

HS 480: Comparative Healthcare Systems Policy Memo

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Subject: An Analysis of the Effectiveness of Information and Service Delivery centered on HIV/AIDS Awareness and Counseling for Women in Rural and Urban areas of Nigeria.

Background:

It is known that one of the most burdensome diseases to ever spread in the continent of Africa is the Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome. HIV/AIDS is one of the leading causes of mortality in Sub-Saharan Africa and it continues to burden lives. Nigeria, the 7th most populous country in the world, carries the second largest number of people living with HIV/AIDS. [1] As of 2016, the HIV prevalence rate for Nigerians was 2.9%, meaning 3.2 million Nigerians were living with HIV [1]. HIV/AIDS is the second leading cause of mortality in Nigeria, after Malaria and within all categories of health, women and children are always the most at risk population. As of 2015, Nigeria had an estimated 41,000 new HIV infections among children. [2] Meanwhile, Antiretroviral coverage for pregnant women living with HIV was 30%, which was an increase from 14% in 2009; and mother to child transmission was at a rate of 23%. [2] This is significant information because the World Health Organization requires countries to ensure that 100% of HIV positive pregnant women receive proper counseling and treatment. [3] In order to learn about the effectiveness of information and service delivery centered on HIV/AIDS awareness and the utilization of services in Nigeria, I choose to focus on the correlations between knowledge of HIV/AIDS and the seeking of or availability to HIV counseling. The targeted population is women from rural and urban areas in Nigeria; and women who are pregnant. Through this analysis, the information and service delivery of HIV/AIDS awareness and counseling will be assessed for quality through the measures of structure. In short, is the information and service delivery of HIV/AIDS awareness and counseling offered? Is the target population reached? What are the outcomes and what do they reflect? Does the data show an overuse, underuse, misuse or an appropriate use of the resources available? I hypothesize that the information and service delivery of HIV/AIDS awareness and counseling is more wide-spread in urban areas rather than in rural areas and that most resources are being misused or underused. Thus, by identifying the source of the issue, health providers can eliminate disparities between rural and urban areas which will reverse the spread of HIV/AIDS, reduce the burden and subsequently save more lives.

Methods:

For this study, I collected data and information from the Demographic and Health Surveys (DHS), the Joint United Nations Program on HIV/AIDS (UNAIDS), and the World Health Organization (WHO) to create an observational cross-section study. For population percentages, I used websites called Index Mundi and Knoema. I chose data from the DHS for the years, 1999, 2003, 2008 and 2013 and I was able to use more recent information through the UNAIDS and the WHO. In some parts of the survey, specifically in the years 1999 and 2003, the data for pregnant women counselled about HIV and testing, was missing. The data from each year was categorized into 4 topics to make graphs that reflected those topics. The 4 topics were, Woman's Knowledge of HIV/AIDS in Rural and Urban Areas, Pregnant Woman Counsellor about HIV/AIDS, Pregnant Woman who received testing for HIV/AIDS, and a graph reflecting the Pregnant Woman who received or did not receive their test results (See Figures 1-4 Below). Each of the percentages in the data correspond to the population of women in either rural or urban areas. Meanwhile, with the information provided by these data sources, I was also able to create a characteristic table to better understand the data (See Table 1 Below). I calculated the female population in rural and urban areas and organized information based on marital status and education and the correlation to the knowledge of HIV/AIDS and counseling of HIV/AIDS. The knowledge of HIV/AIDS sections refers to any women who has any basic knowledge of HIV/AIDS while the counseling of HIV/AIDS sections refer to any women who has received counseling on HIV/AIDS transmission and prevention. The years 2003, 2008 and 2013 focused on the counseling of pregnant women only.

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Results:

Table 1 The demographic information about the knowledge of HIV/AIDS women had in years the 1999-2003 suggests that the more educated you were, the more likely you are to be knowledgeable about HIV/AIDS. [4][5][6][7] Overall, the demographic information about the knowledge of HIV/AIDS women had, as well as the percent of pregnant women counselled about HIV/AIDS in each year, displays the fact that majority of women have the knowledge of HIV/AIDS while less than majority get counseled. This shows a contrast between input use and utilization achieved by healthcare providers and their patients. None of the categories reflect 100% of pregnant women receiving counselling. In the year 2013, there is a more visible increase in the percent of women knowledgeable about HIV/AIDS as well as the percentages of pregnant women who receive counselling. The lowest percent of pregnant women who receive counselling had doubled by 2013 while the highest percent of pregnant women who receive counselling at 83.4%. [7]

Figure 1 Shows the women in rural and urban areas, knowledge of HIV/AIDS by each year. The data reflects that there is an increase each year and that majority of the women in both settings are knowledgeable which challenges my hypothesis that information is more wide-spread in urban areas. Information input is mostly effective in both settings.

