The health workers are now facing increasing number of people with blood borne infections like HIV/AIDS, hepatitis B and hepatitis C. There are estimated 40 million people globally living with HIV and 95% of HIV-infected people live in the developing countries. Surveillance data is scarce in Nepal; however, limited data indicate that HIV prevalence is currently around 0.3 percent in the general population and the estimated number of adults and children living with HIV/AIDS is 60,018. About 5% of patients were HIV positive in Bir Hospital, with 7.5% of male patients in medical wards HIV positive. Similarly, the prevalence of hepatitis B in different groups of population in Nepal varies from less than 1% to 16%. The study of Liver Foundation Nepal has estimated that the number of people with chronic infection with hepatitis B is 200,000. Acute hepatitis has been found to be caused by hepatitis B infection in 6%, cirrhosis in 12% and liver cancer in 34% to 64%. The study of Liver Foundation Nepal has similarly estimated that the number of people with chronic infection with hepatitis C is about 20,000 in Nepal. Acute hepatitis has been found to be caused by hepatitis C infection in >1-2%, and liver cancer in 5%.

Transmission of blood borne infections to health workers is most likely to occur from the injuries sustained with just used hollow injection needles contaminated with patients' blood. Health workers are also at risk while cleaning the used instruments. This is because health workers may have minor wounds in their hands, especially near nail beds, gloves may have minute holes and sharp instruments can penetrate gloves. Among health care workers, hepatitis B virus infection has indeed been most commonly found in non-professional ones in two reports from hospitals in India and Nepal. Cleaning the used instruments is, thus, the other of the two common modes of occupational transmission of blood-borne infections to health workers. While cleaning instruments, water contaminated with blood comes in close contact with minor abrasions in nail folds and other parts of hands. A drop of blood can make a bucket of water contagious. From the point of disease transmission, dipping hand inside such contaminated water is almost like dipping hand into a pool of blood. Wearing gloves during such close contact with contagious water during vigorous cleaning of lots of used instruments may not eliminate the risk of transmission of blood-borne infections. Cleaning of used instruments and other items is a routine affair in health care set up. This points out the potential risk of transmission of blood borne infections to the health workers who clean the used instruments.

With the epidemic of HIV/AIDS, the decontamination of used gloves and instruments, before cleaning, has gained much attention. Decontamination is, thus, additional process before sterilizing the used instruments. Before cleaning any used instruments and gloves, they should be placed in 0.5% chlorine solution or other approved disinfectants for 10 minutes. This process is called decontamination and destroys HIV and other blood borne infective organisms and makes the instruments safe to be cleaned later. In this way only, used instruments and other items become safe to be handled and cleaned by health workers. Of course, there are many precautions and measures to be considered in this decontamination process, which is in a way new in our health set up. Decontaminating instruments one by one would not be practical. So, instruments and other items can be collected in one place, before submitting them together for decontamination. After decontamination, if the instruments are not being cleaned immediately, they should be removed from chlorine solution and placed in a bucket of water to limit corrosion. Similarly, such disinfectants need not be used routinely to clean floor of the whole ward or hospital. Otherwise there could be shortage of such disinfectants. Further, the need of preparation of such disinfectants, which could be pungent or corrosive, routinely in large scale could discourage health workers and thus, hamper the programmed. Routine decontamination of used instruments before cleaning is obviously the priority. Thus, the staffs have to be given training in these respects. To facilitate the easy communication and reminder to the people concerned, displaying a poster with the safety signs in Nepalese language is innovatively also being done. Such poster is really worth ten thousand words.
For decontamination of instruments, plastic containers, 0.5% chlorine powder etc are required and the training requires support. But such support and supply from hospital management and other concerned have been found to be inadequate even in the central hospital. This will lead to difficulty in implementation of the program. This is a real tragedy as the cost involved is not much. Health workers have to take all the possible precautions and manage all patients, whether HIV positive or not. But proper HIV/AIDS care may not be possible without basic safety in health set-up. Merely wishing or blaming the health workers alone is not obviously sufficient. The basic safety in health set up, including decontamination of instruments, has to be given due priority by Hospital Managements, Ministry of Health and National Centre for AIDS and STD Control.

REFERENCES