

ABSTRACT

Healthy psychosocial development of children is important throughout their growing up period. It helps a child to grow up from a totally dependent individual during infancy to one who is able to function effectively and efficiently in personal and social life.

Prevalence studies done in developed countries indicate that children suffer from persistent and socially handicapping mental problems. Data pertaining to developing countries are rare, and available data suggest approximately similar rate. In Sri Lanka however, there is a paucity of accurate data especially among the 0 - <5 years age group.

Child mental health activities were initiated in Sri Lanka in 1983 within the Primary Health Care setting. Monitoring of mental development of children of 0-<5 years of age is one of the important tasks. The key person identified for assessment of mental development in this age group is the Public Health Midwife.

Health education plays a vital role in the performance of the tasks and achievement of the goals of child mental health activities. While each member of the society has his or her own responsibility, the mother is identified as the most important person.

Phase I of the present study was carried out to detect the prevalence of developmental delays in children in the 0 - <5 years age group and behavioral disorder in children of 2 - <3 year age group and to assess the relevant associated biological and socio economical characteristics.

This observational study was conducted in the Deputy Provincial Director of Health Services Division, Colombo. The study population was selected by a house to house survey. A representative sample was ensured by selecting clusters according to probability proportionate to the population in different strata. An interviewer administered, structured questionnaire with a known reliability and validity was used as the study instrument. The quality of data was ensured by adequate training of field interviewers and diligent supervision and monitoring of field work.

The prevalence of developmental delays in children of 0 - <5 years, (n=2000) observed in the present study was 3.4%. A statistically significantly ($z=3.29$, $p<0.01$) higher proportion of boys had developmental delays compared to girls.

The prevalence of behavioural disorders in children of 2 - <5 years, (n=1068) observed in the present study was 8.3%. No statistically significant ($z=0.71$, $p>0.1$) sex difference was observed in behavioural disorders. Although the study area was not representative of the country as a whole the findings highlighted the magnitude of the problem.

Birth order of the child showed a statistically significant association with both developmental delays ($z=2.66$, $p<0.01$) and behavioural disorders ($z=2.98$, $p<0.01$). The children born as fourth, fifth or sixth were the most affected.

Mode of delivery showed a statistically significant association with behavioural disorders ($z=2.45$, $p<0.05$) but not with developmental delays ($z=0.36$, $p>0.1$).

Failure in age appropriate immunization showed to have a statistically significant association with developmental delays ($z=5.64, p<0.001$) but not with behavioural disorders ($z=0.22, p>0.1$). Positive effects of effective immunization would have contributed to such findings.

Low birth weight was not shown to have a statistically significant association either with developmental delays ($z=1.36, p>0.1$) or behavioural disorders ($z=1.32, p>0.1$). However, further research into this aspect would be useful.

The higher educational level of mothers showed statistically significant association with both normal development ($z=3.48, p<0.001$) and normal behaviour ($z=2.41, p<0.05$). Fathers' educational level was not shown to have a statistically significant association with either developmental delays ($z=0.80, p>0.1$) or behavioural disorders ($z=0.14, p>0.1$). Hence, positive effects of mothers education was evident in both instances in the present study.

Occupational status of mother was not shown to have statistically significant association with either developmental delays ($z=1.49, p>0.1$) or behavioural disorders ($z=1.29, p>0.1$). Good quality surrogate parenting would have influenced positively. Occupational status of father was also not shown to have a statistically significant association with either developmental delays ($z=1.40, p>0.1$) or behavioural disorders ($z=0.19, p>0.1$).

Temporary separation from father showed a statistically significant association with developmental delays ($z=2.87, p<0.01$) and behavioural disorders ($z=2.22, p<0.05$). However

temporary separation from mother was not shown to have a statistically significant association with either developmental delays ($z=1.15, p>0.1$) or behavioural disorders ($z=0.02, p>0.1$). A good relationship with at least one parent would have influenced positively.

Family stress was shown to have a statistically significant association with behavioural disorders ($z=2.22, p<0.05$) but not with developmental delays ($z=0.91, p>0.1$). Such events would have affected the children negatively.

Strengthening of existing service for children with developmental delays and behavioural disorders is recommended. Strengthening of preventive measures would be more rational and effective in this approach. Improvement of family planning practices and effective immunization programmes are recommended. Educating mother and even father on correct child rearing practices, positive child-parent relationship, quality surrogate parenting and avoidance of family stress would be most effective. However, strengthening of female education programmes have to be recommended as a high priority.

Phase II of the present study was conducted as an experimental study in four selected Medical Officer of Health areas in the Deputy Provincial Director of Health Services division, Colombo. This was designed to study the effect of an educational intervention programme in improving the activities implemented to promote mental health in children of 0-5 years at Primary Health Care level. Health education was a feasible and rational approach as an intervention.

The health education model used in the present study was the PRECEDE model. The steps in the guidelines developed by World Health Organization in planning, implementing and evaluating a health education programme was followed. The primary target group was mothers. The secondary target group was the Public Health Midwives (PHMM.)

Knowledge, Attitudes and Practices (KAP) of PHMM on child mental health activities increased following the intervention. The recording of age appropriate developmental milestones and home risk factors in Child Health Developmental Record increased following intervention.

KAP of mothers on child mental health activities increased following the intervention.

Hence, the evaluation of the educational intervention programme suggested the value of health education in bringing out improvements in KAP of both the target groups. A well-organized, strengthened educational programmes is recommended. However, the health education programmes for the mothers could be regarded as the highest priority area because the improvement of their KAP would greatly influence the psycho-social development of children.