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A Silent Storm: Hepatitis C in Pakistan

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"Do not inject used syringe. Oh aunty! Nothing is going to happen. I have boiled it very well."

Globally, 2.2% of the world's population is suffering from hepatitis C virus (HCV) [1]. The disease is becoming a major health problem of developing countries, including Pakistan that has the second highest prevalence rate of hepatitis C ranging from 4.5% to 8% [2]. Studies in Pakistan on small targeted groups including blood donors, health professionals, drug abusers and chronic liver disease patients indicate that the prevalence of hepatitis C is as high as 40% [3]. However, literature is still inadequate to clearly reflect the overall picture due to its limitation on identifying the incidence in healthy individuals.

Several studies indicate that the rate of positivity for HCV is much higher in rural areas than the peri-urban areas of Pakistan [4]. It is worrisome to note that 66% population of Pakistan is living in the rural areas [5] where general public either carries the burden of the disease or they are at a high risk of contracting the disease due to several malpractices and misperceptions. It includes unavailability of proper health care delivery system, unscreened blood transfusions, lack of education, poverty, and above all, misusage of drugs. Thus, such alarming situation has profound implications on patients, families, health care professionals and the whole society. This paper will help general public as well as health care professionals to reflect upon their practices and save themselves from the spread of hepatitis C.

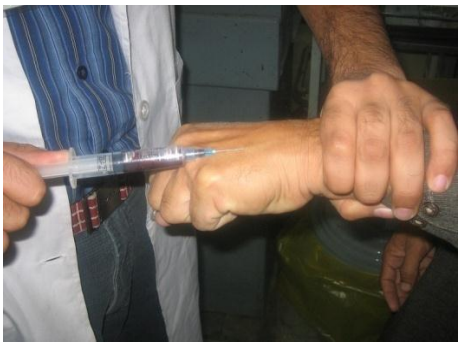
Health care system

According to the Economic Survey of Pakistan 2005 to 2006, the government spent 0.75 percent of GDP on health sector [6]. With such a low allocation of funds, the question arises that how much these expenditures are effective? The public sector lacks quality in its services. On per 1000 population, Pakistan has just 7.3 physicians and 4.7 nursing personnel [7]. These professionals also lack motivations to work in regard to their salary package. Only few of these health care professionals are certified; however, most of them are unregistered [8].

They are also equipped with limited resources which cause them to select alternative means of practice. For example, the evidence of reusing syringes in Pakistan is shocking. In one of the studies conducted in the year 2000 in Pakistan, the researchers found that out of ten registered health care practitioners, none of them were able to mention hepatitis C as a disease likely to be transmitted through unsterile syringes, only two mentioned hepatitis B virus while over half of them mentioned tuberculosis [8]. The other contributing factors are lack of audits and monitoring system in hospitals and poor management hierarchy. Many of the day care centers like basic health units (BHU) and primary health centers (PHC) are just fragile structures without any strict policy, resources and even trained staff.

Exposure to HCV poses a serious occupational threat to health care workers as well. Potential exposures include contact of the eyes, mucous membranes, broken skin, or needle stick injury. In this regard, the situation of public hospitals in Pakistan is worsening as compared to day care centers. Preoperative screening of patients for hepatitis B or C is not performed routinely even if the patient is admitted for the first time. Thus, it places health care workers as well as other patients at a high risk of acquiring hepatitis B or C virus. A study conducted in one of the teaching hospitals at Abbottabad, Pakistan reported that 30% of health care workers were having hepatitis C infection [9]. Likewise, the blood collected from donors at various spots are transfused to needy patients by using low quality kits for collecting blood that give variations in screening results. Moreover, the results from diagnostic tests lack sensitivity and specificity, that is, they are almost unreliable and inaccurate. In this way, it gives false diagnosis, places others at risk and delays treatment. Similarly, several studies affirm that the rate of hepatitis C due to dialysis is much higher in Pakistan. The causes could be be negligence in disinfecting dialysis equipments, reusing vials between different

patients, and above all, financial constraints. Besides this, the usage of unsterile dental equipments is very common in almost every dental clinic of Pakistan [10].



The overuse of injection practices is one of the cultural norms in Pakistan that is fostered by general practitioners. In many settings, doctors and technicians are considered to be more knowledgeable and experts if they give injections against minor illness. Hence, a doctor who fulfills patients' needs not only gives rise to the spread of the disease but also gains more incentives from his patients.

Education

It was identified from one of the studies that participants with formal education even till primary level had better understanding of health hazards then those who did not have it [11]. Unfortunately, the literacy rate of Pakistan is 43% [12] and majority of the population may be unaware about the general knowledge of their spread. The medium of knowledge by means of newspaper, pamphlets, banners and television are not utilized effectively, either due to limitations of language differences throughout the country, affordability or illiteracy among the general public. Thus, the consequences of illiteracy are profound, even potentially life-threatening.

Environmental conditions

Improper disposal of hospital wastes is one of the most common contributing factors associated with the spread of hepatitis C [16]. Throughout the country, from a child to the older age group, hundreds of garbage collectors are affiliated with major recycling businessmen and are providing unsterile syringes to them. In Karachi, a very young scavenger of waste products around 18 to 20 years of age sells 20 to 25 syringes per day to the health care waste dealers against money and the same child gets needle stick injury around none to three times per week [13]. Thus, this horrifying environmental condition may be a reason behind the increasing cases of hepatitis C in Pakistan. On the other hand, the practice of going to the barber shop at a local area also explores the additional factor of having this disease. People are exposed to infected instruments while shaving and hair cutting. Terribly, in District Gujrat, Pakistan about 93% of the barbers were unaware of the potential hazards of consuming used blades on several customers and 48% of them were reusing unsterile equipments among several clients. Additionally, they were also performing tasks like circumcision and minor abscess drainage [14]. Besides this, drug abusers and sex workers are also common factors in acquiring hepatitis C in Pakistan.

Poverty

The number of contributing factors discussed above may be due to the economic status of an individual in Pakistan. The poverty rate of Pakistan is 17.2%, and nearly a quarter of the population is classified as poor [15]. Considering the financial limitation in general public, only upper and middle class people can afford education and can use the private services. On the other hand, those who are unable to afford usually visit quacks or untrained medical professionals.

Implications for health care professionals and general public

Once an individual acquires hepatitis C, it brings a number of challenges that are not only limited to the physical suffering but also affect the psychological, social, sexual and financial

issues throughout his life. Therefore, the role of health care professionals is very significant in alleviating the prevalence and burden of hepatitis C from Pakistan. It is very crucial that health professionals acquire and disseminate proper knowledge about the causes of hepatitis B and C among general public. This will not only lessen stigma pertinent to the disease but may also lessen the prevalence of disease among future generation. Medical and nursing schools must provide proper knowledge about the disease and emphasize on quality practice. Moreover, proper checking and monitoring is highly essential in order to alleviate harmful practices from health care settings. Nowadays when multilingual media is available in every channel throughout the country, it is essential that general public acquires proper knowledge about the spread of the disease and its related precautions. Above all, proper allocation of funds and motivation is highly important in public health sector to decline these malpractices due to the availability of limited resources.

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