least six months. The study included a sample of 302 participants using a single population proportion with the assumption of 95% confidence level and 5% margin of error. Two data collection instruments were adopted for this study, this were questionnaires and in-depth interviews. The collected data was both qualitative and quantitative based on the data collection techniques. The quantitative aspects of the raw data were analyzed for Inferential and descriptive statistics using the Statistical Package for Social Sciences Software Version 22. The study received ethics approval from the University Ethics Review Committee, Hospital Management, and National Commission for Science Technology and Innovation NACOSTI.

Results

The response return rate of 97% was realized. The majority (63%) of the respondents were female compared to their male counterparts (37%) who formed the minority of those who took part in the survey. (43%) of the respondents were related to the Child, (27%) of the care givers were the child's biological parent, while (16%) of the caregivers were the child's guardian and (14%) were foster parents to the child.

Nutritious food and ARV uptake in children aged below 14 years had a Chi-Square value of = 6.615, p = 0.158, availability of medication had a Chi-Square value of = 11.231, p = 0.004, psychosocial support had a Chi-Square value of = 3.846, p = 0.146. The study findings showed a statistically significance positive correlation on the selected items (r= 0.679, P<0.05) between psychosocial support and nutritious food. The r2 = .3130 indicated that 31% variation of psychosocial support and nutritious food could be attributed to socio-economic factors. The p-value was less than or equal to 0.05 and hence there was a statistically significant association between the socio-economic factors and ARV uptake in children aged below 14 years.

Discussion

The study sought to establish an understanding of the existence of a significant association between independent and the dependent variable. To achieve this, two statistical tests were done: Chi-Square test for independence and Pearson correlation analysis. The Chi-square results were presented depicting the views from the respondents. Pearson correlation was used to determine the level of significance of the bivariate relationships (socio-economic factors and ARV uptake in children aged below 14 years). A correlation matrix was used to examine correlation coefficients between single variable and every other variable in the data set.

The study showed that none of the socio demographic factors was significantly associated with ARV uptake in children aged below 14 years. However, there was a suggestive trend for an increase in odds with increase in level of education, with care givers with no education as the reference group, an increase in the education level increased the odds of ARV uptake in children aged below 14 years for the first time by 0.96 and 1.74 times for primary and ECD education respectively.

However, formal test for the trend for this variable was not significant.

CONCLUSION

The strong means leaning towards strong levels of association draws out the clear picture of the study having relevant variables to socio-economic factors that influence ARV uptake in children aged below 14 years. Psychosocial support was established to be necessary to children infected with HIV/AIDs equally a balanced diet was essential to the uptake of ARV and so was the use of special diet since there were certain foods the children were not supposed to take as recommended by health practitioners, this had a direct effect to the social economic status of the care givers putting food on the table was hard enough, making it well balanced was an entirely different story.

REFERENCES

[1] The World Health Organization. (2013). Global update on HIV treatment 2013: Results, impact and opportunities. Retrieved from www.who.int/iris/bitstream/10665/85326/1/9789241505734_eng.pd

[2] Brennan, A. T., Maskew, M., Sanne, I., & Fox, M. P. (2010). The importance of clinic attendance in the first six months on antiretroviral treatment: A retrospective analysis at a large public sector HIV clinic in South Africa. Journal of International AIDS Society, 13, 49. doi: 10.1186/1758-2652-13-49.

[3] United Nations Program on HIV/AIDS. (2010). Report on the global AIDS epidemic. Retrieved fromhttp://www.unaids.org/documents/20101123_globalreport_em.pdf

[4] Mellins C.A, Brakis-Cott. E, Richards A., Abrahams E, Nicholus S. (2009). "Patterns of HIV status disclosure to peri-natally HIV infected children and subsequent mental health outcomes".. Pediatr Infect Dis Journal, 23: 1035–1041.

[5] Bechmann M, Booysen F. (2010). "Health and Economic impacts of HIV/AIDS on South African households." American Journal of clinical nutrition 81(3)

[6] Nachega, J. B., Mills, E. J., & Schechter, M. (2010). Antiretroviral therapy adherence and retention in care in middle-income and low-income countries: Current status of knowledge and research priorities. Current Opinion in HIV and AIDS, 5(1), 70–77.

[7] Atreja A, Bellam N and Levy SR (2005). Strategies to Enhance Patient Adherence: Making It Simple. BioMed Central journal of Public Health, 7(1):4.

AUTHOR'S BIOGRAPHY

Rodgers Omondi Kongina, holds a Master's of Science Degree from the University of Nairobi on Health Economics, policy development and Analysis, A Post Graduate Diploma in Project planning and Management from The Kenya Institute of Management, A Bachelor of Art Sociology and Psychology (first class honors) from Moi University and Diploma in clinical medicine and surgery from Lake institute of Tropical Medicine. He has also worked with Centre for International Programs (ICAP Kenya) as a PMTCT/ EID Program Officer and Kenya medical research institute / Centre for disease control KEMRI/CDC as a Research study coordinator.

Citation: *Rodgers O. Socio-Economic Factors on ARV Uptake in Children Aged Below 14 Years. International Journal of Research Studies in Medical and Health Sciences. 2017;2(6):22-24.*