The Elimination Of Mother To Child Transmission Of HIV In Cuba

Posted on September 22, 2018

Geographic Area: Cuba

Health Condition: In the 1980s, when every Sub-Saharan African country was concerned about HIV/AIDS, Cubans also introduced a rigorous system to test the possibility of HIV in the citizens, but only a few affected people were found. However, a 1.2 per cent prevalence of HIV was reported among pregnant women in 2005, constituting 16 women out of every 137000 women. The total prevalence among people aged 15 to 49 years old was 8.1 per cent. Most of the affected, 77 per cent, adults were men. Regardless of the percentage, it affects women and their children (de Arazoza et al., 2007; Pérez-Stable, 1991). Since 2005, 26 mothers have transmitted the disease to their children.

Global Importance of the Health Condition: Around 36.7 million people were HIV positive in 2016, out of which 2.1 million were children under the age of 15. Most of these people live in Sub-Saharan Africa, and they have been infected with the disease by their mothers. In 2007, vertical transmission was 12 percent prevalent (de Arazoza et al., 2007).

Intervention or Program: The National AIDS Commission was founded in 1983 to control the disease. The program focused on testing and tracing, quarantine, sanatoria and daycare, treatment, health promotion, and education, and intersectoral work has controlled the condition. It has effectively succeeded in minimizing the epidemic. The program focused on vulnerable groups such as pregnant women and blood donors. The program aimed at minimizing the transmission of the disease to children. Treatment such as ZDV and ARVT was recommended for people with AIDS. Later, other drugs were produced in the country, such as 3TC, D4T, DDC, DDI, and IDV, to control HIV in the country. In 2001, every patient with HIV was covered (González et al., 2006; Pérez-Stable, 1991).

Cost-Effective: The early programs of nationwide screening cost the U.S. $3 million for Cuba. As Cuba was economically not stable, it became difficult for Cuba to spend on the project. Also, some of the medicine came from other countries, which was challenging for the country, but when the country invented its medicine, such as AZT, D4T, DDI, DDC, and 3TC, the cost was managed (de Arazoza et al., 2007). Although it was expensive initially, partnerships and donors helped control the disease.

Impact: The program was effective in controlling HIV in general. In 2015, Cuba became the first country to eliminate the mother-to-child transmission of HIV, and WHO validated it in 2015. In Cuba, 12 children HIV positive were born in the last 30 years, making it a success story (Castro, Khawja, & González-Nunez, 2007).

The Disease:

Around 35 per cent of women infect their children with HIV as they are HIV-positive mothers. If the mothers are infected, the likelihood of the children getting the disease increases. The mothers transfer the disease during pregnancy, delivery, and breastfeeding. Consequently, all the children born to HIV-positive mothers are vulnerable to HIV unless proper preventive measures are taken (Coovadia et al., 2007). People in African countries are affected by the disease most of the time.

Mother-to-child transmission of HIV is HIV transferred to the children from the mother during pregnancy, delivery, or breastfeeding. It is a chronic disease that does not have a cure, but it can be controlled using medication. The children get infected by their mothers. It can occur in Utero via the placenta or due to infection of amniotic membranes (Kourtis & Bulterys, 2010). It also happens during the delivery as various secretions come in direct contact with the placenta or contact with blood or other secretions during delivery. It can also be transmitted during breastfeeding as the infant takes in the infected milk from the mother. HIV infection in children is diagnosed early in life, within a few days after birth. For instance, in the non-breastfeeding population, one-third of the infection is detected within two days, two-thirds are detected after the first week, and by six weeks. Therefore, some argue that one-third of HIV occurs during pregnancy, and two-thirds occur during labour pain or breastfeeding. In addition, the symptoms of the disease vary from person to person. But if the disease is kept untreated, it can cause death to the children as AIDs affects the immunity of the children, leaving them vulnerable to diseases (Kourtis & Bulterys, 2010).

Aetiology:

The disease is caused by a virus that affects immunity. As negativity is attached to the condition, people face stigmatization and discrimination, and lack of preparation can cause death (Castro et al., 2007).

Recommendations:

The disease was controlled using national programs that not only focused on prevention and control but also educated and trained people to minimize the conditions. The government uses various treatment techniques and preventive measures. They involved communities and screened the population to ensure that there was no one with the infection (Pérez-Stable, 1991). The rigorous approaches to combat the disease can be replicated in other countries to ensure the prevention of the disease.

Implementations:

The government of Cuba was involved in taking all the possible measures to implement the program to control the disease despite the country's financial struggles. It focused on creating its own medication to control the disease and achieve the target of assisting everyone with the disease. They reached every affected person and helped them control their infection by raising awareness about the conditions and preventive measures. Also, the government distributed condoms and other tools to assist the citizens. The government, with donors and other stakeholders, emphasized controlling the condition before it became a major issue in the country.

Evaluation:

The program was successful in controlling HIV infection among babies. Less than five babies were born HIV positive in 2013, making it the first country to control Mother-Child Transmission of the disease.

Lessons Learned:

The governments must not wait for the outbreak of the disease to respond. They can focus on prevention if there are risks of getting the problem. Also, governments must take rigorous steps to prioritize the health and well-being of their citizen, as Cuba did to control HIV.

References

Castro, A., Khawja, Y., & González-Nunez, I. (2007). *Sexuality, reproduction, and HIV in women: the impact of antiretroviral therapy in elective pregnancies in Cuba*. LWW.

Coovadia, H. M., Rollins, N. C., Bland, R. M., Little, K., Coutsoudis, A., Bennish, M. L., & Newell, M.-L. (2007). Mother-to-child transmission of HIV-1 infection during exclusive breastfeeding in the first six months of life: an intervention cohort study. *The Lancet*, *369*(9567), 1107–1116.

de Arazoza, H., Joanes, J., Lounes, R., Legeai, C., Clémençon, S., Pérez, J., & Auvert, B. (2007). The HIV/AIDS epidemic in Cuba: description and tentative explanation of its low HIV prevalence. *BMC Infectious Diseases*, *7*, 130. https://doi.org/10.1186/1471-2334-7-130

González, I., Díaz, M., Pérez, J., Mengana, H., Gutiérrez, I., & Gorry, C. (2006). National Program for Detecting & Treating Mother-to-Child Transmission of HIV. *MeDICC Review*, *6*(1), 2–5.

Kourtis, A. P., & Bulterys, M. (2010). Mother-to-child transmission of HIV: pathogenesis, mechanisms and pathways. *Clinics in Perinatology*, *37*(4), 721–737.

Pérez-Stable, E. J. (1991). Cuba’s response to the HIV epidemic. *American Journal of Public Health*, *81*(5), 563–567.