Effectiveness of BCG vaccination in preventing tuberculosis

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Common lower respiratory tract infections include tuberculosis, asthma and chronic obstructive pulmonary disease (COPD). World Health Organization (WHO) defined tuberculosis as an infectious disease caused by *Mycobacterium tuberculosis* which most commonly affects lungs. With increase in prevalence, tuberculosis (TB) is now the second only to Acquired Immuno-Deficiency Syndrome (AIDS) as the greatest killer worldwide due to a single infectious agent. Bacille Calmette Guérin (BCG) vaccination has been developed against tuberculosis to decrease the mortality from this disease. Although BCG is not commonly inoculated in America, it is routinely given to infants and children in countries where TB is prevalent. However, cases of tuberculosis have been identified even after inoculation of BCG vaccine. This study was conducted at tuberculosis and asthma clinic of Children Hospital Lahore from January 2012 to December 2012. All those children were included in the study who met the selection criteria. Out of 500 children half, 250 (50%) were male while remaining 250 (50%) were females. 227 (45.4%) were diagnosed as having TB on the basis of PPASC. 389 (77.8 %) were vaccinated while remaining 111 (22.2 %) were not vaccinated. Out of 227 children with diagnosis of TB, 91 (39.9%) were male while 136 (59.9%) were females. Out of 389 vaccinated children, 132 (33.9%) were diagnosed as having TB while out of 111 non-vaccinated children 95 (85.6%) got TB. Results of the study indicate that although vaccination with BCG decreases the prevalence of TB however, it is not 100% effective in combating with tuberculosis.

Biography

Ahtisham-Ul-Haq completed his M.B.B.S at the age of 25 years from Allama Iqbal Medical College. He did his M.P.H. from Institute Of Public Health in 2004 and is currently enrolled in M.Phil. in Community Medicine. Currently he is working as additional medical superintendent at a well-reputed tertiary care hospital. He has presented his research work at various national and international forums.