

Open Peer Review on Qeios

Poliovirus: a long-due battle for Pakistan

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Abstract

Eradication of polio has received gravitation in the past because it deems the host disabled for life. As a result of an unprecedented global effort only three countries remain that have never stopped polio transmission - Afghanistan, Nigeria and Pakistan. A dominant set-back to this goal occurred when Pakistan encountered its worst polio epidemic in 2014; a total of 306 cases of polio were diagnosed and recorded in Pakistan, which accounted for nearly 85% of all polio cases worldwide. This epidemic proved to be a major turning point as after this the virus has decreased to 97% and exhibited its least incidence this year in 2018. Pakistan has proved its devoted efforts by devising new strategies: collaborations between Pakistan's security forces and the polio eradication. Nevertheless, certification of polio eradication ensures that all countries in a region remain polio-free for at least three consecutive years. Hence, the risk for transmission remains if even a single child is a victim to this virus. It is imperative for the general population to recognize polio as a social problem to continue this journey in a steeper manner as it has been established this year.

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Eradication of polio has received gravitation in the past because it deems the host disabled for life. As a result of an unprecedented global effort, only three countries remain that have never stopped polio transmission - Afghanistan, Nigeria, and Pakistan^[1]. It was reported in an editorial of The Lancet (March 2013, volume 13) that, while speaking in London at the Richard Dimble by lecture, Bill Gates reiterated his commitment to wiping out the disease and setting up the new eradication target of 2018^[2]. A dominant setback to this goal occurred when Pakistan encountered its worst polio epidemic in 2014; a total of 306 cases of polio were diagnosed and recorded in Pakistan, which accounted for nearly 85% of all polio cases worldwide^[3]. This epidemic proved to be a major turning point as after this the virus decreased to 97% and exhibited its least incidence this year in 2018^[4]. The recent emergence of Pakistan's first polio case of 2018 was confirmed by The National Institute of Health (NIH) on March 29. The detrimental virus was confirmed to be found in a 38-month-old child and the child eventually became paralysed, the date of onset of paralysis being March 8, 2018^[5]. This is the first case to emerge since November 2017 and even though appears distasteful to the goal established; it mirrors a radical decline of Polio in Pakistan. Pakistan has proved its devoted efforts by devising new strategies: collaborations



between Pakistan's security forces and the polio eradication campaign have helped achieve a reduction in polio cases reported in 2015 compared to 2014. There have been a number of international conferences around the globe, including Pakistan, where a conference was held in the capital of Islamabad in 2014, which has shown tremendous success, as seen by the statistics over the years^[6]. Limitations and reluctance pertaining to the vaccine for religious reasons have been undertaken by prominent Islamic scholars endorsing the polio vaccination campaign, and have also led door-to-door campaigns in parts of the country^[7]. The recent edition of the Pakistan Polio Update of March 2018, reports that Pakistan Polio Program is targeting cornered cases of polio between the Pakistan-Afghanistan epidemiological block which is an important sanctuary for the immunisation gap. Furthermore, the program is focusing on community engagement efforts to bring resistant communities on board. Lastly, two additional environmental detection sites have been set up bringing the total number of such sites to 55; the largest ever network which has been set up worldwide. However, certification of polio eradication ensures that all countries in a region remain polio-free for at least three consecutive years^[8]. Hence, the risk for transmission remains as long as even a single child is a victim of this virus. It is imperative for the general population to recognise polio as a social problem in order to continue this journey in a steeper manner as it has been established this year.

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