

## ABSTRACT

Immunization is cost-effective and one of the strategies for the reduction of mortality rates among children under five years in Myanmar. Missed opportunities for immunization are still high in Myanmar. A missed opportunity for immunization (MOI) refers to any contact with health services by an individual (child or person of any age) who is eligible for immunization (e.g. unvaccinated or partially vaccinated and free of contraindications to immunization), which does not result in the person receiving one or more of the vaccine doses for which he or she is eligible. A cross sectional comparative study with both quantitative and qualitative methods was carried out at Lashio Township, Pathein Township and Pakkoku Township to assess the proportion of missed opportunities for immunization among children under two years and perception to missed opportunities for immunization among midwives. A total of 564 mothers or caregivers of children under two years was interviewed by using pretested face to face questionnaires in both urban and rural community. Key informant interview was conducted with fifteen midwives who were involved in Expanded Program on Immunization service for at least one year. The proportion of missed opportunities for immunization (MOI) was (30%) in 3 townships: (44%), (31%) and (17%) in Lashio, Pathein and Pakokku Townships respectively. The proportion of MOI was (32%) in urban and (68%) in rural population. The majority of mothers or caregivers of children under two years (93%) had the vaccination card in hand. The types of missed vaccines were vaccine for Oral Polio Vaccine (OPV) (64%), Pentavalent (63%), Pneumococcal Conjugate Vaccine (PCV) (59%), bacillus Calmette-Guerin (BCG) (47%), Measles and Rubella (MR) (43%), Japanese B Encephalitis (JE) (27%) and Hepatitis B (7.3%). The common reasons for missed vaccination were; child was ill (54%), travelling of caregiver (14%), (8%) each for no enough time to get immunization, difficult transportation and lack of information for vaccination. There was a significant association of missed opportunities for immunization among under-two children by getting adequate information for immunization service (place and time) and getting explanation about the vaccines given from logistic regression analysis. According to key informant interview among midwives, almost all of midwives told that information for next vaccination was written in immunization cards and local administrative officers helped in

immunization services. About 7 out of 10 midwives made appointment for missed vaccines one month later and one-third of midwives suggested for manpower enforcement. More than half of midwives were satisfied to their immunization services. These findings support the information to ensure the strengthening of the immunization services in Myanmar.