COMMENTARY

Alarming increase in reported HIV cases from Larkana, Pakistan: a matter of serious concern

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Seven years ago in this journal's editorial of special supplement on HIV/AIDS Research in 2006 Vermund and colleagues expressed concern over the rising trend of HIV among injection drug users (IDUs). The editorial was titled, "HIV/AIDS in Pakistan: Has the explosion begun?"[1] The last national surveillance round was conducted in 2011 and its results indicated a surge in HIV infection among IDUs and hijra sex workers. The national prevalence of HIV was 37.8% (95% CI: 37.3%, 38.3%) among IDUs and 7.2% (95% CI: 6.8%, 7.5%) among hijra sex workers.[2] Experts believe that the data and pattern of HIV epidemic in Pakistan suggest that this country will not have a generalized epidemic like several countries in Sub Saharan Africa however in the concentrated phase of the epidemic the trend will continue to rise among certain high risk groups. Chief among these high risk groups are IDUs and hijras who indulge in commercial sex. Experts also think that there will be an upsurge of HIV among these risk groups. HIV infection has reached greater than 40% among IDUs in at least five cities of the country. These cities are Karachi 42%, Sargodha 40.5%, DG Khan 49.6%, Gujrat 46.2% and Faisalabad 52.5%.[2] Melesse and Blanchard used the UNAIDS Estimation and Projection Package (EPP) software to conduct modeling and they projected that in Karachi by 2015 the estimated prevalence of HIV among IDUs in Karachi can reach 50% and may continue to rise whereas the model also indicated a rising trend of HIV among male and hijra sex workers.[3] These are astounding figures even for high risk groups. Some of these cities are much much smaller in size and population than Karachi meaning that the infection can be transmitted to other low risk groups through bridging populations. For example the spouses of HIV positive IDUs can be at risk and their only risk factor will be being married to an HIV positive person.

Larkana is a small town in upper Sindh near River Indus and ruins of Indus Valley Civilization, Moen joDaro. The Population Welfare Department estimates that in 2010 the total population of the district was around 1.4 million and that of Larkana city 539,075. Larkana came in HIV limelight in June 2003 when the first outbreak of HIV among IDUs was reported in which 17 IDUs out of 175 were confirmed positive[4] In 2008, results of Round III of national surveillance suggested 27.6% hijra sex workers were confirmed HIV positive.[5] This has to be a unique town in Pakistan because of an unusual pattern of multiple commercial sex activities happening here. It has a functioning brothel where clients from all over district as well as from the other cities visit female sex workers in day time for commercial sex. Additionally, there are home based sex workers as well, who go with clients on regular basis. There are at least two musafirkhanas(motels) on Station Road in the middle of the city where hijra and male sex workers are available round the clock to provide paid sex services to clients. It is estimated that there are 1096 IDUs, 969 FSWs and 1698 male and hijra sex workers.[2] The charges of commercial sex workers (male and female) often can be as low as 50 to 100 rupees (0.5-1 US$). In other words this city has all the ingredients of an exploding HIV epidemic in the near or distant future. Average number of clients FSWs entertained in past month was 76 while 48% of all commercial sex workers in Larkana did not use a condom in their last paid sexual encounter. Paid sex in the past six months with an FSW was reported by 20% IDUs while paid sex with a male or hijra sex worker was reported by 9% IDUs.[2]

Recent HIV data from Sindh AIDS Control Programme from Larkana suggests that it is a matter of serious concern. The Referral Laboratory of Sindh AIDS Control Programme is housed within Civil Hospital Karachi. It has trained staff including a senior pathologist, counselor, HIV physician, lab and para medical staff. It provides free HIV testing, pre and post test counseling and ARVs to those who meet the criteria. Patients and samples are referred by physicians from their OPDs, blood banks and NGOs working in HIV prevention care as well ashealth institutions from all over the province. From January to December 2012 a total of 964 HIV cases were confirmed at the Referral Laboratory. Among them injection drug was the most probable mode of transmission reported by 536 (55.6%) and sexual route was reported by 321 (33.3%) HIV

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positive persons.Vertical transmission, blood donors and others were also different modes of transmission. Sexual mode of transmission in 2012 was reported by 51.7% cases in Karachi and second highest was Larkana which showed 27.7%. In 2013 from January to July 671 cases were confirmed and sexual mode of transmission was reported by 209 cases. Majority (45.1%) of HIV positives belonged in the 15-25 years of age group. Out of these 38.7% were reported from Karachi whereas 39.7% were reported from Larkana. A small town of over half a million population has surpassed a large metropolis of almost 20 million persons in risky practice. Since 2005 IDUs have been driving the epidemic and multiple surveillance rounds showed a lower prevalence of HIV among commercial sex workers compared to IDUs, making the planners believe that they are not the core transmitters of HIV anymore but the data suggest that the HIV positive persons had more than two commercial sexual encounters were at higher risk of acquiring HIV infection. While there are clear limitation in interpreting this data but this is certainly providing a pattern and showing that Larkana might be at the brink of an HIV outbreak in low risk groups. Concerned stakeholders must look into this pattern urgently and take prudent measures such as improving the quality, services and more importantly coverage of HIV prevention programmes. Failing to act proactively can result in an undue burden on the healthcare system of the province. Not only that, but stakeholders must also take steps by putting as many HIV positive persons on ARVs as possible in Larkana as well as ensuring improved interventions targeted towards commercial sex workers to change behaviour and adopt safe sexual practices. It is certain that "Treatment as Prevention" (TasP) needs to be considered as a key element of combination HIV prevention and as a major part of the solution to ending the HIV epidemic. In the short and medium term, while countries are concentrating their efforts on scaling up treatment according to the eligibility criteria recommended by WHO, it is expected that they will concurrently identify opportunities to maximize the use of ART for prevention purposes.[5] According to CDC guidelines to early treatment of infected persons substantially reduces their risk of transmitting HIV to others. However, the prevention benefit of treatment can only be realized with effective treatment, which requires linkage to and retention in care, and adherence to antiretroviral therapy.[6]

References

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