

Why Scale-Up Care & Treatment of Pregnant Mothers in Health Care Facilities?

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Abstract

This article reports on the Prevention of Parent-to-Child Transmission (PPTCT) Program in Papua New Guinea and challenges that are faced. With limited information available on the topic, the report provides a valuable contribution to knowledge creation for both health workers and the general public. It is argued that care and treatment of pregnant mothers in health care facilities need to be scaled-up in order to reduce the impact of the HIV epidemic in Papua New Guinea and the stigma towards mothers and children who are HIV positive. All hospitals need a constant supply of quality antiretroviral drugs and supplies for the provision of quality care and treatment. A strengthened maternal child health and antenatal system will lead to greater health seeking behaviour by the population, and in particular more women presenting to health facilities for delivery services, knowing their HIV status, and where proper quality precautions can be delivered to protect the child.

Key words: Prevention of parent to child transmission (PPTCT), Human Immunodeficiency Virus (HIV), Acquired Immunodeficiency Syndrome (AIDS), antiretroviral treatment (ART), antenatal clinic, maternal child health

Introduction

The purpose of this research report is to present some interpretations and conclusions derived from current literature, health professionals and non-health professionals on the rationale for why Papua New Guinea (PNG) should scale-up care and treatment of pregnant mothers in health care facilities. The report offers some recommendations for consideration by those responsible for the implementation and scaling-up of the Prevention of Parent to Child Transmission (PPTCT) program in health care facilities throughout Papua New Guinea.

Research significance

The overall goal of this research report is to answer the question of why we should scale-up care and treatment of pregnant mother's in health care facilities and in doing so, highlight the importance of the Prevention of Parent to Child Transmission (PPTCT) Program here in Papua New Guinea.

It is also hoped that this research report will aid educated elites to understand more fully the PPTCT Program and what it entails. In this way, they are better informed about this intervention and can educate the people within their own

communities about the importance of early intervention and antenatal care visits.

Methodology

During the process of preparing for my research report back in May 2009, I had initially decided that the bulk of the information that I would collect would come from current literature on the Prevention of Parent to Child Transmission (PPTCT) Program here in Papua New Guinea. However, as a consequence of the lack of current literature on Papua New Guinea's perspective of the program, I decided to draw up a questionnaire to gauge the views of health professionals and non-health professionals about the scale-up of care and treatment in health care facilities.

The Careers in Development Team ensured that partners and stakeholders, as well as placement agencies were aware of the goals and objectives of the Careers in Development Program (CiDP) in the initial stages of implementation. It was then quite easy for me to explain the component on research and seek the help of my supervisor in the first placement in gathering literature on the PPTCT program here in Papua New Guinea and abroad. Through the use of her networks, the Internet and UNICEF's Intranet, I was able to collect information on PPTCT and pediatric HIV care and treatment, PNG factsheets on PPTCT, maternal health and HIV, and, a position paper on PPTCT by the Joint United Nation's Team on AIDS (JUNTA).

Data on the number of health care facilities providing PPTCT services, the number of HIV positive women and so forth were sourced from the National Department of Health's Surveillance Unit. The National HIV Strategy and Surveillance Reports were provided to me by a senior medical consultant at the Port Moresby General Hospital's Pediatric Ward.

To complement the information and data received, a questionnaire was designed and circulated among health professionals and non-health professionals directly involved in the scale-up and implementation of the PPTCT program in Papua New Guinea. A total of twenty people participated in completing the questionnaire. However, a limitation of the questionnaire that I identified was the degree of understanding about the PPTCT program between health professionals and non-health professionals.

Another limitation of the research is the reliance on data that is already a year old. At best the findings indicate the situation at the time the data was available, and, as more current data becomes available, different interpretations and conclusions could be made.

Issues were derived from:

- reading relevant literature
- analysing the completed questionnaires

- identifying reasons why we should scale-up care and treatment of pregnant mother's in health care facilities
- interpreting and drawing conclusions from identified issues and influences.