Figure 2 Shows the percent of pregnant women who receive counselling in rural and urban areas by each year. The percent change from each year remains constant even though adequate information about HIV/AIDS is present. The only year that shows a major change is in the urban areas in 2013. [7] Majority of women know about HIV/AIDS however, less than a majority receive counselling. This could reflect an underuse and misuse of resources or inadequate service delivery.

Figure 3 Shows the data of pregnant women who received testing in rural and urban areas by each year. The data shows significant increases in the percent of women being tested in both rural and urban areas from 2008 to 2013. [6][7] In 2008, the percent of pregnant women who received testing in rural areas was 10.9% and increased to 18.7% in 2013. [6][7] In 2008, the percent of pregnant women who received testing in urban areas was 38.6% and increased to 58.1% in 2013. [6][7]

Figure 4 Shows the data of pregnant women who did or did not receive their test scores in rural and urban areas by each year. There was no data for the years 1999 and 2003; however, in 2008 the data shows that 8.9% of the of pregnant women who were tested in rural areas received their results while 2% did not.[6][7] The difference between the number of those tested and the number of those who received their results may reflect structural and process issues in the healthcare systems of Nigeria as well as misuse and underuse of resources.

Policy Relevance and Recommendations:

I had originally planned to make projections on the knowledge of HIV/AIDS corresponding to the percent of pregnant women being tested and counseled however, the data shows that there is no significant progressive impact on the percent of pregnant women being counseled as a result of the progressive trend in women's knowledge of HIV/AIDS. Thus, I believe that Nigeria has to first solve the issues and discrepancies within the quality of their healthcare systems, resource allocation and funding. Identifying disparities and gaps within the data is relevant for policy making and for the furthering of innovation in HIV prevention, diagnosis, treatment and care.

4 Points of Focus for implementation in Policy Relevance:

Improving Structure

The measures of structure are meant to examine input use and utilization achieved by medical professionals and their patients. With data presented above, the findings suggest that there is an urgent need for information and service delivery. The data shows that most women in Nigeria are well aware of HIV/AIDS and the discrepancy comes in with the number of pregnant women who receive counseling or are tested. Services are not being utilized either because they are insufficient or there is a lack of knowledge of them. Nigeria's healthcare systems need to revitalize their input use to maximize utilization.

Improving Service Delivery through Human Capital

An efficient healthcare system is one that works with their available resources and circumstances to provide the most responsive, equitable and successful care to achieve the best health outcomes possible. With data presented above, the findings suggest that there is an urgent need for service delivery because there is an inconsistency between information and utilization which suggests that the health services in Nigeria is not

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responsive, equitable or efficient. Mobilizing well-equipped healthcare providers to neglected areas can improve the number of women tested.

Localized Communication and Implementation

Western concepts and modes of implementation often times undermine local concepts or information which perpetually alienates and regresses the people it is meant to help. Health care systems can help yield better health outcomes by using communication and implementation techniques that parallel the means of communication and process of implementation, that is customary or traditional to the people. We have seen efforts to include local realities made in other countries through community based healthcare systems which have been successful like in Ghana. Healthcare systems need to allow communities to participate and take ownership in their healthcare systems and allow their social capital to empower them. Using this technique in Nigeria can help close the gap between information and utilization which will subsequently yield better health outcomes.

Funding

With the issues of the misallocation of funds healthcare systems need to rely on new sources of income to finance their services. Healthcare systems in Nigeria should look to partner with companies that can support their endeavors and other outside sources of wealth like philanthropy and any governmental fund that has strict regulations, tracking and monitoring of the use of their funds so that healthcare systems can be assured the money they need for the health services they are meant to provide. Although the National Agency for the Control of HIV/AIDS (NACA) recently lost funds, the Ministry of Health and other healthcare systems should continue to work with organizations such as this one to prevent any other future issues and to make sure the allocation of funds is protected and used accordingly. [10]

Recommendations by A Model Program:

Ghana

Ghana's Community-Based Health Planning and Services (CHPS) implementation applies the principles of Alma Ata and Universal Healthcare Coverage by bridging the gap between research and program implementation through providing the appropriate strategies for service delivery in disadvantaged regions in Ghana. People will not seek a service if it's not convenient and if they do not feel compelled to do so. Much of the principles in CHPS parallel the ideas in the four point of focus listed above. Programs like CHPS cover community participation, universal access, health system development and system approaches of service delivery. [11] By implementing community based programs to supplement the inconsistencies within Nigeria's healthcare systems, the Ministry of Health and NACA can eliminate the excuse of inadequate access, prevent misinformation, increase proper utilization, reduce disparities and subsequently yield better health outcomes.

