Journal of AIDS & Clinical Research
ISSN: 2155-6113

Businge et al., J AIDS Clin Res 2016, 7:12
DOI: 10.4172/2155-6113.1000639

Research Article Open Access

The Role of Apprenticeship in Improving the Livelihood of HIV-Positive Adolescents Who Prematurely Drop Out of School: The Mildmay Uganda Experience

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Abstract

Objective: HIV and AIDS have adverse effects on the livelihood of adolescents especially when parents die or are poor due to ill health. Mildmay Uganda has an apprenticeship programme that helps such adolescents acquire skills in order to improve their quality of life. The aim of this study was to examine the role of apprenticeship in improving the livelihood of HIV-positive adolescents who prematurely dropped out of school.

Methods: A retrospective review of data of all adolescents who had been enrolled on the apprenticeship programme from January 2012 to January 2014 was done to document their progress and any lessons learnt. A vulnerability index tool was used to assess vulnerability levels and at same time to measure the progress and improvement of livelihood.

Results: A total of twenty (20) adolescents were enrolled on the apprenticeship programme during the stated period. Sixty percent were male and were in the age range of 17-24 years. Sixteen out of the 20 (80%) were able to use the acquired skills through apprenticeship to improve their livelihood. The other four adolescents completed apprenticeship, but did not practice their acquired skills. One male opted to venture into another business and three females abandoned their vocations when they got married. The vulnerability level assessment outcome showed a graduation from extremely poor to poor. Adolescents were able to meet their basic needs, keep clinic appointments and were emotionally stable by end of period of review.

Conclusion: Apprenticeship is one way that can be used successfully to improve the livelihood of adolescents who prematurely drop out of school.

Keywords: Apprenticeship; Livelihood; HIV/AIDS; HIV-positive adolescents; Mildmay Uganda

Introduction

Evidence from studies has shown that widespread use of highly-active antiretroviral therapy (HAART) has significantly reduced morbidity and mortality among persons living with human immunodeficiency virus (HIV) [1-3] and there has been increased adult life expectancy [4]. However, recent data from the Joint United Nations Programme on HIV/AIDS (UNAIDS) shows that globally approximately 1.1 million individuals still die of HIV-related causes. The most heavily affected region is Sub-Saharan Africa, where two-thirds of HIV-infected individuals reside [5]. In Uganda, according to the Uganda Ministry of Health (MOH) AIDS Indicator Survey report, roughly 1.5 million individuals are reported to be living with HIV/AIDS; and an additional 12% of children under eighteen years are living as orphans of the epidemic [6]. According to the Uganda AIDS Commission (UAC) report, more than half (51%) of HIV-infected Ugandans were accessing HAART by end of 2014 [7].

HIV/AIDS has a negative effect on social-economic development since majority of individuals living with HIV/AIDS are adults in the productive age-category of 15 years and older [5]. Persons living with HIV continue to incur increased costs on livelihoods compared to their counterparts who are HIV-negative. This is because persons living with HIV may from time to time need to seek frequent health care. This could cause an interruption to their routine income generating activities which could potentially jeopardize their employability. Therefore, HIV is not only a major public health problem but also has a negative impact on people's livelihood. There is even a greater impact in adolescents when their parents die or are poor due to increased morbidity [8,9]. As a result, parents and caregivers are unable to support these adolescents through education and eventually they are forced to drop out of school prematurely [8].

Recent data shows that 52% of Ugandans aged 15-24 years have attained incomplete primary education and 28% have incomplete secondary education [10]. Overall the school drop-out rate in Uganda is over 40 percent [11]. Dropping out of school combined with loss of parents due to HIV/AIDS undermines the adolescents' chance of realizing their full potential. For HIV-positive adolescents who have lost parents, there is diminished parental care and guidance. Consequently, this renders these adolescents prone to risks (such as: failure to keep clinic appointments, being idle and engagement in anti-social behaviours like abuse of psychoactive drugs and risky sexual behaviours) that are detrimental to their wellbeing.