Interpretations and conclusions

The interpretations made and conclusions drawn have been derived from the analysis of current literature and questionnaire data in the qualitative analysis research method.

Background

Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) remain priority health issues as infection and transmission rates in Papua New Guinea continue to climb. The HIV prevalence is estimated at 1% by the end of 2008 and there are 56,175 people projected to be living with HIV and AIDS in the country. The number of HIV positive persons continues to grow each year with women and young people being most at risk. The prevalence rate is highest among the 15-39 age group with the majority of them being females. Hence, because 70 per cent of pregnant women also fall in the 15-39 age bracket, the risk of mother to child transmission in PNG remains high.

Currently in the country, Prevention of Parent to Child Transmission (PPTCT) programs have a very limited reach and focus primarily on providing counselling and testing for women who come for antenatal services – as opposed to care and treatment. Follow-up for those who do test positive, including the provision of antiretroviral treatment (ART) drugs at delivery, is not well covered. Furthermore, with only 60% of pregnant women attending an antenatal clinic, the remaining 40% go without any support or knowledge of their HIV status.

In this regard, the Prevention of Parent to Child Transmission (PPTCT) Program is vital for reducing the impact of the HIV epidemic in Papua New Guinea, as well as reducing stigma towards mothers and children who are HIV positive. The PPTCT Program involves a range of services which include:

- preventing primary HIV infection in women and their partners
- preventing unintended pregnancies in women with HIV
- preventing HIV transmission during pregnancy, childbirth and breast-feeding periods
- providing care, treatment and support for HIV-infected women and their families.

But in order to deliver these services, it is essential that access and quality of antenatal care must be established and further strengthened in order to motivate women to fully attend antenatal clinics and participate in required follow-up. As such, it is imperative that the PPTCT program, especially care and treatment of pregnant mothers, is scaled up in health care facilities.

Overview of Prevention of Parent-to-Child Transmission in PNG

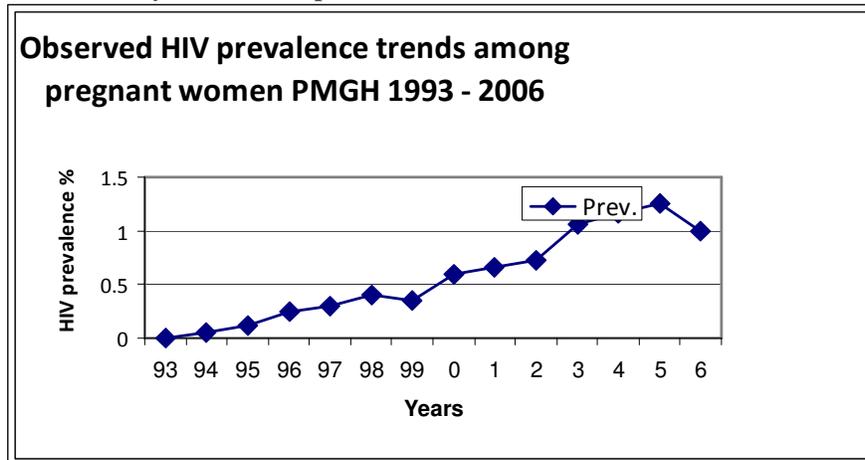
The Papua New Guinea Prevention of Parent to Child Transmission (PPTCT) Program, formerly known as the Preventing Mother to Child Transmission (PMTCT) Program, is a nationwide program which commenced in 2003/2004 and implemented within the maternal child health services through the PNG health care system which is provided by both church and government institutions. The aim of this strategy is to ensure that the program becomes part and parcel of the routine services that are provided to women and children. In this program, women in antenatal clinics are provided with information on HIV with emphasis on the importance of staying negative and knowing their HIV status in order to protect their baby and their families through early detection in order to improve their long term outcome through timely antiretroviral treatment (UNICEF 2006).

