The accessibility of HIV-infected Poor Women to the Prevention of Mother to Child Transmission Service in Surakarta Indonesia

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Abstract

Background: HIV transmission from HIV-infected mother to child can occur through pregnancy, birth and lactation process; therefore, there should be Prevention of Mother to Child Transmission or PMTCT. Aims & Objectives: This research aimed to study the HIV-infected poor women’s accessibility to the Prevention of Mother to Child Transmission Service in Surakarta Indonesia. Material & Methods: This study was a qualitative research with explorative approach conducted in October-December 2015 and HIV-infected poor women as the unit of analysis. The sampling technique used was maximum variation sampling. Techniques of collecting data used were observation, in-depth interview and documentation, while data analysis was conducted using an Interactive Model of analysis with materialist theory. Results: Structural, financial and personal or cultural constraints were found: less target-appropriate health insurance policy, expensive cost of delivery with section caesarian surgery and breastfeed-substituting formula milk, and limited knowledge, experience and negotiation with the service provider leading to the HIV-infected Poor Women’s limited accessibility to comprehensive and sustainable PMTCT. PMTCT socialization, the giving-birth insurance and Food Supplementation program activation by Empowerment Work Group in AIDS Coping Commission in Surakarta City was the opportunity to access PMTCT service. Conclusion: Although PMTCT resulted in some problems, particularly formula milk administration and delivery process with section caesarian surgery, this attempt should be taken to make the baby born healthy. For that reasons, PMTCT service and health insurance should be improved from beneficiary data to accessible and sustainable procedure.

Keywords

Accessibility; HIV-Infection poor women; PMTCT.
Aids case distribution by sex consists of 61.5% male and 38.5% female, 18.6% of which are housewives. In Surakarta during October 2005-October 2015, there are 1762 HIV/AIDS cases: 590 HIV, 1172 AIDS, and 499 deaths. HIV case by sex consists of 294 (50.1%) males and 289 (49.8%) females, while AIDS consists of 810 (69.1%) males and 362 (0.8%) females, 271 of which (120 HIV and 151 AIDS) are housewives (1).

From gender dimension, the existing data shows that the women as the victim tend to increase. Ironically, the housewife is infected with HIV because their husbands often change sexual partner. At that time, housewife has been the part of group highly risky of being infected with HIV and can transmit it to her child/baby. The mother-to-baby transmission of HIV can occur through pregnancy, childbirth, and lactation processes; thereby the Prevention-of-mother-to-child Transmission (PMTCT) should be taken as the effective strategy involving a broad spectrum related to HIV/AIDS coping (2, 3). The forms of comprehensive PMTCT intervention includes Voluntary Counseling and Testing (VCT) service; antiretroviral therapy (ARV); safe delivery; best feeding procedure for baby and child; arranging pregnancy and terminating reproduction; administering prophylaxis ARV to child; diagnostic child examination. Those interventions can be undertaken sustainably (4, 5).

In HIV-infected mother, breastfeeding is risky thirteen times more than formula milk, because her breastfeed contains high-volume HIV (6). Per vaginam delivery is risky six times more than sectio caesarian one, because during delivery the infant can be infected with HIV-containing blood through virus swallowed in the birth canal. Virus is found in vaginal liquid of HIV-infected mother and stomach aspiration of newborn. The high number of HIV virus secreted by vagina and breastfeed is related to ARV consumed by HIV-infected pregnant woman (7). Therefore, in PMTCT, formula milk administration and sectio-caesarian (SC) delivery become the safe attempt to do and access (8). Materialist/Structuralist theory stated that the position in work hierarchy, power or social status affects an individual’s access to resource and material necessary to produce health (9,10,11,12,13). Everyone, including HIV-infected woman, is entitled to have access to health facilities and PMTCT service (14, 15,16,17,18,19).

**Aims & Objectives**

To study the accessibility of HIV-infected poor women to PMTCT service in Surakarta Central Java Indonesia.

**Material & Methods**

**Study Design and Area:** This qualitative research using explorative approach was conducted in Surakarta Central Java Indonesia in October-December 2015. The target of research was the HIV-infected poor women based on monthly family income. A total of thirteen subjects were selected by using purposive sampling, consisted a leaders of peer support groups in people living with HIV/AIDS. The primary informants were seven poor women with HIV who had income under IDR 1418,000 (Regional Minimum Wage). The supporting informants were three health care workers, one staff of Health Services in Surakarta and one program manager of AIDS Coping Commission of Surakarta.

