

Effectiveness of a health education handbook designed to increase knowledge on birth defects among Public Health Midwives in Southern Province of Sri Lanka

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ABSTRACT

Introduction and objectives:

Birth defects is a significant health problem among children. Prevention of birth defects is cost effective than spending resources to correct BD in newborns. Increasing knowledge and relevant skills in primary health care workers on birth defects is urgently needed to prevent birth defects in Sri Lanka.

Methods:

An interventional study was carried out to evaluate the effectiveness of a health education handbook prepared to increase knowledge on birth defects among the Public Health Midwives (PHMs) of Southern province of Sri Lanka. A self-administered questionnaire was used to evaluate the knowledge of PHMs of Bope-Poddala (intervention group, n=16) and Matara municipal council health unit area, (control group, n=17). Post-evaluation was carried-out for both the intervention and control groups using the same questionnaire. The range of scores on the knowledge on birth defects, on associated factors and on prevention and management of birth defects were 0-10, 0-21 and 0-10 respectively. Data were analyzed using SPSS version 20. Means of categorical knowledge on birth defects were calculated and *t* test was used to identify the differences between means. Significance level was considered as $p < 0.05$.

Results:

The mean scores obtained on the knowledge on birth defects, on associated factors of birth defects and on prevention and management of birth defects were 6.69, 14.69 and 8.19 respectively by the intervention group during pre-evaluation. The respective mean scores were 8.88, 18.63 and 9.19 ($p < 0.001$) after the intervention. Among the control sample the mean scores of knowledge on birth defects, on associated factors and on prevention and management were 8.00, 14.53 and 7.65 in pre-evaluation and they were 7.07, 14.73 and 8.20 in the post-evaluation ($p > 0.05$). The PHMs highlighted the importance of handbook as the first concise health education material they received on birth defects and they suggested distribution of the handbook among the other PHMs of Sri Lanka.

Conclusions:

The developed health education handbook is effective in increasing the knowledge on birth defects, on associated factors of birth defects and on prevention and management of birth defects among PHMs of Southern Province of Sri Lanka.

KEY WORDS

Birth defects, knowledge, health education, Public Health Midwives, Sri Lanka