Depending on the capacity of the health care facilities, large group information, small group and or individual pre-test counselling is provided and the 'opt in' or 'opt out' strategy used for testing (Hunter 2005). The opt-in or opt-out strategy refers to patients being given the choice to undergo or not to undergo testing and treatment. Individual post-test counselling is done for all positive women, including counselling for infant feeding options and ART administered at delivery. However, a major challenge in this setting is the capacity of the health care facility to provide innovative programs in order to enhance the affectivity of the primary prevention interventions within the Maternal Child Health services and follow that up with related programs in the community care and support settings to enhance the reduction of transmission of the virus (Hunter 2005).

With the strategy in place the PPTCT Program is now beginning to scale up; however, PNG is a long way away from experiencing any tangible impact of the reduction in the number of infants infected with the virus (UNICEF 2006). According to the 2004 National Health Information System statistics, about 200,000 women in PNG give birth each year with 60% of these women attending antenatal care and only 40% delivering their children under supervision. This means almost half of the pregnant women will not have access to PPTCT programs, consequently missing the opportunity to access primary prevention information and PPTCT services.

To date, PPTCT programs are implemented in seven of the 20 provincial hospitals, and in about seventeen health care facilities which provide HIV information, counselling, testing and antiretroviral treatment for protecting the baby. Since 2004, more than 17,000 pregnant women have accessed PPTCT services; 10,000 of these in 2005 (National PMTCT Data 2005). This equates to 5% of the total number of women delivering each year, or only 8.3% of those who attend antenatal care each year. At the Port Moresby General Hospital alone, the HIV prevalence rate among pregnant women has steadily increased over a number of years (refer graph below).

Figure 1. Observed HIV prevalence trends among pregnant women at Port Moresby General Hospital 1993 - 2006



The challenge of follow up care and support to track the status of the children and support the health of the mother is a task that needs good coordination between the health care facilities and the community. This needs significant improvement within the current system to improve and provide high quality care and treatment to pregnant mothers in health care facilities throughout Papua New Guinea.

Furthermore, to ensure that 80% of the women attending antenatal care receive PPTCT services, an injection of major resources is needed both in terms of staff numbers and capacity through skills training. Currently, throughout the country, inadequate numbers of health care workers remain a major constraint to the delivery of care to affected people. Moreover, the inaccessibility of health facilities, many of which are non-functional, due to a lack of basic resources, make it difficult for pregnant women to access antenatal care. Long distances, lack of transportation and difficult terrain are major impediments for pregnant women to access antenatal care through which PPTCT services are provided, subsequently impeding the overall impact that PPTCT program would potentially achieve. Major investment by the government into logistics and infrastructure and supporting safe motherhood programs through strategies needed to improve the coverage and quality of antenatal care and delivery services are a critical necessity in order to achieve the United Nations' goals for this commitment (National PMTCT Data 2005).

Prevention of Parent-to-Child Transmission program

Papua New Guinea's (PNG) 2006-2010 National Strategic Plan for HIV and AIDS encompasses prevention of parent to child transmission (PPTCT) as one of the key focus areas. PPTCT is also included in the Health Sector Strategic

Plan for STI, HIV and AIDS (2008-2010) with an overall objective of providing PPTCT services to all provincial hospital and health centres in PNG by 2010.

However, expanding services to all facilities has been difficult with only about 5% of HIV positive women accessing anti retroviral drugs for PPTCT. Various factors contribute to low service coverage and uptake, including poor access to antenatal care, low uptake of supervised delivery, inadequate follow up of positive women and their infants, a largely rural population far from PPTCT and Pediatric HIV programs and inadequate testing facilities both for women and children due to human resource constraints generally and in antenatal clinics and maternal and child health specifically.

In addition, lack of clarity regarding positioning of PPTCT within the health service delivery context, insufficient understanding of the scientific basis behind PPTCT and paediatric HIV care and treatment, lack of a national costed plan, multiple uncoordinated PPTCT training curricula, ambiguities in policy and guidelines, an inefficient HIV testing and counselling algorithm in antenatal care, and weak monitoring and evaluation systems for HIV care including PPTCT, have also contributed to limited scale up to date (UNICEF 2009).

