



IMPACT OF STRUCTURED TRAINING COURSE ON KNOWLEDGE OF HEALTHCARE PROVIDERS REGARDING INFANT AND YOUNG CHILD FEEDING PRACTICES

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ABSTRACT Appropriate knowledge and feeding practices are of fundamental importance for survival, growth, development, health and nutrition of infants and children. Health professionals need adequate training in practical aspects to promote appropriate infant feeding practices.

METHODOLOGY: The study design was a before and after workshop based intervention study. Study participants were health care providers from health centres where facilities for antenatal, delivery and postnatal services were available. Knowledge of IYCF was assessed with a total of 27 questions on the fundamental understanding and core indicators of IYCF before starting the training sessions. The same set of questions was repeated after the training was over. Change in knowledge was assessed by applying appropriate statistical tests.

RESULTS: A total of 48 participants were tested for knowledge on different variables of IYCF indicators. Significant improvement in the overall knowledge of healthcare providers was seen. Highly significant improvement was observed in knowledge regarding breastfeeding assessment, breast conditions, expressed breast milk, infant milk substitute act, feeding low birth weight newborns and growth monitoring (p value < 0.0001).

CONCLUSION: Regular IYCF structured training courses are a necessity to improve the knowledge of health care providers.

KEYWORDS : Knowledge, Healthcare providers, Infant feeding practices.

INTRODUCTION:

Sub-optimal infant and young child feeding practices are responsible for spectrum of malnutrition in children. Optimal infant and young child feeding- initiation of breastfeeding within one hour of birth, exclusive breastfeeding for the six months of life and continued breastfeeding until the child is 2 years old or beyond, together with age appropriate, nutritionally adequate and safe complementary foods from 6 completed months of age, can have a major impact on child health, nutrition and survival [1].

Professionals concerned with nutrition, and with maternal and child health, all recognize the importance of improved infant feeding practices but they lack the knowledge and skills to ensure these. They have not received adequate training in practical aspects of lactation management and they have not understood the needs of lactating mothers. Hence there is an urgent need to impart knowledge and skills to health workers, who provide maternal and child care services to protect, promote and support appropriate infant feeding practices.

METHODOLOGY

The study design was a before and after workshop based intervention study.

Study setting

The study was carried out in GB Panth Children hospital, Srinagar where a training program was organized for health care providers which included medical officers and multipurpose health workers. The participants of this workshop were from health centres representative of all districts of valley, where facilities for antenatal, delivery and postnatal services were available.

THE INTERVENTION

IYCF counseling course is a comprehensive and integrated course developed by Breastfeeding Promoting Network of India (BPNI) and International Baby Food Action Network (IBFAN) Asia Pacific, which include breastfeeding counseling, complementary feeding counseling and Infant Feeding and Human Immunodeficiency Virus (HIV) counseling and Growth monitoring. The information provided in the course focused on educating and providing skills to health workers for counseling mothers to adopt optimal infant and young child feeding practices. For the intervention, a 7-day training course was designed.

During part 1 (3 days) participants received training from trainers in IYCF counseling. In part 2 (4 days) participants practiced to conduct a course for frontline workers/ peer counselors including 3x2 hours clinical practice in hospital. Different kinds of sessions were done including lectures, demonstration, group work, clinical practice and class discussion. Trainers guide, a comprehensive manual covering all sessions of the course was used as a course material. The trainers guide provided information and training on the following: Why optimal Infant and child feeding practices, production and intake of breast milk, assessment of breast feeding, breast conditions, counseling practice, expressing breast milk, not enough milk, complementary feeding, nutrition of lactating mothers, Infant Milk Substitute (IMS) Act, growth monitoring, infant feeding in HIV. Powerpoint slides were used as visual aids in various sessions.

DATA COLLECTION

Knowledge of IYCF was assessed with a total of 27 questions on the fundamental understanding and core indicators of IYCF before starting the training sessions. The same set of questions was repeated after the training was over. Change in knowledge was assessed by applying appropriate statistical tests.

Data analysis

Data was entered and analyzed using SPSS version 16.0. Data was presented in percentages and Chi-square test was used to test associations between quantitative variable which measured statistically significant differences ($p < 0.05$) before and after the training.

Ethical considerations

Confidentiality was maintained and names were not used on data tools. Verbal informed consent was collected from all participants. No harm occurred to participants.

RESULTS

A total of 48 participants were tested for knowledge on different variables of IYCF indicators. Significant improvement in the overall knowledge of healthcare providers was seen. Highly significant improvement was observed in knowledge regarding breastfeeding assessment, breast conditions, expressed breast milk, infant milk substitute act, feeding low birth weight newborns and growth

monitoring (p value<0.0001). Knowledge also improved in other variables like Nutrition of lactating mothers, complementary feeding and counseling for breastfeeding although not significantly.

Table 1: Knowledge difference pre and post intervention in the study hospital.

Knowledge variables	Pre intervention %	Post intervention %	Chi square	p value
Optimal IYCF practices	68.18	80.55	9.058	0.003
Production and intake of breast milk	69.09	95.00	10.716	0.001
Breastfeeding assessment	36.36	76.04	11.453	<0.0001
Breast conditions	59.84	89.06	17.289	<0.0001
Enough breast milk	28.78	87.50	27.89	<0.0001
Nutrition of lactating mothers	45.45	46.87	0.000	0.986
Expressed breast milk	36.36	95.83	31.153	<0.0001
Infant Milk Substitute Act	37.37	61.11	12.300	<0.0001
Complementary feeding	50.00	69.79	5.67	0.017
Feeding Low Birth Weight newborn	25.75	81.25	23.805	<0.0001
Infant feeding and HIV	35.60	55.72	7.87	0.005
Counseling for breastfeeding	6.06	7.29	0.189	0.664
Growth monitoring	63.63	89.58	14.35	<0.0001
Total	55.89	75.57	95.64	<0.0001

DISCUSSION:

On the whole, the outcomes of the training intervention were positive. Generally, knowledge and attitudes improved immediately following the training intervention. This is similar to other studies where nutrition education and training of health workers improved personal knowledge and performance of health workers [2,3]. A systematic review [4] also showed that nutrition training for health workers can improve feeding frequency, energy intake and dietary diversity of children aged 6 months to 2 years. Conducting the breastfeeding training resulted in significant improvement in knowledge regarding basic IYCF indicators. The statistical test were highly significant ($P<0.05$). Similar findings were reported in a nonrandomized controlled study conducted in Italy which showed that training for three days with a course including practical sessions and counseling skills were effective in changing hospital practices, knowledge of health workers, and breastfeeding rates [5]. Another study conducted in Pennsylvania school of nursing supported the findings because it proved that breastfeeding training increased the knowledge and improved the practice [6].

Some negative attitudes persisted regarding nutrition of lactating mothers, complementary feeding, as well as for counseling for breastfeeding. Health workers have poor knowledge in these aspects both before and after intervention, suggesting deeply rooted influences (possibly socio-cultural) that remain among health workers and shape their opinions despite previous medical or public health training and re-training (as in the intervention study). Behavior change communication in IYCF must start from health workers; hence, training and re-training of this group should involve strategies that embrace activities that can supplement the usual didactic method of teaching clinical facts and imparting desired medical skills. Such pedagogies should not only enhance cognitive learning and skills acquisition but also be very effective to bring about behavior change in the learner.

CONCLUSION:

In order to update the knowledge among health care workers regular IYCF structured training courses are a necessity. However it needs to be seen whether improvement in knowledge translates into changes in practices among mothers in their feeding practices.

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