Vaccine Preventable Diseases (VPD) and Public Health

The category Vaccine Preventable Diseases (VPDs) has acquired a legitimacy, and is being used to refer to many diseases [1]. This labelling or classification has adversely affected the broader disease control. VPD implies that the rest of diseases are not preventable by vaccines, which may not be true. There are ongoing attempts to create vaccines against dental caries, atherosclerosis, cancer, and many infectious diseases [2,3]. VPD should be correctly referred to as Vaccine Available Disease.

VPD may also imply that these diseases are to be primarily controlled by vaccination. This is against the principle of disease prevention. Disease prevention has been classified into Primordial, Primary, Secondary and Tertiary [4]. The modes of intervention for primary prevention are Health promotion and Specific protection. Health promotion can be achieved by Health education, Environmental modification, Nutritional interventions and Lifestyle and behavioural changes [4]. Health promotion is probably the most ethical, effective, efficient and sustainable approach to achieve good health [5]. Health promotion results in the host being strengthened against all diseases, and results in Positive health, the highest state of health. Vaccination results in specific protection only against a particular disease. Long-lasting and comprehensive disease prevention cannot be achieved by vaccination alone.

Occurrence of a VPD leads to a demand for more vaccination, repeat doses and clamour to punish persons/ children who are not vaccinated. All other aspects of disease prevention are ignored in the panic reaction. No vaccine has 100% efficacy and even the vaccinated can get infected and transmit the infection – albiet for a shorter period than the unvaccinated. Importantly all those who are not vaccinated are not unimmune because of natural exposure to the agent by subclinical infection. Despite these well known facts, there is a tendency to emphasize only on vaccination to prevent VPDs and blame the unvaccinated for disease outbreak.

We should not abandon all principles and tools of epidemiology, immunology, physiology and sociology as soon as a vaccine is created. The goal of public health should be positive health and not merely disease prevention by a single intervention.

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Increasing Antimicrobial Resistance in Community-acquired Infections – An Alarming Trend

New resistance mechanisms among antibiotics are spreading worldwide. They are affecting the treatment of common infectious diseases, resulting in adverse clinical outcomes, death and huge consumption of healthcare resources.

Typhoid fever, an endemic disease in India, is a multisystem febrile disease caused primarily by *Salmonella enterica* serovar Typhi (*S.* Typhi). Ceftriaxone resistance has not been very prevalent in India [1], and it continues to be the first choice of drug for the inpatient management of typhoid. However, resistance to ceftriaxone and fluoroquinolone is increasingly being reported in *Salmonella enterica* subspecies from Asia and Africa [2]. During January to June 2019, 19 clinical isolates of *Salmonella* Typhi were isolated from 3696 blood culture specimens, collected from children admitted at Bai Jerbai Wadia Hospital for Children, Mumbai, India. Resistance to ceftriaxone was seen in 14 (73.7%) isolates, while 10 (52.6%) were resistant to fluroquinolones. No resistance was reported towards aztreonam, ceftazidime, colistin, cefepime, doripenem,