Health sector response to Prevention of Parent-to-Child Transmission

The 2006-2010 National Strategic Plan for HIV and AIDS encompasses the overall HIV strategic response guidance. The plan prioritizes increased access to HIV prevention, care and treatment, including PPTCT services and is the framework underpinning the coordinated response to HIV and AIDS in PNG. The objectives and strategies are also integrated into the Medium Term Strategic Plan of PNG. In 2008 key stakeholders in Papua New Guinea began formulating a National Prevention Strategy for HIV and PPTCT to be a core intervention. The final strategy was completed in the first quarter of 2009 (UNICEF 2009).

The Health Sector Strategic Plan for STI, HIV and AIDS 2008-2010 includes an overall objective of providing PPTCT services to all provincial hospitals and health centres in PNG. However, there has been difficulty in sustaining services and meeting minimum standards partly due to the lack of an established 'home' at the National Department of Health (NDoH) to be accountable for program guidance and implementation. To date PPTCT implementation was placed between two core NDoH programs: Family Health Services and Disease Control making coordination, planning, monitoring and management of the delivery of services difficult (UNICEF 2009).

The antenatal coverage (first visit) and supervised delivery rates have declined over the years with rates at less than 60 % and 35 % respectively, impacting the potential reach of PPTCT services and hence reducing the ability to make a significant impact. PNG has a total of 676 health centres facilities (2007), of which only 279 (excluding sub-centers) are able to provide antenatal care. By

the end of 2007, 38 health centres facilities were able to provide basic PPTCT services including provision of ART to both mother and baby at delivery. The major hospitals, including Port Moresby, Mount Hagen and Goroka hospitals, and major health facilities have established follow up care services for continuum of care through various mechanisms to reduce fall-out rates and improve timely ART provision and improved adherence. This includes linking with non-government organizations (NGOs) for continuum of care to communities in some health facilities. Although all health centres are potentially capable of providing maternity services including antenatal care and delivery, due to a variety of reasons including human resource constraints, lack of staff motivation/awareness and monitoring, not all these facilities are able to provide the services.

Follow up treatment and care support for women and families that have received PPTCT services remain a challenge in most health facilities due to the lack of comprehensive support services and minimum number of facilities providing paediatric ART. The following factors are identified as bottlenecks for follow up to treatment, care and support of women and families/

- Poor access to antenatal care with less than 60% (first visit) of pregnant women in PNG attending antenatal care services
- Late attendance at antenatal care – often not until after 30 weeks
- Less than 35% of women receive a supervised delivery
- Inadequate follow up of HIV positive women due to lack of adequate health facility based follow up services and issues related to stigma and lack of community based organizations (CBOs) working with PPTCT and Paediatric HIV programs to provide linked follow up services
- Remote rural areas where majority of people live do not have access to opportunistic infection and antiretroviral treatment (OI/ART) services.
- Due to geographical remoteness, transportation difficulties limiting the ability to push PPTCT services where highly active antiretroviral therapy (HAART) is not readily accessible making it difficult to provide follow up treatment and care services for infected women and her family
- Due to the lack of personnel resources, the ‘opt-out’ strategy is used in the main government health facilities. Where it is relatively feasible, particularly in the Catholic Church health services, the ‘opt-out’ strategy is being used. Since the inception of the program, the number of pregnant women accepting to test in well established centres using the ‘opt-in’ strategy has increased from less than a third to 80% in some facilities. A variety of modified strategies have been used in various facilities in an attempt to improve women’s acceptance to test, without taking away the chance to refuse.
- Up to 50% of women delivering at the major provincial hospitals have not attended antenatal care and the very low health care worker to patient

ratio in the labour wards do not allow most women with unknown status to be counselled and tested even where the services are available.

Despite the presence of political commitment and partner support, PNG continues to face significant bottlenecks. These include extremely limited decentralization of HIV services, very few providers trained in paediatric HIV care and treatment and weak infrastructure, particularly with respect to laboratory services including capacity for early infant diagnosis. Limited testing of children in 2008 resulted in only 13 children being initiated on ART during the first six months of the year (Aggleton et al., 2008).