**Data collection:** Primary data was obtained from key informants, family and related stakeholders. Secondary data derived from Health Service, AIDS Coping Commission of Surakarta and PMTCT service provider. The author employed documentation, observation and in-depth interview related to the poor women behavior in accessing PMTCT service based on the previously developed interview guidelines.

**Data validity and Reliability:** The author employed source triangulation and method to validate the data.

**Data Analysis.** Data analysis was conducted in-depth with an Interactive Model of Analysis encompassing data reduction, data display, and conclusion drawing (20).

**Results**

Indonesian health security system includes Health Insurance, Social Labor Security, Indonesian Army’s Social Insurance, Public Healthcare Security, Health Insurance for Poor Family, Healthy Fund, and Commercial Health Insurance organized by private insurance company for upper-middle income society (21). Since 2008, Health Insurance for Poor Family changes into Public Health Security, but it has not optimally fulfilled health security and service for the poor because of limited State Income Expense Budget. Local Government has social protection system as well, particularly for its citizen’s health funded with Local Income Expense Budget, Local
Health Security, for example Surakarta City’s Public Healthcare Program (thereafter called PKMS) started since 2008. The membership of PKMS is divided into two: Silver card charged with IDR 1,000 per individual per year and Gold card charged with no fee at all. Meanwhile, the healthcare services insured are inpatient and outpatient (normal service), normal delivery, and referral to the hospital existing in Surakarta and surrounding. Sectio-caesarian delivery is included into this.

Since 1 January, 2011, Delivery Security has been published, used for pregnancy examination, delivery help, post-partum service including post-partum Family Planning and Newborn service, the financing of which is assumed by Government. This program is conducted throughout Indonesia in government’s health facilities such as Public Health Center (Puskesmas), Village Health Post, Village Delivery House, Hospital, and private health facilities entering into contract (22). During transition period from health security to Social Security Organizing Agency, some changes occur in nationally integrated health security system. The enactment of RI’s Law Number 24 of Social Security Organizing Agency (thereafter called BPJSS) constituting the result of social security reform results in transition of some health securities, such as Public Health Security and Health Insurance into BPJSS. Similarly, the change occurs in Delivery Security that has ever been removed or stopped in 2014 following the enactment of BPJSS. Particularly in Surakarta, although Delivery Security is terminated, the participants of PKMS program still can access the pregnancy service twice.

Recently, since 2016 only National Health Security is enacted, organized by BPJSS. Nevertheless, in Surakarta, PKMS program still exists with some changes. The citizen enlisted in Gold PKMS will be integrated into BPJSS and those in Silver PKMS will remain to have it. The change also occurs in 2016 related to Delivery Security that will be enacted again. However, there is a fundamental change in the term of its program beneficiary. If formerly it is intended to fund all deliveries, the new one is intended to fund the high-risk pregnant women only. This program will be intended to all high-risk pregnant women, such as the pregnancy risk that will harm mother and infant’s life when it is not dealt with SC.

In the attempt of preventing and coping with HIV/AIDS in Surakarta, the Surakarta Mayor’s Decree Number 443.2.05/98/1/2012 on November 20, 2012 has been released about the establishment of AIDS Coping Commission, Work Group and Secretariat (23). PMTCT program in Surakarta involves Hospital and Puskesmas as VCT service provided, VCT clinic of Dr. Moewardi Hospital as the coordinator program, VCT clinic of Dr. Oen Hospital, Puskesmas Sangkrah, Puskesmas Manahan, Puskesmas Stabelan, Puskesmas Kratonan, Puskesmas Gajahan, Public Pulmonary Health Center and Indonesian Red Cross. ARV can be assessed freely in Puskesmas and Hospital providing VCT. PMTCT team in Surakarta consists of Obstetrician and Gynecologist, Delivery Room Midwife, Baby Room Nurse, Obstetric Policlinic Midwife, and has actively socialized to housewives, particularly pregnant women in 51 Kelurahans (Administrative villages) of Surakarta City in the program of People Care about AIDS. For example: all HIV-infected pregnant women should undertake examination routinely to find out the diseases in their pregnancy. Any diseases found should be treated according to the healthcare guidelines. All HIV-infected pregnant women should undertake delivery process with sectio caesarian and use formula milk in feeding their infant, to reduce the risk of mother-to-child HIV transmission. PMTCT intervention aims to make HIV-infected women capable of arranging their pregnancy and to prevent their child from being infected with HIV.