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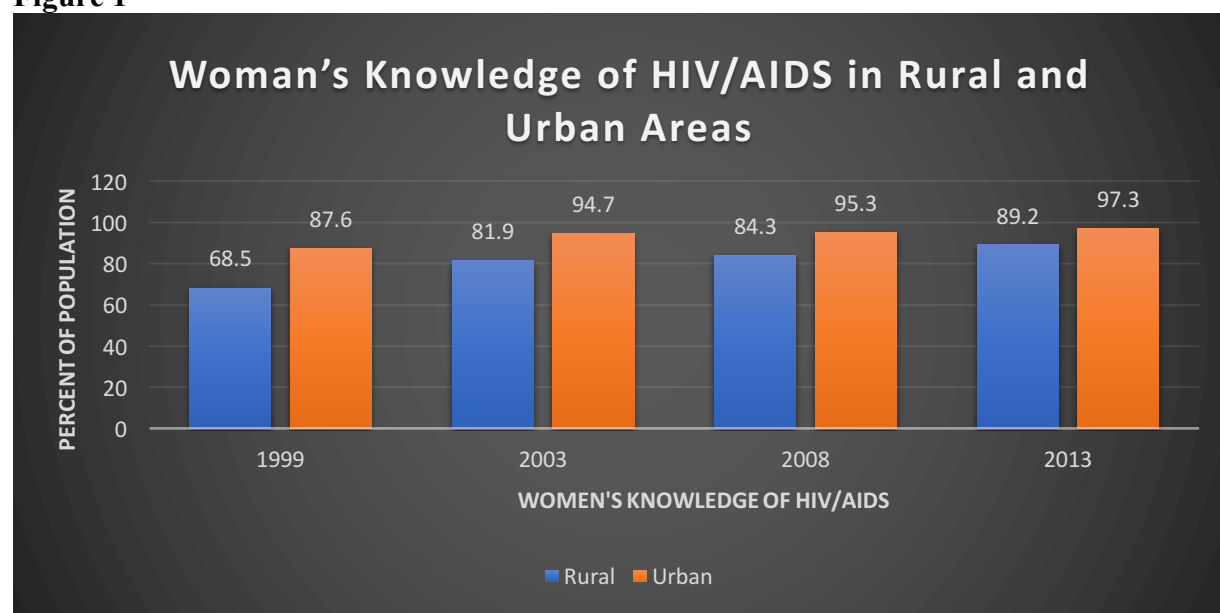
Appendix:

Table 1

Table 1 Characteristics of Women and Pregnant Women in Nigeria (1999-2013 DHS)

Variables:	Knowledge of HIV/AIDS (Women in general)				Counselled about HIV/AIDS (Pregnant Women)			
	1999	2003	2008	2013	1999	2003	2008	2013
Marital Status								
Never Married	86.4%	88.4%	92.9%	94.3%	No Data	23.3%	No Data	47.0%
Married	69.6%	85.4%	86.4%	91.8%		24.4%	Data	35.3%
Divorced	80.6%	88.1%	91.3%	95.5%		22.6%		45.4%
Education								
Primary	85.7%	86.6%	90.2%	93.1%	No Data	28.4%	22.8%	37.3%
Secondary	94.1%	94.8%	96.0%	97.8%		49.5%	44.5%	60.6%
Higher Education	98.1%	100%	99.3%	99.6%		71.3%	70.5%	84.3%
No Education	49.5%	77.9%	76.6%	85.7%		8.4%	6.1%	14.1%
	1999	2003	2008	2013				
Population (Index Mundi & Knoema) [8][9]	N=119,826,200	N=132,581,500	N=151,115,700	N=172,816,500				
Female Population	59,182,160.18	49.3% = 65,362,680	49.2% = 74,348,924	49.1% = 84,852,902				
Urban Population	36.3% = 43,496,910.6	37.64% = 49,908,626	42% = 63,466,179	46.4% = 80,190,196				
Rural Population	63.7% = 76,329,289.4	62.36% = 82,672,874	58% = 87,649,521	53.6% = 92,626,304				
Urban Female Population	21,483,124	24,602,512	31,226,548	39,371,747				
Rural Female Population	37,699,036	40,760,167	43,122,376	45,481,155				

