

Chapter 7

Summary

The study was conducted in two phases, the first phase assessed gaps in the knowledge and practices of primary caregivers related to immunization. The second phase assessed effectiveness of a need based interventional package. During the first phase, total four focus group discussions (FGDs) were conducted with experienced primary caregivers comprising mothers and caregivers visiting vaccination room. Five participants in each group were interviewed using guiding questions. One session with each group was organized to reach a sample size of twenty.

During FGDs, information needs related to various aspects of immunization were expressed. Knowledge deficit of primary caregivers was highlighted related to various aspects of immunization. Awareness regarding immunization schedule, vaccine site, route and related problems was found low. They expressed desire to be informed about expected local reaction, pain management methods and home care of children after vaccination. Overburden staff and rush on vaccination day was reported as main reason for lack of information. The health care staff could give only limited information to each parent. The caregivers reported their inability to differentiate a normal from an abnormal reaction. Some wrong home based practises were also identified such as massaging the area, hot fomentation, ointment application etc. They also had some misconceptions regarding conditions when the child must not be vaccinated. This further strengthened the need for an educative intervention and formed the base for interventional package.

The phase II was conducted using two groups (interventional and control group) selected via random sampling. The intervention group received educative intervention and a written material for reinforcement while the control group received routine information as provide by healthcare staff. Both the group were homogenous with respect to their socio demographic variables. Also the children in both the groups had similar attributes.

Awareness among primary caregivers.

It was measured at birth, six weeks and nine months using a self- structured self- administered questionnaire. Both the groups had a comparable awareness level initially (at birth). After implementation of interventional package, the awareness level among intervention group increased significantly from 19.84 at birth to 32.76 at nine months. As for the control group, a negligible rise in the mean awareness was seen; it was 19.25 at birth and 19.33 at nine months. Maximum score was 25 for both initially but rose to 42 for interventional group. The awareness level was in good and average category for both the groups at birth with no significant difference according to chi square method. None had very good awareness level. Thereafter, the awareness increased to 50% subjects in very good and 50% in good awareness category. The subjects in control group remained in good and average category till nine months. Within group and between group analysis also showed that interventional package significantly increased awareness in the intervention group. Interestingly, the pairwise comparison showed no significant improvement in awareness after six weeks which could be interpreted as more receptivity for educative intervention during early postpartum days.

The awareness increased drastically for almost all the aspects of immunization. At nine months, all knew about protection rendered by immunization, maximum age of vaccination, common symptoms after immunization, association of fever and Pentavalent vaccine, method of cold sponging. More than 70% primary caregivers became aware of vaccines given at birth, body part affected by polio, route of rotavirus vaccine, about PCV vaccine (disease prevented, site of administration), MR vaccine, minor reactions after vaccination and methods to reduce fever. Low awareness was observed initially for BCG site, severe reactions to vaccines, antipyretic administration and indication of allergic reactions. For all these, awareness increased to more than 50% at nine months among primary caregivers of interventional group.

Self-efficiency among primary caregivers.

Self-efficiency was measured using a Likert type self-administered scale. The baseline assessment was done at birth and repeated at successive immunization events till nine months. Initially average and poor level of self-efficiency was seen among both the groups. Average self-efficiency was among 50.7% in interventional and 52% in control group. The rest had poor level. The difference was statistically not significant. By nine months 78.8% in interventional group had good self-efficiency and the rest average while the control group subjects remained in the average (51.6%) and poor category (48.4%). The mean self-efficiency increased from 12.91 at birth to 23.17 at months. As for the control group, marginal increase occurred from 12.97 at birth to 13.03 at 9 months. Maximum score initially was 15 for both the groups but increased to 27 for interventional and 16 for control group. Between groups analysis was done using unpaired t-test. The difference in mean self-efficiency of intervention and control group was not significant at birth but was significant at all successive immunization events. Within group analysis concluded a significant improvement in self-efficiency in interventional group, confirming the effectiveness of interventional package. Pairwise comparison also revealed marked improvement in self-efficiency at every immunization event in interventional group. Self-efficiency scores of interventional group were at good and average level with most subjects in good efficiency category.

Vaccine related problems among children.

Vaccine related problems were enquired at every immunization event. Commonly reported problems were pain at vaccination site, excessive crying, redness & swelling, irritability and restlessness, nodule formation, drowsiness and sleep disturbance, feeding problems and fever. At all immunization events pain, redness and swelling, excessive crying and feeding problems were observed in both the groups. Irritability and restlessness had its highest incidence at ten weeks. Nodule formation at vaccination site occurred with Pentavalent administration. Fever was present at all immunization events till nine months, except at birth. Drowsiness/sleep disturbance was seen at six weeks and fourteen weeks. The

proportion of children experiencing vaccine related problems was similar for both the groups. Maximum vaccine related problems were observed at six, ten and fourteen weeks. Association of vaccine related problems with gender and birth weight of children was found significant for most of the problems at variable number of immunization events except for drowsiness/sleep disturbances.

Immunization compliance among groups

Both the groups reported 100% compliance with the immunization schedule at first immunization (at birth). Delay in vaccination was observed at six weeks (20% in intervention and 17% in control group) onwards in both the groups. While all the children in intervention group had timely immunization, 1.6 % children in control group were vaccinated beyond one year of age. Statistically, type of locality in intervention group, education of primary caregivers and their occupational status were found associated with their timeliness of immunization.