The Joint Inter-Agency Task Team made up of the Department of Health, UNICEF, WHO, the United States Centre for Disease Control and Prevention and the PNG Prevention of Parent to Child Transmission and Paediatric HIV experts; reviewed the PPTCT and Paediatric program in March this year. The Joint Mission Report (2009) came up with recommendations designed to assist the Department of Health and partners accelerate the scale up of care for HIV-exposed and infected infants and children, within the context of the Health Sector Strategic Plan for STI, HIV and AIDS 2008–2010. This was specifically with respect to National Strategic Plan Focal Area 1 (Treatment, Counselling, Care, and Support) with a specific focus on areas 1.3, 1.4, and 1.5 (laboratory, ART, and Opportunistic Infections), and Focal Area 5.3 (Human Resource Development and Management). Recommendations are categorized in four areas, namely optimizing delivery of services to HIV-exposed infants, identifying HIV-infected infants and children, promoting appropriate infant feeding counselling, and providing care and treatment for children with HIV.

Advantages of scaling up care and treatment

There are more and more partners interested in supporting the National Department of Health to realize its goals in both PPTCT and Paediatric AIDS. The new national health strategy for HIV also prioritizes PPTCT and the strategic priorities which are reflected are those found in the final draft PPTCT and Paediatric AIDS Operational Plan (2010-2015) (guiding documents are complementary and streamlined).

Promotion and uptake of early, expanded antenatal clinic attendance which includes PPTCT has been recognized as a strategic entry point for addressing both HIV prevention and treatment while at the same time having an overall impact on maternal health outcomes. An additional benefit in the merging of these two health interventions is the resultant strengthening of existing health systems. Use of integrated programs makes sense, both financially and in terms of sustainable solutions in order to address both issues. Use of existing or available HIV resources can support strengthening of maternal and child health services and prevent vertical transmission of HIV.

The application of a family-centered approach to PPTCT and antenatal care also contributes to increased engagement of men. Involvement of men in early

antenatal care empowers them in their role as a 'family leader' who protects the health of their entire family while at the same time also helps to diminish the potential gender-based violence and empowers them in their role of supporting improved child health.

Increasing accessibility and availability of quality antenatal care HIV counselling and testing services from the current 24% to 80% of all pregnant women in the country faces immense challenges in PNG. PPTCT is an integral component of a comprehensive maternal child health package of services to pregnant women. The high maternal mortality rate, limited antenatal clinic attendance and supervised deliveries in PNG pose special challenges. It is therefore critical to work along with the maternal and child health services and systems. Addressing gaps and strengthening maternal child health services will in turn impact on the quality, accessibility and availability issues around PPTCT and Paediatric AIDS.

Evidence shows that a limited number of simple, affordable interventions could reduce deaths of both mothers and children if service provision was strengthened and reach maximized. These client-friendly antenatal clinic services – accessible to both women and men – are required to improve both the quality and coverage of antenatal care which also includes PPTCT services as part of an integrated approach to family-centered service delivery.

Perspectives on scaling-up care and treatment

Health professionals and non-health professionals working in health and directly involved in the implementation and scale-up of the PPTCT program agree that there is a comprehensive PPTCT program here in Papua New Guinea. However, it is a program that needs more support from the government in terms of scaling up the service to all health care facilities and not just the main urban hospitals. In addition, the scale-up of PPTCT services should now be focused on providing high quality care and treatment to positive pregnant mothers as opposed to just counselling and testing.

The scale-up of PPTCT, especially care and treatment services, to all health care facilities throughout Papua New Guinea is viewed by many of those who undertook the questionnaire as a need in providing mothers with high quality antenatal care. As such, it is imperative to have HIV testing available from all antenatal service providers so that early diagnosis is made and the mother can then commence antiretroviral treatment to protect the unborn child from acquiring the virus.

