

Adolescent and adult pertussis - Lack of data from South Asian and African regions

Muhammad Ali Syed

Pertussis or whooping cough, generally considered as the disease of infants and children, is an acute respiratory tract disease responsible for around 300,000 deaths annually.¹ However, recent reports from many countries of the world clearly indicate that this disease targets people of all age groups including adolescents and adults.² Pertussis remains an underestimated and under reported disease in adolescents and adults due to atypical symptoms in these age groups. Moreover, physicians continue to perceive it as a disease of children. There have been increasing reports of pertussis out breaks in adult population in many western countries and vaccination of this age group is being planned.³ Adult pertussis is usually characterized by persistent cough; however there are also reports of epidemics in adults with typical symptoms from some outbreaks.^{4,5}

Both South Asian and African regions are badly affected by infectious diseases such as AIDS, tuberculosis, cholera, malaria, typhoid, diarrhoea etc. Like many other developing countries of the world, morbidity and mortality rate due to pertussis is likely to be high in South Asian countries such as Pakistan, India, Bangladesh and Sri Lanka as well as countries of African continent.⁶⁻⁸ There is also a very high probability of occurrence of adult pertussis cases in this region. As most of the adult pertussis cases have been reported from the developed countries, incidence and prevalence of these infections seem to be under reported from this part of the world. Further, there is an overall lack of data related to laboratory confirmed cases of pertussis from these regions. Author could not find any significant number of reports of *B. pertussis* in the adult

population in the developing countries of South Asia and African continents. The main reason behind this under reporting may be lack of adequate diagnostic facilities, poor surveillance systems and unawareness of physicians to the occurrence of these infections in adult population.

Widespread use of DTP vaccination has resulted in the shift in the incidence of pertussis to adolescents and adults.⁹ It is estimated that almost 20-50% of all persistent cough cases in adults are caused by the *B. pertussis*.^{2,5} Several explanations have been proposed for this shift, waning vaccine induced immunity after some years seems to be most cited. Improved molecular biology based diagnostic techniques are another reason for increasing reports from developed countries.⁹ As pertussis may be fatal in infants and children, the adult reservoir may also serve as a great source of infection to children in contact and other adults as well. The proposed adult vaccination with DTaP will not only reduce the burden of the disease from this age group but it will also reduce the risk of transmission to children.²

Adult pertussis is both a significant health problem as well as an economic burden in both developing as well as developed countries.^{1,2} Lack of epidemiological data from this part of the world is of concern. It is suggested that medical community and health care policy makers in South Asia and African region should turn their attention to the surveillance *B. pertussis* infections in the adolescent and adult population as well, so that a clear picture of the epidemiology of *B. pertussis* infections is available for future planning on the control and prevention of the disease. Moreover, a shift in the clinical manifestations of the diseases in the vaccinated or incompletely vaccinated population should also be monitored.

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1. Muhammad Ali Syed,
Department of Microbiology,
Kampala International University,
Western Campus, P.O Box 71, Bushenyi, Uganda.
- Correspondence:
Muhammad Ali Syed, PhD,
E-mail: mirwah2000@yahoo.de
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