

## ABSTRACT

The spread of human immunodeficiency virus (HIV) and sexually transmitted infections (STIs) are rapidly increasing in many South East Asian countries today compared to the last two decades. STIs have been shown to be of considerable importance in the prevention and control of HIV/AIDS. Although STIs are mainly transmitted through sexual intercourse, they could also be transmitted through infected blood and from mother to child. Today more than 20 pathogens are known to be sexually transmissible. Since a large number of STIs are asymptomatic, what is diagnosed has been represented only as tip of the iceberg. The proportion of persons with symptoms who will seek healthcare are few and among those only a small number is reported. Of these, the majority tend to be males; whereas most of the women who are infected do not have symptoms and signs of STIs.

Studies done elsewhere have shown that commercial lorry drivers have easy access to sex workers or are known to bring their own casual partners during the journey. In Sri Lanka there is little information on sexual behaviour of this group but the limited data indicates that long distance lorry drivers are an important client group of sex workers. If lorry drivers are a high risk group, with the capacity to spread infection to their wives, girl friends and casual partners, targeted STI and HIV prevention efforts might be warranted, particularly at this early stage in the spread of the disease in Sri Lanka. There are no documented previous in-depth studies available on the prevalence of sexually transmitted diseases and the sexual behavioural patterns of the lorry drivers. This research study on the STIs/HIV prevalence and behavioural surveillance among long distance lorry drivers was planned to fill this gap.

The study comprises of three phases namely a baseline survey, an intervention and a post intervention survey. To obtain baseline information on selected STIs, a cross sectional descriptive study for sero-prevalence of selected STIs was carried out among long distance lorry drivers in Trincomalee and Dambulla AGA divisions.

In phase one part one, an equal number of long distance lorry drivers were selected from each AGA division. An interviewer-administered questionnaire and focus group discussions were used to gather information. Blood samples were collected for

serological testing for viral markers and Treponemal antibody detection. This phase aimed at collecting qualitative information on a sub-sample to complement quantitative data on sexual behaviours. Based on the findings of the base-line survey, two groups of long distance lorry drivers from the Dambulla AGA division (intervention group) and a Trincomalle AGA division (control group) were compared to determine the outcome of an educational and condom promotion intervention.

In phase one part two, the study of sexual behaviour among female sex workers in Dambulla AGA division was carried out using an interviewer administered questionnaire to gather information on sexual behaviour among 122 sex workers.

In phase two, 122 long distance lorry drivers were given an education of STI and condom intervention while a comparative group was selected for comparison. In phase 3, a cross sectional comparative study of the two groups of long distance lorry drivers, was done to determine any change in sexual behaviour and knowledge about condom usage, six months after the intervention.

For the total sample of 741 respondents from Dambulla and Trincomalee AGA divisions, the study revealed a sero-prevalence of 2% syphilis, 16% herpes simplex-1, 3% herpes simplex-2 and 0.4% HBsAg. There were no HIV infections detected among these population groups.

The study revealed that the 86% of the sample, admitted extramarital/sexual exposures of almost all of the married and half of the unmarried long distance lorry drivers. A tendency was observed within the previous three months for unmarried long distance lorry drivers to have multiple partners (47%) compared to married workers (32%). The most prevalent risky sexual act was unprotected vaginal sex (93%) among long distance lorry drivers. Condom use remained low with workers 'ever using condoms' at 24%. Knowledge on types of STIs was also low at 48%.

Among the sex workers, the study determined that 23% of their clients were long distance lorry drivers. In this group condom use remained low with 49% only during the last sexual exposure.



The findings of the post-intervention survey indicated that the intervention group had a marked improvement in their overall knowledge ( $p < 0.05$ ) and had a more positive attitudes towards STIs ( $p < 0.001$ ) and the condom usage had been significantly improved ( $p < 0.05$ ).

The study concluded that there is a high prevalence of risky sexual behaviours among long distance lorry drivers. Behaviours such as multiple partners as FSW's and low level of condom use were the reasons for the high risk of spread pf STI among them and also spread throughout the country as this is a mobile population.

It also demonstrated that long distance lorry drivers can be motivated new knowledge, adopt changes in attitudes and gained skills when exposed to a well planned, comprehensive educational intervention.

A sexual behavioural surveillance, particularly among long distance lorry drivers and female sex workers should be established in order to monitor the trends in sexual risk behaviours.