

## **Predictors of adherence toward childhood immunization of under five children**

### **ABSTRACT**

Introduction: Vaccine preventable diseases are occurring despite high immunization coverage. Hence, the predictors of adherence toward childhood immunization are important to be identified. A cross-sectional study conducted to determine the predictors of adherence toward different vaccines of childhood immunization among mothers of under five children. Materials and Methods: Recruitment of 320 respondents into the study was via systematic random sampling technique. Validated self administered questionnaires and proforma were used as the study instruments. Descriptive and inferential statistics were analyzed using SPSS version 22. Multiple logistic regression conducted for the analysis of predictors. Result: Response rate of 98.1% was obtained from 314 respondents. Adherence (completeness) towards childhood immunization and adherence (timeliness) towards different vaccines were 98.09% and 56.5% - 97.1% respectively. The predictor of adherence (completeness) was household income category of RM2000 to RM2999 ( $p=0.047$ ). The predictors of adherence towards vaccine timeliness were; employed mothers towards BCG vaccine ( $p=0.011$ ), third and onwards born children towards Hepatitis B dose one vaccine, ( $p=0.049$ ), 25 year old and above mothers towards Hepatitis B dose two vaccine ( $p=0.038$ ) and household income of RM5000 and more towards MMR dose one vaccine, ( $p=0.044$ ). Conclusion: High adherence (completeness) towards childhood immunization relatively differs with the lower adherence (timeliness) towards different vaccines and its doses. Household income was the predictor for adherence (completeness). Predictors of vaccine timeliness included; mother's employment status for BCG vaccine, birth order for Hepatitis B dose one vaccine, maternal age for Hepatitis B dose two vaccine, and household income for MMR dose one vaccine.

**Keyword:** Predictor; Adherence; Childhood immunization; Under five children