Social Protection for Burmese Adolescents: Conditional Cash Transfer as financial incentive to prevent HIV transmission among adolescents

1. Motivation

Adolescence is an age of opportunity for children, and a pivotal time for us to build on their development in the first decade of life, to help them navigate risks and vulnerabilities, and to set them on the path to fulfilling their potential – UNICEF, 2011.

There are currently 1.2 billion individuals who are aged between 10 years to 19 years old. Out of these adolescents, 2.1 million adolescents are diagnosed with HIV.[1] Adolescents are still vulnerable to HIV infections. Compared to young childhoods and adults, adolescents are less prioritized in national HIV plans and face scarce access to and uptake of HIV counseling and testing (WHO, 2011). Shifting the scope to Myanmar, Burmese adolescents and young people are facing the same threat. HIV is highly prevalent in these age cohorts. UNICEF reported that HIV is diagnosed in 13.3% of people who inject drugs and 4.5% among men who have sex with men. [2] The UNICEF, then went on recommending that "The Myanmar Government must increase services for HIV testing and reduce barriers to access to services with a specific focus on adolescents and young people among key affected populations". This research will be an attempt to design and implement the intervention, followed by evaluation.

Social Protection is increasingly playing an important role in the development arena. Out of various types of social protection, conditional cash transfer (CCT) is often employed. CCTs are now considered as important programmes for their role in human capital development by linking the receipt of transfers to school enrolment and/or health checkups. Proponents of the CCT programmes believe that these programmes are effective in incentivizing socially desirable behavioural change (Walque, 2011). Through evaluating CCT programmes, it is shown that they can be effective in preventive healthcare, as well as actual health outcomes. Social Protection programmes aimed at adolescence are often overlooked by the Burmese government and currently, there are no interventions by the government exclusively targeting at alleviating the prevalence of HIV among adolescence, aged between 10 years to 19 years old through CCT (Yoshimi, 2011). In this research, CCT programme will be utilized to provide incentives for the adolescent to avoid risk-taking behaviors for the purpose of preemptive solutions for HIV. The risky behaviors in this research are defined as having unprotected sex and sharing needles for injection. Socio-cultural factors play a huge role in shaping the decision of the adolescents adopting risky behaviours too. Burmese adolescents at this age are prone to peer pressure and are likely to perform risky behaviours under duress.

[1] HIV and Adolescents: WHO
[2] http://www.unicef.org/myanmar/media_21919.html

A simple economic theory can justify the intervention. For example, an adolescent is weighing between cost and benefit of adopting risky behavior. By transferring cash, it is likely that the implicit cost (i.e. not receiving cash) for the adolescent will increase. Therefore, a rational adolescent will be less reluctant to adopt the risky behaviors.

2. Description of Policy Intervention

The Policy Intervention aims to alleviate the HIV prevalence among the Burmese adolescents. The programme is aimed at reducing the adolescent's tendency in taking risky activities that will lead to both sexually transmitted diseases and non-sexually transmitted diseases (such as HIV disease spread through sharing injection needles for drug). The presumption is that through taking risky activities, one is more likely to be contracted with HIV diseases. CCT will be utilized to offer financial incentives to adopt less risky behavior that would lead to less prevalence of HIV. The implementation will be carried out with the assistance of the Ministry of Health, Myanmar and UNICEF.

a) Participants - The intervention is aimed at the Burmese adolescents, between the ages of 10 to 19 years old who are living in Yangon, the business city of Myanmar. The participants will be required to show the identification that they belong to the township. Yangon is chosen for proximity to the target group and facilities for medical checkups are readily available. The intervention is targeted at both genders. The intervention expects to enrol 1,000 participants from all walks of life in the study. Within the city, participants from ten different townships will be invited to enrol in this programme. People who have already been diagnosed with HIV will not be able to join the program. Pre-study HIV tests will be conducted to diagnose. Participants will be made aware of the programme that they were being treated as this is an important factor in this intervention.

b) Design of the intervention – The study is based on randomized and controlled experiment, consisting of control group and treatment group. The randomization occurs at individual level. Through focus-group discussions and calculations on an average daily wage, the amount of the cash transfer will be allocated. The amount is estimated to be $10 for the cash transfer. The reward will be rewarded directly to the participants. As HIV virus has the nature of window-period, the tests will be performed every six months. Pre-study HIV tests will also be performed. When testing HIV, antibody tests will be employed. The programme will track the participants over the span of two years. Therefore, 4 tests will be carried out throughout the programme. Participants in the treatment group will be eligible to receive cash payment if they were tested and the result is negative for the HIV disease. The cash will be directly rewarded to the participant. Individuals in the control group will not be eligible to receive cash payment if they were tested positive. For humanitarian assistance, once they were identified with HIV, they will be provided with counseling and free treatments through the Ministry of Health of the Burmese government.

c) Testing for HIV – Participants will be required to visit the testing centers, designated by the Ministry of Health. To ensure accuracy and less anxiety, counseling will be provided before and after the tests.