Apprenticeship as means to improve livelihoods

There has been several attempts to improve the wellbeing of not only

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Received November 20, 2016; **Accepted** November 28, 2016; **Published** December 05, 2016

Citation: Businge A, Gonza PK, Mwehire D, Chemusto H, Mukama SC, et al. (2016) The Role of Apprenticeship in Improving the Livelihood of HIV-Positive Adolescents Who Prematurely Drop Out of School: The Mildmay Uganda Experience. J AIDS Clin Res 7: 639. doi: 10.4172/2155-6113.1000639

adolescents, but also individuals of all categories using apprenticeship. In apprenticeship, a person is trained to acquire skills of a particular trade while working with a skilled worker in an enterprise for a given period of time [12]. Evidence from studies done in Tanzania, Malawi and Ghana show that apprenticeship improves the livelihood of young people [12-14]. Mildmay Uganda (MUg) has adapted an apprenticeship programme integrated into comprehensive HIV care for adolescents living with HIV. This programme equips HIV-positive adolescents aged between 17 and 24 years with employable skills so as to improve their quality of life. For adolescents below 18 years, special considerations are made to support them.

The healthcare provider identifies the HIV-positive adolescents who report having dropped out of school due to either lack of social support from parents or had learning difficulties. They are then linked to the social worker and occupational therapist. The social worker assesses the adolescent's vulnerabilities based on nationally set standards, and the occupational therapist assesses the suitability and ability of the adolescent for a given vocation to undertake. The social worker supports the adolescents to identify competent apprentice trainer in their desired area of interest. The adolescents are then referred to the apprentice trainer and MUg facilitates ongoing apprenticeship for the adolescent. On average each adolescent undergoes apprenticeship for 6 months. After successful completion of apprenticeship, the adolescents are given a start-up kit like sewing/knitting machine (that costs about 121 U.S. dollars) to implement the acquired skills so as to improve their livelihood. Others are either employed by artisans at the places where apprenticeship was done or look for employment somewhere else. Targeted monitoring is done for adolescents to ensure sustained progress. The aim of this study was to examine the role of apprenticeship in improving the livelihood of HIV-positive adolescents who prematurely dropped out of school.

Methods

Study design and population

This was a retrospective cross sectional study of adolescents between 17 and 24 years living with HIV who were actively receiving care at MUg and were enrolled on the apprenticeship programme between January 2012 and January 2014.

Study setting

Mildmay Uganda has a comprehensive HIV and AIDs clinic based in the Wakiso District in central Uganda, 12 km on Entebbe Road from Kampala the Capital City of Uganda. Currently the Clinic cares for over 12,000 patients (of which 13% are aged between 10-24 years). Wakiso Districts is estimated to have a population of over 1.9 million people, of which 10.6% (211,726) adults aged 18 years and above are estimated to be living with HIV [6,15]. Mildmay Uganda also provides technical support to public health facilities in the 16 districts of central Uganda. The public health facilities combined with the MUg HIV clinic provide HIV care to over 103,000 patients.

Participants and data collection

Data for adolescent patients from Mildmay Uganda HIV clinic who received apprenticeship for economic strengthening between January 2012 and January 2014 were included in this study. Data of those eligible were extracted and entered into MS Access database format for further data management. Adolescents' data that was incomplete was not included for analysis. Double data entry was conducted to ensure quality of data. A total of 20 patient records for clients who were on apprenticeship between January 2012 and January 2014 were considered for analysis. Data on socio-demographic and economic characteristics were extracted. The Uganda Ministry of Gender, Labour, and Social Development measure of vulnerability was used to assess vulnerability of the adolescents [18]. A vulnerability index score card was used to assess vulnerability levels and at the same time to measure the progress and improvement of livelihood. Details of the vulnerability index tool are presented in Table 1. The vulnerability levels were categorized as: extremely poor, very poor and poor with scores of 53-78 for extremely poor, 30-52 for very poor and below 30 for poor. The education status assessment for adolescents was assessed at primary and secondary levels.

Data analysis

The study was carried out using routinely collected data from service delivery. There was some missing data**.** For missing variables of interest, we studied the missingness and we established that the missingness was random for the variables of interest and therefore would not bias the outcome of the analysis. To address missingness, the mean single imputation method for imputation of key missing variables was used to impute the missing variables of interest. Continuous data was presented in form of mean and standard deviation (SD) while categorical data was presented in proportions.

