Cholera on high alert

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Madam, cholera is an acute bacterial infection of the intestine caused by the Vibrio cholera bacteria. Cholera spreads via the faecal-oral route and causes severe diarrhoeal infection. According to the World Health Organization, every year, three million to five million cases of cholera appear; among them 100,000-200,000 deaths occur globally.[1] The disease has been associated with seven pandemics in the past. The first pandemic of cholera occurred in 1817.[2] In the 19th century, an outbreak of cholera in the Ganges delta, in India, led to the spread of cholera across the world. Six subsequent pandemics of cholera have since then killed millions of people. Later, in 1961, 1971, and 1991, outbreaks occurred in South Asia, Africa, and America respectively. Cholera is now endemic in most Southeast Asian countries, including Pakistan.

Cholera was not a major cause of diarrhoea in Pakistan before 1988, but now it is endemic in Pakistan and sporadic cases of cholera, particularly in Sindh, are still reported.[3] Our country is already facing economic and social consequences of the Covid-19 pandemic, which has been a burden on the health sector as well. Authorities should take adequate measures to check the spread of cholera, both at a provincial as well as national level, in order to save the health sector from collapsing. Adults and children are equally affected. According to the National Institute of Child Health, each health setup is receiving 10-15 patients daily. However authorities claim that this number is much higher than that.[4] Poverty, heatwaves, poor sanitary conditions, lack of clean drinking water, and environmental pollution are the main reasons for cholera.[4] Every year 53,000 children die due to cholera in Pakistan. The recent outbreak in Sindh is due to the Ogawa strain, which can cause death within hours.[4]

V. Cholera has more than 200 serogroups, out of which O1 and O139 cause outbreaks, while the rest of the non-O1/O139 serogroups are related to mild and moderate infection.[2] A human is the only host of V. Cholera; it enters via the mucous membranes into the epithelial cells of the small intestine, and releases cholera toxins (CT).[2] Due to these toxins, the body releases enormous amounts of water, leading to loss of fluids, essential minerals, and electrolytes. Symptoms of cholera are difficult to differentiate from other forms of diarrhoea. Vomiting, diarrhoea, dehydration, sleepiness, muscle cramps, rapid pulse, dry mucosa, etc., are the chief complaints of patients suffering from cholera. Cholera can cause severe depletion of electrolytes and essential minerals due to diarrhoea and vomiting. 1 in 10 people experience a severe form of infection — mostly pregnant women, children, and the elderly. Access to clean water, adequate sanitation, and hygiene practices (WASH) are linchpins of cholera prevention. Cholera vaccines can supplement prevention strategies. There are two types of oral cholera vaccines available: Dukorall and Shanchol.[2] The Vaxchora vaccine is an FDA-approved, single-dose, live, oral bacterium that can be administered before travelling to infected areas. Shanchol and Euvichol are vaccines available for mass vaccination; whose protection against cholera lasts for 3 years.[5] Health facilities should alert the public about the disease outbreak and they should act quickly to ensure proper treatment and prevention of this disease.

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