This intervention is a pilot programme for two years. After the end of the implementation, evaluation will be carried out for the possibility of implementing nation-wide programme.

3. Research question and hypothesis

The hypothesis is that Conditional Cash Transfer will discourage the adolescents from taking risky behaviours that would lead to HIV disease. The research questions are:

1) Is the Conditional Cash Transfer effective in prevention of HIV? If so, up to what extent?
2) Is there sensitivity to the CCT depending on the gender? If so, will the program be more effective in targeting specific gender?

4. Research Design and Methodology

By using the tracking and tests data from regularly checking the participants, we will be able to estimate the impact of the program. Below is the simple estimation equation of the program. By randomizing at the individual level and unblinded, participants have equal chance of participation and are aware of the programme. Awareness is of great importance in this intervention.

$$H_{it} = \alpha + \beta_1 X_{it} + \beta_2 (X_{it} * Woman_i) + \beta_3 G_{it} + \varepsilon_t$$

This equation is to measure the impact of the CCT on the adolescents contracting HIV.

$H_{it\ is}$ the variable that assumes the value 1 if the participant is contracted with HIV and 0 if not. It tracks the individual over 4 tests, hence, the subscripts are *it*.

X_{it} is the variable that indicates whether the participant belongs to the treatment group – its value is 1 when the participants indirectly receive the cash and 0 otherwise

$Woman_i$ is the dummy variable that indicates whether the individual is female or male (Female=1, Male=0).

$X_{it} * Woman_i$ are interacted to allow the interactions between the two variables. This interaction could then be used to see the impact of the programme on the gender.

G_{it} is the control variable for other factors (income, race, etc) .

ε_t is the error term

5. Expected Outcomes

It is expected that the control group who receives the cash will not contract HIV disease, that is β_1 will be positive. For the gender effect, it is expected that β_2 will be positive, given the fact that the girls are less likely to involve in risky activities and cash transfer will act as incentive to further discourage the tendency to take risky activities.

However, there are potential challenges:

1) Peer effect – Limiting the scope of the experiment to only 10 townships and one city might lead to the so-called peer effect. The individuals are likely to be influenced by peers around them as the individuals might be in the same social circle who might probably encouraging them to adopt the risky behaviours. The current estimation cannot fully control the effect that might arise from the peers

2) Stigma – This challenge is more of a socio-cultural problem, rather than economic problem. Participants who are not eligible for CCT are further excluded from the social circle. People who have already contracted from HIV are facing social stigma problems. Through this ineligibility, the social stigma problem can be discouraging for them.

3) Cultural limitation – There are possibilities that there might not be enough adolescents joining the programme. HIV is still a taboo word in Myanmar. Even once they are in the programme, some participants might drop out.

4) Sustainability of the programme – CCT are funded by the government. The Burmese government itself is not that strong as the tax systems are not that developed yet. Thus, the programme depends on budget availability of the government.

5) Dependency – The CCTs are short-term responses towards the HIV. Once the programme is withdrawn, the participants might change their behavior and possible that they will adopt risky behaviours.

Bibliography

Institute of Development Studies. *Documentation of Child and HIV Sensitive Social Protection in the Eastern and Southern African Region*. Rep. Brighton: Institute of Development Studies, 2011. Print.

Nishino, Yoshimi, and Gabriele Koehler. *Social Protection in Myanmar: Making the Case for Holistic Policy Reform*. Working paper. Vol. 386. Brighton: Institute of Development Studies, 2011. Print.

Roelen, Keetie, and Rachel S. Wheeler. "A Child-sensitive Approach to Social Protection: Serving Practical and Strategic Needs." *The Policy Press*291306th ser. 20.3 (2012): 291-306.

Walque, Damien. "Incentivising Safe Sex: A Randomised Trial of Conditional Cash Transfers for HIV and Sexually Transmitted Infection Prevention in Rural Tanzania." *BMJ Open*(2012): 1-12. Web.

WHO. *HIV and Adolescents: Guidance for HIV Testing and Counselling and Care for Adolescents Living with HIV*. Rep. Geneva: WHO, 2013. Print.