

System barriers in diffusion of innovations: a case in promoting newborn screening behavior in postnatal mothers

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Introduction

A rapid assessment tool is used in community health and other community development projects to identify behavioral determinants associated with a particular behavior. Health promotion activities targeted on maternal and child health care has shown to be effective with positive health indicators.

Aim

To conduct a health promotion intervention through public health midwives (PHMs) in a district in Southern Province to motivate mothers to participate in newborn screening (NBS) for congenital hypothyroidism (CH).

Methods

Quasi experimental study design was used. A group of PHMs in a district was given a health education program on Iodine Nutrition (IN), CH and NBS for CH expecting that the intervention would lead PHMs to make changes in the NBS behavior of postnatal mothers in their PHM areas. A survey was done using a questionnaire in a group of postnatal mothers (n=100) in the intervention area and with two control groups of mothers, one from Galle (n=100) and the other from Matara (n=100) districts. The aim of this evaluation was to assess whether PHMs were effective in motivating mothers to take part in NBS for CH by disseminating the relevant message.

Results

The average age of mothers in the intervention and control groups were 29, 29 and 30 years respectively. A higher mean score of attitudes on IN was observed in the intervention group compared to Galle control [(13.2±26.4) verses 6.7±15.0, p<0.01] and Matara control [(13.2±26.4 verses 8.2± 23.3), p<0.05]. No significant differences of the mean scores of knowledge and practices on IN, CH and NBS for CH were found between the intervention group and the two control groups.

Conclusion:

We have reported earlier that the health education intervention targeted at PHMs on NBS for CH was an effective program. However, it seems that there are many health care system barriers that the PHMs face in disseminating the knowledge and skills that they had gained through the intervention. Further research is needed in this area.