## **HIV/AIDS Disease: Transmission Transition**

## Mohammad Hassan Lotfi

Department of Biostatistics and Epidemiology, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

As an emerging infectious disease in the world over the recent years and decades, HIV / AIDS has imposed a lot of different economic, social, and psychological costs to communities around the world of which the most quantitative and most objective indicator is the burden of this disease. The third wave of the disease which is called the change in the way of transmission from sexual partners to intravenous drug use has been able, as a new challenge and concern, to preoccupy the minds of the custodians of public health and sociology of the Islamic Republic of Iran. A twenty-three-fold increase in transmission through intravenous drug use in 1997 compared to the year before it and then the gradual decrease during the following years indicate the replacement of transmission through sexual contact so that the statistics in 2007 show a 16 percent reduction in transmission from intravenous drug use and a three-fold increase in transmission from sexual contact. In 2007 13%, in 2012 21%, in 2013 33/6%, and in 2014 42% of the whole transmissions were through sexual contact and this replacement process is still continuing. The reason for this change has been the expansion of harm reduction activities in prisons and in the society. The increased incidence of the disease through sexual contact and the increasing cases of afflicted women (especially pregnant women who will finally give birth to afflicted infants) pose many risks. This is what we call the third wave of concern. The vertical transmission of HIV causes it to be transferred more from groups who have a high-risk behavior to the general population and the groups that do not have a high-risk behavior. Many of these innocent victims are women who do not have any high-risk behavior and are afflicted by their husbands or are the babies born from these mothers. The age pattern of Global statistics in 2012 indicates that Iran with 2.0% AIDS infiltration in adults is ranked 102th among the countries of the world. In terms of the contribution of age group, the age group of 15-24 among all AIDS patients was 3/3 percent in the early years which has now risen to 11 percent. 46.5%, that is, nearly half of the people afflicted with HIV are in the age group of 25-34. The rate of children younger than 5 years old afflicted with HIV has increased from the 2002s to 2012s so that the number has risen from 1.0% to 3%. Currently, about 15 hundredth of the age group of 15-60 of the country is afflicted with AIDS. Also, the pattern of afflicted men and women (sex ratio) indicates a change in the proportion of men and women in the society so that in the first ten years of this disease in Iran, the share of men was 98% and the share of women was 2%. But the number of affliction cases in women has reached from 4% to 22% from the 2002s to 2012s and in the current situation in 2015 these statistics have reached about 70% for men and 30% for women. Considering the shift of transfer portion from intravenous drug use to sexual contact, the summary of the mentioned statistics shows the significant increase of women's portion and younger age groups afflicted with HIV. This is a warning message to the authorities to aware the public especially younger age groups, to facilitate the ways of marriage, and to train life skills as cultural and social needs with high priority.