The cost of poliomyelitis: Lack of cost-of-illness studies on poliomyelitis rehabilitation in Pakistan

Dear Editor,

Poliomyelitis is a contagious viral disease caused by infection from polio virus. It results in partial or complete paralysis of the patient's body.[1] Massive eradication efforts have been carried out worldwide to eliminate this disease and have eventually resulted in its successful elimination from almost all parts of the world. Currently, Pakistan and Afghanistan are the two remaining countries in the world where poliomyelitis (polio) is still categorized as an endemic viral infection.[2]

Ironically, keeping in view the grave nature of this disease and its impact in Pakistan, it is quite disappointing to observe the limited research literature available in this context. There is an apparent dearth of studies that report the problems faced by patients after contracting the disease. The purpose of this letter is to accentuate a need to conduct research studies as well as health economic evaluations such as cost-of-illness studies related to poliomyelitis, its treatment costs, and its impact on the lives of the patients of Pakistan.

Poliomyelitis in Pakistan has been prevalent for quite a long time and has aggravated in recent years.[3] The health-care system of the country is more focused toward prevention approaches such as vaccination.[4] This proactive approach of vaccination may have been successful in reducing the number of new polio cases reported in the country; however, no scheme has been employed for those patients who have contracted the viral infection and now facing the predicament of polio infection. Contracting poliomyelitis can lead to partial or complete paralysis which can result in social embarrassment, difficulty in securing employment, financial dependency, and compromised or low quality of life. This condition needs specialized physical rehabilitation over a long period of time that demands exhaustive treatment attendance and finances.[5] Studies conducted in Brazil reported a rehabilitation treatment cost of US $5829.[6] Another study conducted in the USA reported the rehabilitation treatment duration to stretch over 3–10 years.[7]

A recent study by Naqvi *et al*. investigated the potential barriers perceived by poliomyelitis-infected patients that hinder them in undergoing rehabilitation treatment in Pakistan. The authors reported that the respondents held financial constraints and treatment attendance to be the major and minor barriers, respectively. The study concluded establishing direct costs as a vital issue that needs to be addressed on a priority basis since polio is more prevalent among those with a weak socioeconomic background. Due to the lack of welfare schemes and provision of health insurance for the poor, in most of the cases, patients in Pakistan need to bear medical costs by themselves. Hence, polio survivors have to face economic hardships due to long-term costs associated with the disease.[5]

Poliomyelitis has profound economic consequences, especially for the survivors in the developing countries such as Pakistan. Duintjer Tebbens *et al*. report that in middle- and low-income countries, the treatment for polio amounts to US $600–6000 per case on an average. This is a startling figure keeping in view that the average GNI/per capita of these countries is merely US $930–3200.[8] With a climate of economic instability in the country, an understanding of the economic impact posed by the disease to the society is of paramount importance as it can contribute to the development of relevant of policies that could not only improve the affordability of managing polio but also help in alleviating the economic consequences of the disease.

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