Ethical Considerations

The investigators sought for Institutional and Ethical approval. The study was approved by the Mildmay Uganda Research Ethics Committee (MUREC) #REC REF 0401-2016 and registered with the Uganda National Council of Science and Technology (UNCST) SS 4079.

Results

Majority of the adolescents under the apprenticeship programme were adolescent males (60%). The mean age was 21 (SD=2.55) years

Type of variable	Variables	Visit
Basic demographics	Name of index Orphaned and Vulnerable Child (OVC), sex, age, education, physical address, name of care giver	At enrollment (before intervention)
Monetary	Main household income earner (child, elderly/grandparent, father/mother), main source of household income, income earned per month (less than Ugandan shillings 50,000; 50,000-100,000; 100,000 up to 150,000; 150,000 up to 200,000; 200,000 and above)	At enrollment, 6 months and after 1 year of intervention
Expenditure	Savings per month, what takes the highest percentage of expenditure (food, other basic needs, investment)	At enrollment, 6 months and after 1 year of intervention
Living condition	Type of dwelling (e.g., temporary, semi-permanent, and permanent)	At enrollment, 6 months and after 1 year of intervention
Food and nutrition	Source of household food, number of meals per day	At enrollment, 6 months and after 1 year of intervention
Health services	Access to health care	At enrollment, 6 months and after 1 year of intervention
Education	School attendance status for child, who pays school fees and scholastic materials	At enrollment, 6 months and after 1 year of intervention

Table 1: Type and description of the variables collected using vulnerability score card.

as in Table 2. Thirteen out of twenty (65%) were residing within 20 km radius from MUg HIV clinic. Majority (70%) of the adolescents dropped out while attending secondary education compared to those who had only attained primary level (30%) by the time of drop out of school as shown in Table 2. Six (6) of them dropped out of school at primary level and fourteen [14] dropped out at secondary level as shown in Table 2. All (100%) the adolescents studied were orphaned either by one parent or both. All the participants were followed up on average 4 months. The skills given to the adolescents in the study period were: tailoring (2 adolescents), hairdressing (6 adolescents), mechanics (3 adolescents), plumbing (1 adolescent), jewelry (1 adolescent), knitting (1 adolescent), barbering (1 adolescent), cobbler (1 adolescent), and cookery (4 adolescents) as shown in Figure 1. Sixteen out of the 20 (80%) have been able to use the acquired skills to gain income to support their basic needs. The other four adolescents completed apprenticeship, but did not practice their acquired skills. One male opted to venture into another business and three females abandoned their vocations when they got married (data not shown). Majority (80%) of adolescents could afford two meals a day at the time of enrollment into apprenticeship whereas 20% could only afford one meal a day (data not shown). At the fourth visit following apprenticeship, all adolescents could afford at least two meals a day. This is indicative of a 20% increase in ability to afford more than one meal a day. The findings showed a 75% increase in the number of adolescents who were income earners at fourth visit compared to income earners at enrollment. The proportion of adolescents whose basic needs (with at least 2 sets of clothing per adolescent) were fulfilled increased from 15% at enrollment to 30% at end of the review period.

Attribute	n (%)
Gender	
Male	12 (60%)
Female	08 (40%)
Age	Mean: 21 (SD=2.55)
District of Origin	
Wakiso	13 (65%)
Kampala	05 (25%)
Mpigi	02 (10%)
Point of Drop out of school	
Primary	06 (30%)
Secondary	14 (70%)
Year of Drop out	
2012	13 (65%)
2013	07 (35%)

Note: n=20

Table 2: Demographic characteristics of adolescents on apprenticeship.

