

## ABSTRACT

This cross sectional comparative study was conducted to identify risk factors that can be associated with the prevalence of underweight at two years age among children born in year 2005 in the Medical Officer of Health area, Medirigiriya and some socio-demographic factors and other factors such as low birth weight, duration of exclusive breast feeding, total duration of breast feeding, maternal knowledge on nutrition and feeding of children during first 2 years and the birth order of the child were compared between underweight and normal weight children at 2 years age.

1,062 children were included into the study while 552 were males and 510 were females whose age was from 32 to 45 months to the date of interview. According to WHO, MGRS growth standards 21.9 percent of males and 20.0 percent of females were underweight at 2 years age. The total figure was 21.5 percent.

The prevalence of low birth weight was 34.2 percent for underweight children while it was only 14.3 percent for normal weight children and low birth weight showed a very highly significant ( $p=0.000$ ) association with the prevalence of underweight at 2 years age for both males and females indicating that low birth weight children are more prone to be malnourished.

The maternal knowledge on breast feeding, on complementary feeding and on feeding during second year also showed very highly significant ( $p=0.000$ ) associations with the prevalence of underweight at 2 years age showing that more knowledgeable the mother less prone the child to be underweight.

Among the other factors, mother's level of education had a significant ( $p<0.05$ ) association with the prevalence of underweight of females and the literacy of both mother and the father had highly significant ( $p<0.01$ ) associations with the same category while any one of three variables did not show significant ( $p>0.05$ ) association with the prevalence of underweight of male children.

This study failed to detect significant associations of the sex of the child, age of father or mother, the level of education of the father, duration of exclusive breast feeding, the total duration of breast feeding and the birth order of the child with the prevalence of underweight at 2 years age among males or females.

According to the above findings the possible associated factors for children to be underweight at 2 years of age are,

1. Low educational level of mother
2. Illiteracy of both mother and father
3. Low birth weight of the child
4. Poor knowledge of mother on,
  - a. breast feeding
  - b. complementary feeding
  - c. feeding during second year of the child

As this MOH area has higher prevalence of low birth weight in 2005 than the country and it has shown to have very highly significant association with underweight at 2 years, the stake holders such as Family Health Bureau should take actions to reduce the prevalence of low birth weight by eliminating the already identified risk factors for low birth weight.

The maternal knowledge on nutrition also has very highly significant association with the prevalence of underweight and this indicates the more and more need in maternal education on nutrition. The FHB and also the Health Education Bureau (HEB) can take steps to overcome this problem.