Surakarta City’s AIDS Coping Commission stated that during January-October 2015, the number of pregnant women undertaking VCT through healthcare facilities is below the target, that is, only 35% or 3,799 out of total 10,829 targeted people (23). The achievement of Prevention of Mother to Child Transmission in Health Centre Service Facility, Surakarta were shown in table 1. Meanwhile, the cumulative number of People Living with HIV/AIDS (PLWHA) treated with ARV in Surakarta is 6,621 during January-October 2015. The number of HIV-infected pregnant women receiving prophylaxis ARV is 47. (Figure 1). The data above shows that VCT and ARV can be obtained freely in many places and is relatively accessible to PLWHA including the HIV-infected poor women.

The result of research shows that the family income of HIV-infected poor women is IDR 750,000-IDR 1,000,000. It means that their income is below Surakarta City’s Regional Minimum Wage of IDR 1,418,000 per month; it is barely insufficient to meet their need for eating and living daily. Thus, they sometimes are entrapped with debt and usurer. Bad
fortune surrounds the HIV-infected poor women’s life at least in some aspects. The first is physical weakness of poor family because there is high ratio of the family dependents to the healthy adult members working. Viewed from Surakarta case, housewives become the vulnerable group because generally only husband earns living in the family. It is unsurprising that the family will encounter big problem to prepare for delivery process and safe lactation for their baby. The second is any form of isolation, for example information source access. HIV-infected poor women have no information equipment such as television, radio, do not want to or shyly attend the meeting such as “arisan (gathering)” often used as the information media for social program and citizen health. The third, they are in the form of vulnerability, meaning having no reserve particularly “money” to deal with emergency such as sectio caesarian or formula milk administration. The fourth is helplessness in dealing with others or health personnel unfriendly to them. From physical distance, VCT provider facilities and ARV drug are distributed in various areas and accessible using various public transportation vehicles existing in Surakarta. It means that access to VCT and ARV drug service is good, even it is free. However, their accessibility becomes a big problem related to SC delivery and breastfeed-substituting formula milk. Viewed from facility availability to give birth with sectio caesarian surgery, all large hospitals in Surakarta have catered to SC surgery with mean cost of IDR, 10,000,000. Education and Training Division of Dr. Moewardi Surakarta Hospital states that the number of SC deliveries increases significantly from 512 patients in 2011 to 1688 in 2012. Since the presence of Delivery Security program, everyone can get delivery service freely in local Hospital. About 75% of women giving birth in Dr. Moewardi use Delivery Security and 25% do not so in 2011-2012. Despite termination in 2014-2015, Delivery Security is reenacted in 2016. Delivery Security to be enacted will be more appropriate-target and give the HIV-Infected poor women the access to SC-delivery process. It means they have an opportunity of having delivery with minimum risk of HIV transmission to child using Delivery Security. Actually, the formula milk is available widely and distributed evenly in supermarkets and shops in Surakarta, but its price is expensive, IDR 100,000/50 mg, unaffordable to poor family. Meanwhile, formula milk will substitute breastfeed constituting the only feed for baby within six month after his/her birth, so that the cost to be spent is so high. On average, HIV-infected poor women or her family should spend hundreds thousands rupiah to buy formula milk per week. The HIV-infected poor women’s accessibility to PMTCT, particularly in lactating process using formula milk is still very low. In Surakarta, there have been Food Supplementation program, despite very limited quantity, 20 PLWHA. Food supplementation, particularly formula milk for HIV-infected baby, has not been implemented, meaning that the access has not been opened. It is also affected by the less optimum implementation of Empowerment Work Group activity in AIDS Coping Commission.

Discussion
In Indonesia, social health insurance increases access of health service utilization to the outpatient and among the poor patients with Askeskin programme in urban areas (24). The accessibility of HIV-Infected poor women to comprehensive PMTCT service is still limited in Surakarta Indonesia. Although some facilities and health services such as VCT and ARV are accessible, particularly the delivery and lactation process with minimum risk of HIV transmission is instead difficult to access. It is because many constraints: structurally, number, type, concentration, location, and configuration of (facility/healthcare) provider; financially, individual/family treatment cost including health service type covered in health insurance/security; and personally/culturally, a set of explicit and implicit regulation determining the behavior of social subject in relation to their health such as their incapability of going to service center, of communicating with service provider, and disrespectful behavior of service. Structural constraints can be seen from the less target-appropriate health security policy. Health insurance for Poor family (Askeskin), Public Health Security, Local Health Security and Delivery Security sometimes even miss or exclude the poor and needy people from the beneficiary of healthcare service. The change of policy and regulation related to social/health security form and service affects the accessibility of HIV-infected poor women, because sometimes they get information on the change lately. In addition, no special sustainable program is intended for baby born from HIV-infected women such as formula milk administration. The operation
of PMTCT service in Surakarta still uses 80% help from donor institution, the Global Fund to Fight AIDS, Tuberculosis, and Malaria, meaning that the fund is still dependent on outsider. So, the quality controls mechanisms with universal health coverage (UHC) policies; to monitor the impact of UHC among the poorest; intervention research to reach the poorest with UHC; and inclusion of private providers without formal medical qualification in basic healthcare (25).