The scaling up of care and treatment services in health care facilities not only leads to the protection of the unborn child but can lead to the virtual elimination of paediatric HIV. Combined with improved infant feeding practices, PPTCT can help to reduce both child mortality and new HIV infections. In addition, it is believed that a more efficacious, lifelong treatment for HIV-infected women will result in fewer children orphaned by AIDS.

Based on the draft PPTCT Operational Plan, care and treatment services, particularly those offered under the Prevention of Parent to Child Transmission Program, have proven to be feasible and cost-effective. The incremental cost due to additional month/years on treatment will be partially counterbalanced by decreased costs for treatment and care for new HIV infection in children. In addition, in the long-term, the costs for the mother's own health and survival will also be compensated by increase productivity and decreased number of children orphaned by AIDS (12 out of 20 participants).

The upscale of care and treatment offered under PPTCT services is believed by almost all of those who undertook the questionnaire to strengthen progress towards achieving Millennium Development Goals (MDG) 4, 5 and 6. PPTCT can also act as an entry point to improved Maternal Child Health and Sexual Reproductive Health services at a primary level, which will result in decreased under-five and maternal mortality rates and reduced HIV transmission.

Recommendations

The Government and development partners should be congratulated for the major achievements realized in the fight against HIV and specifically for their efforts to create a specific PPTCT program. The low levels of prevalence currently in PNG, and the Department of Health's current reform agenda provides a window of opportunity to capitalize on the identified strengths and address the weaknesses and gaps in the PPTCT program before the problem escalates.

Investment by the Government towards the scale-up of the PPTCT program, focusing especially on care and treatment, will not only greatly reduce the rate of HIV acquired by unborn babies from acquiring HIV infection (from about 35% to 5%) from their mothers at birth, it will create a more responsive and comprehensive antenatal care and maternal child health system. A strengthened maternal child health and antenatal care system will lead to greater health seeking behavior by the population, and in particular more women presenting to health facilities for delivery services, knowing their HIV status, and where proper quality precautions can be delivered to protect the child.

Central leadership and coordination, clarity in the packages of PPTCT and paediatric care and treatment services to be delivered at each level of the health system will form a strong foundation from which to build the program. Global best practices and a greater understanding of the scientific basis behind PPTCT and paediatric HIV care and treatment will also assist in driving the necessary programming forward. In order for this to take place the government, stakeholders and partners must:

1. Prioritize and work at all levels of the health system to remove barriers such as distance, quality and cost related to accessing quality care and treatment services offered by the Prevention of Parent to Child Transmission Program (PPTCT) for all women.

2. Support the formulation and implementation of the Health Sector Strategic Plan for STI, HIV and AIDS to provide PPTCT care and treatment services at all provincial hospitals, sub-health centres, church-run hospitals, accredited hospitals and health service providers.
3. Ensure that all hospitals have a constant supply of quality antiretroviral drugs and supplies for the provision of quality care and treatment.
4. Ensure that all pregnant women with HIV are fully supported to access and receive comprehensive care and treatment services provided under the PPTCT Program, especially the provision of antiretroviral treatment.
5. Conduct operational research on the acceptability, accessibility and coverage of care and treatment services under the PPTCT Program. This will provide the Health Department with solid data on the bottlenecks surrounding the scale-up of this service and ensure that they are addressed accordingly.
6. Ensure that more awareness is done in the general public, especially in the rural communities, about PPTCT services. Prevention of transmission of HIV to infants must be promoted and understood as the responsibility of both the parents.

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Hannelly F.P. Kiromat is of Manus and Morobe parentage. She was one of 25 Cadets selected from close to 600 applicants to participate in the Careers in Development Program. The Careers in Development Program pulled together a total of 21 donor organisations, international non government organisations, and managing contractors within Papua New Guinea, to improve career opportunities in development for Papua New Guineans. The Cadetship covers a 20 month period and is designed to assist the cadet in gaining management standards relevant to working in development agencies. Her research was carried out during the 20 month cadetship program while being placed with the United Nation's Children's Fund (UNICEF), the William J. Clinton Foundation and Child Fund Papua New Guinea.