

Supplemental Table 1 Summary of variables used in the present study and their description

Variable description	Categories
Interviewee responsibility of child	0 = Mother, 1 = Caregiver, 2 = Others
Residence: place of the residency	0 = Rural (Reference), Urban = 1
Sex of child: the sex of the index child	0 = Male (Reference), Female = 1
Age of child: age of the index child -----in months	0 = 12-17 months (Reference), 18-23 months
Birth order: birth order of the index child	0 = First, 1 = Second, 2 = Third and above
Age: age of the mother/caregiver-----in years	0 = <=30 years, 1 = >=31 years
Marital status: current marital status of the mother/caregiver	0 = Never married, 1 = Current married, 2 = Divorced
Educational status: educational level of the mother/caregiver	0 = No formal education, 1 = Primary, 2 = Secondary, 3 = College / above
Occupational status: current occupation of the mother/caregiver	0 = Housewife, 1 = Private worker, 2 = Employed
Father's occupation	0 = Private, 1 = Merchant, 2 = Employee, 3 = Farmer
Family structure: living parents of the child	0 = Bi-parental/extended, 1 = Single parent
Family size: number of family members living in the household_____	0 = <6, 1 = >=6
ANC follow-up: is the mother had ANC follow-up for the index birth	0 = Yes, 1 = No
PNC follow-up: is the mother had PNC follow-up for the index birth	0 = Yes, 1 = No
Place of birth: birth place of the index child	0 = Health facility, 1 = Home
Immunization important: do you think immunization is important to a child	0 = Yes, 1 = No
Claim of forgetting due date: did you forget vaccination due date of the child	0 = Yes, 1 = No
Maternal illness during due date: did you get ill during vaccination due date of the child	0 = Yes, 1 = No
Mother busy during due date: did you get ill during vaccination due date of the child	0 = Yes, 1 = No
Perceived fear of vaccine side effects: claimed fear of vaccine side effects	0 = Yes, 1 = No

VPDs could be serious: did you thought VPDs could be serious for the child	0 = Yes, 1 = No
Vaccination achieves immunity: do you believe vaccination can achieve immunity for the child	0 = Yes, 1 = No
Know immunization starting time: do you know at what age child vaccination start	0 = Don't know, 1 = Know
Know immunization ending time: do you know at what age child vaccination complete	0 = Don't know, 1 = Know
Ill health of the child: did the index child get ill during vaccination due date	0 = Yes, 1 = No
Long waiting at a health facility: waited greater than or equal to 60 min to vaccinate their child during the immunization sessions	0 = Yes, 1 = No
Lack of appointment at a health facility	0 = Yes, 1 = No
Mode of transportation: Ways of transportation to health facility	0 = Vehicle, 1 = On horse/mule, 2 = On foot
Lack of vaccine: was there no vaccine at the health facility at the due date	0 = Yes, 1 = No
Distance to a health facility: distance from a health facility made it difficult for them to access medical care from such facilities, including services such as child immunization.	0 = Not a problem, 1 = Big problem
Satisfaction: have you satisfied with the practice of healthcare providers at the immunization sessions: Very satisfied, satisfied, neutral, dissatisfied, and very dissatisfied.	0 = Satisfied, 1 = Not satisfied