Risk Communication in the management of Mother to Child Transmission of HIV

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Abstract

Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) has become a major global health threat in the last two decades. Mother-to-child transmission (MTCT) is one pathway HIV is transmitted. The MTCT of HIV not only threatens children's health and imposes socio-economic burdens, but also increases the risk of HIV being transmitted from high risk populations to the general population. China is facing such challenges that there has been an increase of MTCT of HIV in reported cases from 0.1% in 1998 to 1.6% in 2007. Emerging with this rising trend is the concern for a lack of effective management of MTCT of HIV.

There have been many policies developed to prevent MTCT of HIV in China. However, successful management of MTCT prevention requires multi-sectoral cooperation to implement preventive measures. A case study from Guangdong Province shows that the key failure factors underpinning the problematic, non-cooperative management of MTCT of HIV are a lack of risk communication. This highlights the need for a risk communication strategy to overcome the problems.

This paper explains the importance of a risk communication strategy for the effective prevention and management of MTCT of HIV in China. It will first provide a brief background on the urgent needs for effective management of MTCT of HIV. This is followed by a discussion of the concept and functions of risk communication and its significance in risk management. Finally, the paper will present a case study to illustrate the need for a risk communication strategy to facilitate cooperation and coordination of the management of MTCT of HIV in China.

List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CDC	Centres for Disease Control and Prevention
HIV	Human Immunodeficiency Virus
MTCT	Mother to Child Transmission
MMTCT	Management of Mother to Child Transmission
PMTCT	Prevention Mother to Child Transmission
RC	Risk communication
RM	Risk Management

Introduction

HIV/AIDS has become a major global public health concern in the last two decades. Mother-To-Child Transmission (MTCT) is one pathway HIV is transmitted. It can occur at various stages of pregnancy including in utero, intrapartum and during breastfeeding (Sullivan, 2003). The data showed that there are 2.4millions women with HIV who gave childbirth every year in the world, they can lead to 0.8 million newborns infected HIV, and make newborn mortality rates increase 75% as a result of MTCT of HIV. Additionally, another study suggested that about 90 % of HIV positive infants and children were infected with HIV from their mother (Ebba-Duncan, 2001), so MTCT of HIV is a main way that the general population under 15 years old infected HIV. Therefore, MTCT of HIV is threatening children's health seriously and posing the heavy burden on the family and society.

In the absence of intervention, studies find the risk of MTCT of HIV to be between 25-40% in developing countries (Working Group on MTCT of HIV, 1995); in many African nations, MTCT of HIV approaches 20% to 52% (Behrman, Kleigman, & Jenson, 2004, p.107). In China, the proportion of MTCT of HIV in reported HIV cases have increased from 0.1% in 1998 to 1.6% in 2007. This suggested the urgent needs for effective management of MTCT of HIV to reduce threats from the prevalence of MTCT of HIV.

According to global studies, effective intervention measures can reduce risk of a mother to her baby by up to 38-50 percent (Scarlatti, 2004). These measures include drug treatment for the pregnant women with HIV, using caesarean section as the mode of delivery, providing alternatives to breastfeeding and following-up and providing HIV test for newborns(Sullivan, 2003). China began to carry out the prevention measures since 2003. The same scheme was made to guide the prevention of MTCT of HIV in whole country. However, the prevention of MTCT of HIV related to two groups population (mothers and children), and the management of MTCT of HIV is a complicated process. It needed multi-sectoral engagement and cooperation to implement intervention measures. Although many policies and regulations have been made to prevent MTCT of HIV and emphasised the importance of multi-sectoral collaboration in China, in practice, there were concerns that caused barriers to collaboration including lack of effective communication, and lack of explicit

responsibilities for different health sectors. Thus, it led to an urgent need of developing strategies to facilitate and strengthen collaboration between different health sectors engaged in the management of MTCT of HIV and effectively reduce the risk of MTCT of HIV.

Risk communication is a sound strategy which facilitates multi-sectoral collaboration. This essay will introduce risk communication theory and significance in strengthening multi-sectoral collaboration for effective management, and necessity in the management of MTCT of HIV in China.

RC and management of MTCT of HIV

The epidemic of MTCT of HIV would become a serious social threat if there were no intervention strategies for it. RC is a sound strategy to strengthen multi-sectoral collaboration for effective management, so it is necessary to introduce a RC strategy to manage MTCT of HIV. The following section will introduce theory and application of RC; and identify problems in the MMTCT of HIV in China with illustration a case from Guanfdong and explain the importance of developing RC strategies to effectively manage MTCT of HIV.

