



## Evaluation of Factors Responsible for Incomplete Expanded Programme of Immunization in Village Wari, District Dir (Upper), Pakistan

Alamgir KHAN <sup>1</sup>, Hanif ULLAH <sup>2</sup>, Bashir ULLAH <sup>1</sup>,  
Shujaat A. KHAN <sup>2</sup>, Sabiha KARIM <sup>3</sup> & Ghulam MURTAZA <sup>2\*</sup>

<sup>1</sup> Department of Surgery, Saidu Teaching Hospital, Swat, Pakistan.

<sup>2</sup> Department of Pharmaceutical Sciences, COMSATS Institute of Information Technology,  
Abbottabad 22060, Pakistan.

<sup>3</sup> Univeristy College of Pharmacy, University of the Punjab, Lahore, Pakistan.

**SUMMARY.** This study was designed to determine the age-appropriate expanded program of immunization (EPI) coverage in children (under one year) and tetanus toxoid (TT) coverage of their mothers (15-49 years) in Village Wari, District Dir (Upper). A cross-sectional experimental study was carried out by taking 170 children. Child's mother was interviewed by using a structured pre-tested questionnaire. A total of 170 children (born during December 1, 2010 to July 31, 2011) were not completely vaccinated. Percentage of incompletely vaccinated children regarding other vaccination was as: all children were vaccinated for poliomyelitis, 40 % for BCG (bacille Calmette-Guerin vaccine against meningitis and disseminated tuberculosis), 24 % for DPT (a combined vaccines against diphtheria, pertussis and tetanus), 34 % for COMBO (combination vaccine) and 2 % had no information after BCG vaccination. TT coverage of mothers for the index pregnancy was 80 % for both doses of vaccine, while 20 % mothers had not taken TT during pregnancy. Mother's TT vaccination status and parent's educational status were found to be significantly ( $P < 0.05$ ) associated with children's immunization status. Major factor (71 %) responsible for incomplete vaccination in all families was lack of awareness. As a result of health education, 49.60 % of mothers (61 mothers out of 123) started completing their vaccination. Education of mothers plays a significant role in EPI coverage.

**KEY WORDS:** Education, Expanded program of immunization, Incomplete immunization, Measles, Risk factors, Vaccination.

\* Author to whom correspondence should be addressed. *E-mail:* gmdogar356@gmail.com