drug trade, one of which even involved the pentavalent vaccine, effective against diphtheria, tetanus, pertussis, polio, hepatitis B and *Haemophilius influenzae* type B (table).

What are the administrative weaknesses that have led to the boom of the Indian counterfeit drug trade? The Mashelkar Report of 2003[6] noted "the difficulties in the regulatory system in the country were largely due to insufficient or weak drug control infrastructure at the state and central level, inadequate testing facilities, unavailability of drug inspectors, non-uniformity of enforcement, an absence of specially trained cadres for specific regulatory areas, non-existence of data banks, and non-availability of accurate information". Another shortcoming is the prevalence of rampant corruption in India's health-care sector.[7]

What measures are being used by the Indian Health Ministry to address the above inadequacies and ensure that genuine vaccines will be available in all the centres associated with Mission Indradhanush? For Mission Indradhanush to succeed, efficient mechanisms are needed to stop the theft of government resources, which is quite rampant (table), and suitable vigilance procedures to end the corruption associated with the counterfeit drug trade. Otherwise, like other health-care projects—eg, the National Rural Health Mission for Uttar Pradesh in 2005, which failed because of large-scale mistakes and supply of spurious drugs,[8] Mission Indradhanush will also end in failure.

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Cholera and blame in Haiti

After an explosive cholera outbreak in Haiti in October, 2010, an Editorial in *Lancet Infectious Diseases* opined that assigning blame as to the origin of the outbreak was unhelpful.[1] Subsequently, the outbreak turned into the largest cholera epidemic in the world with 745 558 cases and 8972 deaths (as of July, 2015).[2] Blame is often portrayed as a vengeful act—finding fault so as to inflict emotional pain. Yet in public health circles, the definition of blame might have another connotation: "to hold responsible".[3] In Haiti, avoidance of responsibility for cholera quickly became entangled in international politics. Without insight and steerage, control and elimination efforts were hindered and irregular.

A UN peacekeeping camp in the central regions of the country hosted soldiers from a cholera-endemic country (Nepal) and in a village at the camp's edge, doctors of the Cuban Medical Brigade recorded the first cholera cases, which suggested a possible origin of the outbreak.[4] Haiti was recovering from an earthquake that occurred 9 months earlier and many felt the presence of UN troops was essential for the country's stability. But there was a dilemma: should the origin of the epidemic be investigated or avoided, so as not to enrage the Haitian people against stabilising UN peacekeepers? Although the Pan American Health Organization, WHO, and the US Centers for Disease Control and Prevention chose to not investigate the potential involvement of the UN military camp, the Haitian government asked the French Embassy for assistance with an outbreak investigation, led by Renaud Piarroux. The ensuing scientific report provided epidemiological arguments that cholera had been introduced by the UN peacekeepers.[5] After a draft of the report was leaked to the media in December, 2010, the UN secretary-general ordered a follow-up investigation. The investigation panel—selected by the UN—concluded that the source of the Haiti cholera outbreak was due to contamination of the river flowing by the village next to the UN camp, with a pathogenic strain of a south Asian type of *Vibrio cholerae* introduced by human activity.[6] Additional evidence also pointed to the UN troops as the probable source of the epidemic,[7] and in 2014, the panel stated that personnel associated with the UN peacekeeping camp were the "most likely source of introduction of cholera into Haiti".[8]

Although the UN has never officially recognised its responsibility nor accepted blame for the outbreak, the agency has made several related policy changes including mandatory cholera vaccinations for all UN peacekeepers deploying to and from cholera-endemic areas; proper management of wastewater in military camps, including improvement and better monitoring of existing facilities, installation of independent wastewater-treatment plants, and inspection and closer supervision of contractors involved in wastewater disposal; and appointment of an

environmental officer responsible to support missions for implementation of policies on sanitation and environmental issues.[9] Would these policy changes instituted by the UN have taken place if the source of the Haiti outbreak had not been identified? Despite avoidance politics, finding blame is recognised as an important component of public health accountability.

RP is assisting UNICEF and the Ministry of Public Health and Population in Haiti to implement epidemiological studies aimed at improving the National Plan for the Elimination of Cholera in Haiti 2013–22. RRF declares no competing interests.

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