RC theory

RC theory includes the definition of risk, the concept, functions of RC, the relationship between RC, multi-sectoral collaboration and effective RM, and application of RC in practice.

Definition of risk

Risk is commonly referred to as the "potential for harm" (Sandman, 1989, p.1). Rodgers et al. (2002) define health risk as “a probability of an adverse outcome, or a factor that raises this probability to health” (p.7). It means that if a constant health risk such as MTCT of HIV exists, it will threaten human health and place unprecedented burdens on socio-economic life.

The concept of RC

RC is a field that has flourished in the area of environmental health. Through RC, information is exchanged between different individuals or organizations, and help them make choices and adjust to knowledge of risk. Lundgren and McMakin (2004) define RC as “to inform and encourage groups to work together to reach a decision

about how the risk will be managed (prevented and mitigated), and emphasize stakeholder participation, which encourages all those with an interest (stake) in how the risk is managed to be involved in consensus building" (p.5). The RM process begins with a hazard, a potential or actual danger to the environment or human health or safety, and stakeholders need sit together to discuss the risk each other and decide how risks are to be managed, then the decision is shaped by making a policy or regulation (Lundgren and McMakin, 2004, p.7). This RM process requires RC that seeks to determine stakeholder perceptions of a variety of factors including the risk and the organization in charge of managing risk; balance the needs of competing stakeholders; assist in reaching a resolution that all parties can live with (Lundgren and McMakin, 2004, p.8). It indicates that RC emphasizes all the stakeholders' engagement and a two-way communication (Chess & Salomon, 1992).

The functions of RC in RM

Rodgers et al. (2002) explain the importance of communicating risk clearly and openly to the public and creating an atmosphere of trust and shared responsibility between the government, the public and the other stakeholders. According the RM process and the concept of RC that have mentioned before, effective RC can facilitate stakeholders' involvement, strengthen their trust in each other and empower them (Lundgren and McMakin, 2004, pp5-8; Chess & Salomon, 1992); it is helpful for stakeholders to share risk information and build cooperation among them so that risk will be managed effectively and reduce duplication of effort and resource waste (Chess & Salomon, 1992). On the other hand, if there is lack of effective RC about the magnitude of a health risk, mistrust and conflict between stakeholders will be produced and lead to a negative influence on the implementation of policy and effective use of resources (Chu, 2006).

Risk communication and multi-sectoral collaboration

Barbara Gray (1989) defines collaboration as 'a mutual search for information and solutions'. Multi-sectoral collaboration is not a simple aggregation of different sectors, but is usually a "formalised relationship between autonomous agencies to work together as a whole to achieve a common goal, product or outcome" (Chu, 2007, pp.52-53). Forming a coalition allows interest groups to deal with complex social and public problems, demonstrate and develop widespread public support, and help

mobilize more resources to solve issues (Chu, 2007, p.53). Unsustainable development and resource limitations are major challenges that the world has to face.

However, it is not easy to build collaboration between different health sectors in PMTCT of HIV in China, for many factors create barriers to collaboration. Successful multi-sectoral collaboration requires understanding and trust between different stakeholders but for different health sectors, collaboration can mean different things, because they have different needs and concerns in collaboration. A "common definition of the problem", a "commitment to collaborate", and "identification of the stakeholders" are required to clarify roles and responsibilities and produce activities that work toward the common goal (Chu, 2007, p.53).

Reviews of RC strategies indicate that RC can facilitate stakeholders' involvement and strengthen trust between stakeholders by understanding stakeholders' needs and concerns in collaboration. Thus, RC can be developed to facilitate multi-sectoral collaboration in PMTCT of HIV in the future.

Issues in PMTCT of HIV in China

In implementing intervention measures, many health sectors have been expected to engage in the process of PMTCT of HIV. This requires high levels of collaboration across various medical sectors in China (Wang & Su, 2006). However, many issues influence the collaboration demanded in the implementation of PMTCT of HIV in China. A case from Guangdong province, in the south of China, identifies these issues.