Figure 1



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Figure 2

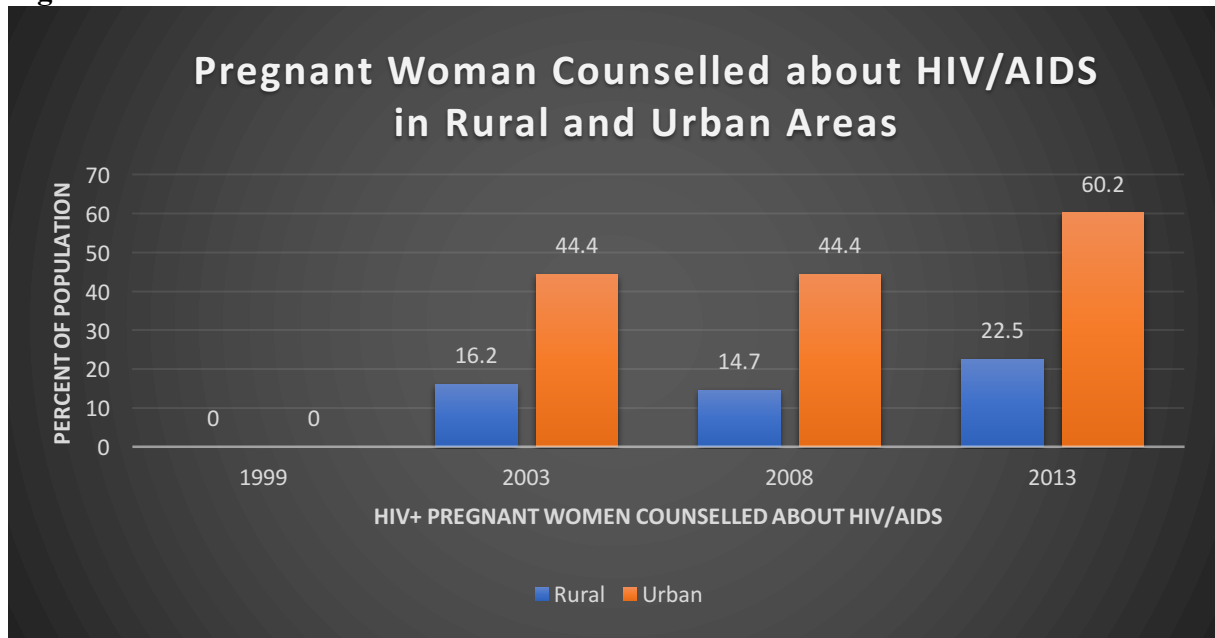
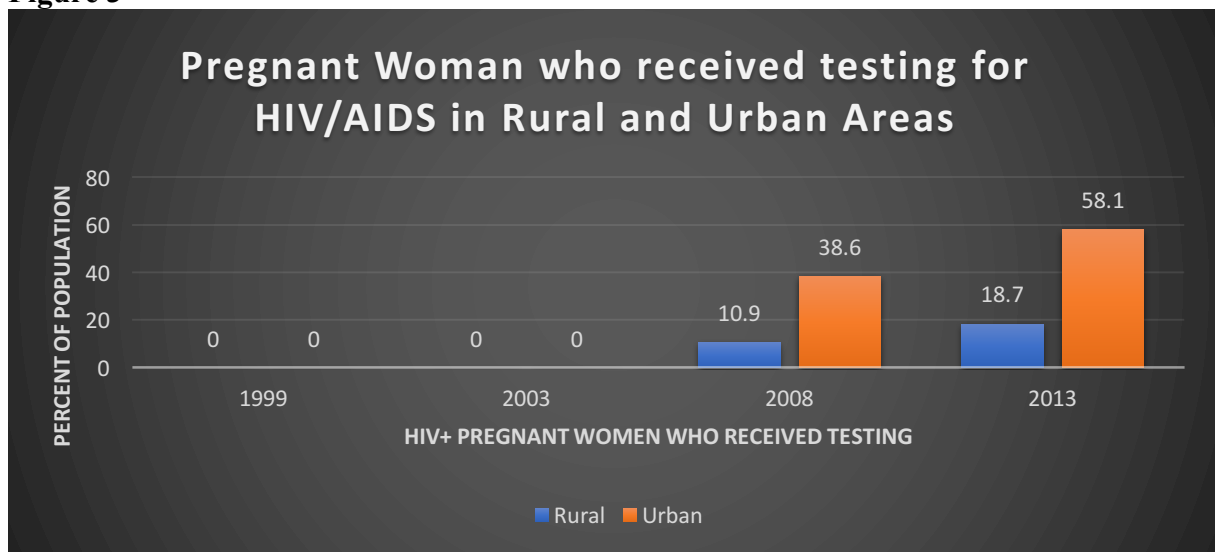


Figure 3



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Figure 4

