

Short Commentary*Open Access, Volume 3***Potential cost and benefits of integrating health care services for managing multiple chronic conditions in sub-Saharan Africa: A critical short review and commentary*****Corresponding Author: Peter Karoli**

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Abstract

Sub-Saharan Africa is currently having a dual burden of HIV and Non-communicable diseases. HIV is regarded as a chronic condition regardless of HIV being infectious, due to the absence of a cure. However, these patients have achieved a substantial increase in survival after receiving Antiretroviral Therapy (ART). An increase in survival puts HIV patients at risk of developing Non-Communicable Diseases (NCD).

Integration of health services for chronic diseases has been one of the suggested measures to be considered and recently, a scientist has invested to conduct research in this area to see if it can help to improve the quality of health care services particularly in resource-limited countries.

Most of the published work has found that; the integration of health services for chronic diseases into a single clinic is potentially cost-effective and has benefits. This approach could be used to minimize cost and help improve the quality of life and increase life expectancy among HIV-infected individuals. However, these findings need further evidence because some of the published data were obtained from weak study designs, and those regarded as strong were designed as pilots.

Introduction

Sub-Saharan Africa is currently having a dual burden of HIV and Non-communicable diseases. Due to absence of cure, these conditions are all regarded as chronic condition regardless of HIV being an infectious disease [1]. More than eight [8] million patients with HIV active in care across the lower- and middle-income countries have achieved a substantial increase in survival After Receiving Antiretroviral Therapy (ART). However, they are at risk of developing Non-Communicable Diseases (NCD) [2]. For instance among HIV patients in care, the prevalence of hypertension is up to 36.9% [1]. Interestingly, the Hypertension and HIV clinics still run vertically within the same facilities in some of these countries [3,4]. It's well known that there is a significant shortage of resources including staff to support these health services and it raises a concern to how will these resource limited countries minimize cost at same time provide the quality health care services [5].

Integration of health services for chronic diseases has been one of the suggested measures to be considered and recently, research scientist has invested to conduct research in this area to see if it can help to improve the quality of health care services [5]. The good example of integrated model of health care services includes the management of the HIV, Diabetes and Hypertension into a single clinic [6]. This model has been shown to be the best intervention and anticipated to be cost effective as compared to how those three conditions would be managed separately in the vertical programs [6].

Hence, integrating health services for HIV, Non-communicable diseases, and other infectious diseases, could result into more effective health services and offer a greater value. Cost-effective analysis is an approach to appraise the clinical benefits and costs associated with the healthcare interventions and it provides guidance for making decisions during investments, policy making and scaleup, which is beneficial when resources are increasingly constrained [2].

The available scientific evidences at the end of 2021

Recent findings have evaluated the potential cost and benefits of running an integrated HIV, Diabetes and Hypertension services into a single clinic. Four recently published articles include, Tinevimbo Shiri et al, in the study from Tanzania and Uganda [6], Stephane Verguet et al, from Uganda [7], Parastu Kasaie et al, from Kenya [8], and, Ilya Golovaty et al, from South Africa [2].

The articles differ in the models of integration that were assessed, from partial to a complex model of integration, i.e. the integration of services in terms of screening to the complex model of integration which involves the care and treatment [2,6]. However, the potential cost in all kind of integrated models is observed, and provides evidences that, this approach could help to minimize cost and have proper use of funds in the resource limited countries [2,6-8].

The authors found that, integration of services has a range of potential economic benefits from an individual, facility level, to the national level [6]. For instance, an individual would benefit both in terms of lower cost but also to improve the quality of life. Authors found that, integrating HIV, Diabetes, Hypertension and cholesterol screening and management had a potential advantage to decrease 10 years risk of cardio vascular diseases among HIV patients [7]. This would give these individuals more time to live, work and contribute to their country's economy, instead of becoming a burden to the health care. In terms of cost benefit, the authors found that, integrating these services would produce an estimated net cost in between \$1400 and \$3250/disability adjusted life year averted of an adult HIV patient [7]. That means, in a scarce resource setting, the averted funds could be allocated to improve other health care services to ensure good health to all.

Authors found that, the facilities would benefit from integration of HIV and NCD (Hypertension and Diabetes preferably) by minimizing the running cost. For instance, the authors report that the cost was 34.4% lower when managing two conditions and 48.8% lower when all three conditions were managed at a single clinic as compared to when those conditions would be managed separately in the vertical clinics [6]. These benefits come from different factors including proper use of the available staff, which would be paid twice if they would be allocated to work in vertical clinics. But also, in terms of staff per patient related time and the time costs per each clinic visit where, there were no significant differences between the integrated clinics and the vertical clinics [6]. That mean, same time interval used in vertical clinic would be capitalized to be used to manage more than one condition at a single clinic; instead of managing one condition and then make a schedule for the second condition on the other different weekdays.

Managing these conditions in an integrated model could not only be beneficial in monetary perspectives, but mostly on improving quality of life. As seen in some of the scientific evidence, even partial integration of services at the screening level (not including care and treatment) had incremental cost

of \$3.95 (42%) /person screened. However, this moderately increase in costs had potential benefits to avert Hypertension, diabetes and high cholesterol related death and disabilities to in patients with HIV [2].

Conclusion

Integration of health services of chronic diseases into a single clinic is potentially cost effective and has benefits. Published data suggest this approach could be used to minimize cost and help improve the quality of life and increase life expectancy among HIV-infected individuals. However, these findings need further evidence because some of the published data were obtained from weak study designs, and those regarded as strong were designed as pilots.

Conflict of interest: The author declares no any conflict of interest to the content of this manuscript.

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