A pregnant woman went to the local maternal and child health hospital for delivery. She tested HIV positive, and the director of the hospital suggested that she should move to the local infectious diseases hospital for the treatment of HIV. According to the existing policies, this hospital ought not refuse to admit a pregnant woman with HIV; however the director of the local hospital thought the hospital had no experience in providing the support she required and had no appropriate care unit for a pregnant woman with HIV, because they had never had an HIV positive pregnant woman before. He said repeatedly that the staff already had a heavy workload to provide services for non-HIV pregnant women, and there was not enough money to build an

extra care unit for pregnant women with HIV. He emphasized that the more important thing was that non-HIV pregnant women who were living in the hospital preparing for childbirth had claimed that, if the HIV positive woman had been accepted into the hospital, they would have shifted to other hospitals for their delivery.. This would have had a serious impact on the hospital's reputation and on the economic benefits it received from the government. The pregnant woman with HIV had to be sent to the local infectious diseases hospital, but there were no staff and labour room for her childbirth, because the function of the local infectious diseases hospital was just to provide services for patients with infectious diseases including HIV; however, local policies did not require the hospital to prepare for delivery by the HIV positive pregnant woman. Finally, the local maternal and children's hospital sent two doctors to the local infectious diseases hospital to help the pregnant woman with the HIV delivery.

This case shows there is an urgent need to establish collaboration between different health sectors in PMTCT of HIV in China. There are two factors that contribute to this need: firstly, no single health sector can carry out all measures of prevention of MTCT of HIV. The implementation of all prevention measures needs multi-sectoral collaboration between the maternal and children's health hospital, the Centre for Disease Control and the infectious diseases hospital. The local women and children's health hospital focused only on non-HIV pregnant women and did not have more resources provided for pregnant women with HIV; while the local infectious disease hospital just focused on the patients with HIV and did not have more service resources provided for HIV positive patients with pregnancy. The local Centre for Disease Control is responsible for HIV testing and purchase and distribution of medicines , but it can not treat AIDS. This indicates successful PMTCT of HIV needs multi-health-sectoral collaboration; secondly, there is a lack resources for a single health sector to prevent MTCT of HIV in some areas. The lack of human resources in the health sector is a serious issue in low-and middle-income countries, for HIV has placed an unprecedented burden on the scarce health-care resources in these countries (UNAIDS, 2006). In some areas of Africa, a lack of human resources at all levels has hindered progress in the prevention of HIV: there is a lack of health workers to provide counselling for pregnant women with HIV and to provide follow up with them and their babies. In these countries, not every health sector can provide HIV

tests for pregnant women and not all health workers in the health sectors can obtain training on the prevention of MTCT of HIV, because of the huge economic burdens on the health service (Limping PMTCT, 2007). China is facing the same challenges; therefore, it is important to develop strategies to facilitate the different health sectors' involvement in the management of MTCT of HIV.

This case also identifies two issues in the present collaboration between different health sectors engaged in implementation of PMTCT of HIV in China. The first one is that there was a lack of real collaboration between the different local health sectors.

The second issue is that there is a lack of two-way information communication between the different health sectors. There was only a one-way communication flow between the local policy-makers and the different local health sectors. According to the existing local policies, the two local hospitals should not refuse to admit a pregnant woman with HIV. but they did not implement the existing local policies and pushed the pregnant woman of HIV out of the hospital. This indicates that the policy-makers did not communicate with the local hospitals when they made the policies and it suggests again that there is a lack of clear roles and functions for the different health sectors engaged in PMTCT of HIV. It is easy for them to shift their responsibility to another sector. Additionally, this one-way communication may not meet the needs of different health sectors, and it will lead to a failure in the implementation of preventive measures (Chess & Salomon, 1992; Chu, 2006). Wang & Su (2006) point out that, although there are many policies provided to support PMTCT of HIV, the biggest challenge is still the significant difficulties in improving the awareness of stakeholders and implementing policy measures (p.7).

In summary, the case offers a micro-model of PMTCT of HIV in China. Many health sectors need to be involved in the implementation measures of PMTCT of HIV. However, the different health sectors do not make optimal use of their involvement in PMTCT of HIV to achieve a consensus, so this highlights the importance and necessity of developing the risk communication strategy to overcome the current problems to collaboration in PMTCT of HIV in China.

Conclusion

All in all, there is lack of the effective RC strategy to manage MTCT of HIV while the prevalence of MTCT of HIV has indicated an increasing trend in China. Although many policies and management measures developed to prevent MTCT of HIV in China, the key failure factors underpinning the problematic, non-cooperative management of MTCT of HIV are a lack of effective communication. Successful management of MTCT prevention requires multi-sectoral cooperation and stakeholders engagement which relies on effective risk communication. So this highlights the importance to develop risk communication strategy to overcome the current problems and effectively manage MTCT of HIV in China.

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