

Pakistan: a cirrhotic state?

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Routine reuse of syringes in Pakistan's back-street health centres has caused a surge in blood-borne infections such as hepatitis B and C. which experts have dubbed "the AIDS of Pakistan". But to solve this problem, Pakistan must first wean itself off injections. Khabir Ahmad writes.

Gravediggers in one of Asia's oldest and largest graveyards, situated in Pakistan's fertile Charsadda district, are busy preparing yet another grave. This time, the grave is for a 41-year-old science teacher who died of complications of hepatitis C—a virus whose rates have surged in Pakistan during the past decade, along with hepatitis B. The dead man's home village of Gulabad is gripped by constant fear, wondering who's turn will be next. At least one person in each household is infected with hepatitis B or C, some even have both.

More than 15 people, mostly in their early 50s, have died of complications of these infections during the past 5 years. The situation is similar elsewhere in Pakistan, which several experts warn is fast becoming "a cirrhotic state".

"For decades, middle-aged people in this area (Charsadda) died mainly as a result of family feuds and enmity; now many of them are dying because of Ziyarai (Jaundice), heart attacks and accidents", says Iqbal Khan, a 55-year-old gravedigger from Charsadda Khas whose family has been in the trade for centuries, and who claims to have buried thousands of people over his 41-year career.

Mohammad Iqbal Khan, a consultant physician at Khyber Teaching Hospital—a large tertiary-care hospital in Peshawar that also caters for Charsadda—reveals that around a quarter of medical unit beds in the hospital are taken up by patients with complications of hepatitis B or C, most of whom have chronic liver diseases.

The numbers of such patients are steadily increasing, taking vital resources away from other medical conditions in a country where public hospitals are already under-resourced and over-stretched.

Although nationwide data on the prevalence of blood-borne infections is lacking, it is estimated that 5-8% and 7-10% of people in the country are suffering from hepatitis B and C, respectively. Experts have dubbed the two infections "the HIV/AIDS of Pakistan" and warn that loss of productivity due to illness, deaths, and care-giving (at home as well as in hospitals) is worsening the poverty situation, which is already dire with 30-40% of people living on less than US\$1 a day.

The recommended treatment for chronic viral infection is so expensive that many patients cannot afford to use it. They and their families are forced to resort to selling their animals, jewellery, and land to buy interferon injections. Equally worrying is the growing number of "hepatitis orphans". Each person who dies from these infections leaves behind, on average, five impoverished children for whom no social and government support exists.

But, argues Naveed Zafar Janjua (Aga Khan University, Karachi), hepatitis deaths and their associated socioeconomic problems could largely be avoided by promotion of safe injection practices and by avoiding unnecessary injections. He estimates that over 1.5 billion injections (13.6 injections per person), including 53.6 million for immunisation purposes, are administered in Pakistan each year, and that 50% of these are unnecessary.

Behind these alarmingly high injection rates is a belief among many Pakistanis that this delivery method is the most powerful, the best and the quickest way to administer medicine, explains Janjua.

And most of the people who opt for injections are unaware of the risk associated with their use.

Educating the public about these risks might help reduce some of the excess but, says Aamir Javed Khan of Safe Injection Global Network (SIGN), Pakistan, the main drivers behind the high injection rates are

the prescribers, dispensers and other health-care workers in the private sector who provide much of the care in Pakistan. Unqualified private Practitioners operate illegally across the country; most have received no formal medical training and the government does not have any control over their practice. Those who are practicing legally doctors are not far behind in the race for injections.

But why are private practitioners such strong proponents of injection? The short answer is that injections mean money. according to Khan. The average cost of a visit in which injection is administered is far higher than that in which injection is not included. The most commonly administered injections are chloroquine and vitamin B complex. A 30 mL vial of each, enough for 15 injections, costs only 9-12 rupees (2 cents); the cost of syringes is negligible (less than 2 rupees), but patients are charged 15- 25 rupees (35-55 cents) per injection. To maximise their profit further, medical practitioners in the private sector routinely reuse syringes, and only changing the needle when it gets blunt. It is estimated that about half of all injections administered in Pakistan involve reused syringes. In the public sector, reuse of syringes OCCURs mainly because of equipment shortages. A nationwide survey by the ministry of health in 2002 revealed that as many as 72% therapeutic injections and 50% immunisation injections in public health-care facilities were unsafe and potentially dangerous.

In 2000 alone, unsafe injections were estimated to have resulted in 134,245 and 932,971 cases of hepatitis C and hepatitis B infections, respectively. Experts warn that these infections would have led or lead to 4876 early deaths and 174,291 disability-adjusted life (DALYs) years during 2000-2003.

The problem has been compounded by the unchecked use of multiple-dose vials despite widespread concerns that they can be a source of patient-to-patient transmission of both hepatitis B and C.

Another unnoticed but alarming problem is the way in which medical waste is managed in Pakistan. Most used syringes and needles are dumped, along with other medical waste, in open rubbish tips just outside hospitals. Rag pickers mostly children and many of them Afghan refugees or members of other vulnerable groups collect used injection devices and sell them to Kabaris at a price of 18- 25 rupees (40-55 cents) per kg. Most of the used syringes are then recycled into plastic items such as buckets and coat hangers, but some are washed and simply packaged for resale, says Arshad Altaf of SIGN. Cases where a freshly opened package is found to contain blood-tipped syringes are not uncommon, he adds. Children can easily get hold of discarded syringes and blindness caused by needle injuries is not uncommon. Mohammad Daud Khan (Khyber Institute of Ophthalmic Medical Sciences, Peshawar), a former president of Ophthalmological Society of Pakistan, reveals that he and his colleagues have seen hundreds of such cases. "Almost every day we see that (needles) are causing not only globe eye injuries but also endophthalmitis. Unfortunately, salvaging these eyes is impossible", he says.

After decades of government apathy towards these problems, the Ministry of Health has now given some grounds for optimism. Muhammad Nasir Khan, Federal Minister for Health, is backing a comprehensive and nationwide plan for the prevention and control of hepatitis B and C, and it is close to being approved.

"It is nice to see that a lot of attention is now being paid to the spread of hepatitis B and C and to the contribution made by unsafe injection practices to their transmission", says Khalif Bill of WHO Pakistan.

Pakistan's parliament is soon going to discuss legislation that calls for regulation of disposable medical devices, including syringes. The proposed law states that "nobody shall use or apply for use a disposable medical device like the same has been used or applied for use once, either on the same or another patient. . . and it shall be the responsibility of the person using the device to discard the same, into a safety box, immediately after its first use so as to prevent its reuse".

The government also plans to provide new, single-use injection devices to public health facilities. These will complement two schemes already set up by the government:

inclusion of routine hepatitis B vaccination for children, and provision of auto-disposable syringes in each health-care facility.

However, it is not clear how government is going to implement much of these ambitious plans. Most of

the injections are administered illegally by health-care workers in the private sector and the government does not have any control over them. Government laws call them “quacks”, and the care they provide as “quackery”. Most of the workers in such clinics feel threatened by government and doctors associations. Implementation of such laws would mean government will have to recognise them first as an important part of Pakistan’s health care.