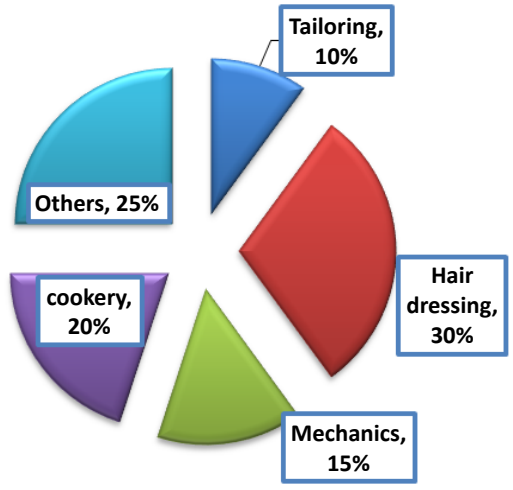

Figure 1: Distribution of Mildmay Uganda apprenticeship programme beneficiaries by skill acquired.

Discussion

We set out to examine the role of apprenticeship in improving the livelihood of adolescents living with HIV who had prematurely dropped out of school. Findings from this study show that vulnerability levels of HIV-positive adolescents on the apprenticeship programme at MUg had improved from the very poor and extremely poor categories to the poor category after one year of follow-up. Furthermore, the results of this study reveal that there was a remarkable increase in the number of adolescents who became income earners after one year on the apprenticeship programme. This is consistent with the findings of studies done in Tanzania, Malawi and Ghana which showed that apprenticeship is a means that bring about improvement in skills hence improving wellbeing of individuals [12-14]. In addition, those findings show that there was improvement in the quality of life of most adolescent apprentices in our programme since majority (80%) could afford to meet their daily basic needs after completing the apprenticeship. However, there is need for continuous monitoring of these adolescents to ensure sustained progress in the improvement of their livelihood and quality of life.

Majority (60%) of adolescents on the apprenticeship programme were males, and had dropped out of school at secondary level (70%) compared to primary level (30%). This concurs with the findings from a study done in Rakai district in the central region of Uganda that revealed that non-enrollment in school was higher among adolescents aged 13-16 years than in children aged 6 and 12 years. Similar finding of more adolescent males dropping out of school compared to their female counterparts has been reported by Makumbi [16]. This could be due to the fact that boys usually end up becoming bread winners in HIV/AIDS affected families by doing petty jobs. However, this was a striking contrast of the findings of studies conducted in other parts of Uganda which indicated that a large proportion of young people drop out of school at primary level and girls were most affected [11,17].

Moreover, the results of this study showed which apprenticeship trainings should be provided to HIV-positive adolescents who prematurely drop out of school in order to improve their livelihoods. In addition, findings revealed that hair dressing, catering and mechanics were the preferred vocations by majority of the adolescents.

This study is limited because it considered HIV-positive adolescents who were enrolled on apprenticeship in a specific period of time which affects the generalizability of the findings. In addition, this study does not explore the learning experiences of adolescent apprentices which could help to inform improvement in the implementation of apprenticeship programme within HIV care. However, results of this study highlight the importance of an integrated apprenticeship programme within HIV care programme on improving the livelihood of HIV-positive adolescents.

Conclusion

The results of this study suggest that apprenticeship plays a role in improving the livelihood of HIV-positive adolescents and can be one way that can be used successfully to improve the livelihood of adolescents who prematurely drop out of school. We strongly recommend that when young people drop out of school prematurely, they should be empowered through apprenticeship to live productive lives.

Author's Contribution

AB, SM, and GK conceived the study. AB, SM, GK, MO, and BM implemented the study. PKG, DM, SCM, and HC conducted the data analysis and prepared draft manuscript. All authors participated in writing, read and approved the final manuscript.

Grant and Financial Support

The findings of the work reported in this article were supported by the U.S. Centers for Disease Control and Prevention (CDC) (grant number 1UG2GPS002909-01). The content is solely the responsibility of the authors and does not necessarily represent the official views of CDC.

Acknowledgement

We acknowledge the programme staff including: Florence Kyamanywa, Olivia Nantale, George Ssempiira, and Saad Luyinda. We also acknowledge the input by Edmond Muyingo, Edith Akankwasa, and Yvonne Karamagi. We are grateful to the adolescents on apprenticeship programme and the support by all MUg staff.

Previous Presentation

Findings presented in this manuscript have been previously presented in part at the International AIDS Conference (Abstract Number WEPED426), Durban, South Africa 2016.

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