The main constraints are SC delivery and formula milk administration to substitute breastfeed. These two services need large fund and are expensive for the poor family, so that they can afford it if only it is covered by social/health security (government/state grant). Unfortunately, not all of existing health securities covers SC delivery cost. So far Delivery Security provides SC delivery service during 2011-2014. In addition, Delivery Security itself does not provide service to the newborn or it stops after a while when the baby has been born. Meanwhile, baby born from HIV-infected women need sustainable formula milk administration, at least for 6 months.

Personal and cultural constraint can be seen from HIV-infected women’s limited knowledge, experience and ability of negotiating leading them to communicate difficultly with the healthcare officer/provider related their healthcare. In addition, some officers are unfriendly and disrespectful to HIV-infected poor women during healthcare process, because they are marginal, in both social and economic status, moreover when the healthcare officers are affected with negative HIV/AIDS stigma as moral disease. It vulnerably results in misunderstanding or delayed information delivery and delayed healthcare service. The midwifery and health care staff in health service can improve the information about HIV (26).

Behind those constraints, there are some opportunities that can be used to reduce and to change such the condition. Firstly, the policy of providing Delivery Security program is released in 2016 with new regulation intended to high-risk pregnancy women only, those actually needing it medically and socially. This provision opens the access for HIV-infected poor women to undertake SC delivery. Secondly, it is possible to give access in relation to formula milk to substitute breastfeed. It is because there has been the one responsible for it, Surakarta City’s AIDS Coping Commission through Work Group Empowerment conducting Food Supplementation activity for PLWHA and special program of economic empowerment for PLWHA, including Entrepreneurial skill improvement training. The implementation of policies and plan for tackling HIV and AIDS should be monitored and evaluated as well as sustainable (23).

The improvement of HIV-infected poor women’s accessibility can not only rely on the existing opportunity, but also utilize it and follow-up it with the real action touching them. In Indonesia, community cadres are pleased with incentives gained by mobilizing clients for the program (27). In addition, the data of poor people who need free healthcare service should be updated continuously. This process is not easy because healthcare service, and social/health security are very complex but it should involve the state/government, because somehow health is the right of all people without exception, including the marginalized ones such as HIV-Infected poor woman.

**Conclusion**

HIV-infected poor women’s accessibility to comprehensive and sustainable PMTCT is still limited due to structural, financial and persona/cultural constraints. This condition can change into the better one when there are some opportunities such as active socialization of PMTCT, presenting the more transparent Delivery Security program and Empowerment Work Group in Surakarta City’s AIDS Coping Commission that can expand the accessibility.

**Recommendation**

The authors emphasize the improvement of healthcare service and security to be done from the data of beneficiary to the procedure mostly facilitating the access to sustainable PMTCT service.

**Authors Contribution**

All the authors had made substantial contributions to conception, design, data collection, analysis and interpretation of data; drafting the article, revising it critically for important intellectual content; and final approval of the version to be published.

**References**


### Tables

**TABLE 1 THE ACHIEVEMENT OF PREVENTION OF MOTHER TO CHILD HEALTH CARE FACILITIES ON THE TRANSMISSION OF SURAKARTA INSTEAD OF JANUARY TO OCTOBER 2016**

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<th>Health Care Facilities</th>
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<th>Sept</th>
<th>Oct</th>
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<tr>
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<td><strong>411</strong></td>
<td><strong>518</strong></td>
<td><strong>451</strong></td>
<td><strong>432</strong></td>
<td><strong>3799</strong></td>
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### Figures

**FIGURE 1A TOTAL OF PREGNANT MOTHER WITH POSITIVE HIV WHO RECEIVED ARV PROPHYLAXIS IN JANUARY TO OCTOBER 2015**

![Graph showing the total of pregnant mothers with positive HIV who received ARV prophylaxis from January to October 2015.](image)