



Use of Video in Imparting Education to Rural Illiterate Girls on Anaemia

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INTRODUCTION

It is beyond doubt that multi faceted resources in the field of formal & informal education in India and elsewhere are gaining sufficient momentum and various teaching techniques at almost all the levels of education are under going radical changes in past few years. Educational practitioners have now turned their faces towards developing such teaching strategies which when used for different targets groups and subjects and situations ensures better learning with greater interaction on one hand and maximum attainment of unstructured objective on the other.

Electronic media today is the most effective mass media in India as well as in other countries to disseminate knowledge in various fields like agriculture, education, marketing etc. at one hand and on the other they are proving very effective in providing regular updating of information in various subjects. Video has been proved very effective for imparting nutrition education to illiterate population as it involves the sense of hearing, seeing and also understanding which is a difficult aspect for trainer when he is dealing with illiterate subjects.

The nutritional scenario of country continues to be formidable despite the fact that India has achieved tremendous increases in the frontier of food production. Anaemia, which is one form of the malnutrition, affects 30.0 % of total world population and 60-70 % of Indian population, of whom majority is the women folk. Anaemia in our country is essentially due to Iron deficiency. Adolescent girls in Thar desert region are particularly suffering from iron deficiency anaemia and figures may be as high as 80.0 %. The present study was done to impart nutrition education to rural illiterate girls in arid region of *Thar* desert region of Rajasthan (India) on anaemia through video.

METHODOLOGY

Two villages viz., Gundoj and Mogra Kala in two districts of Pali and Jodhpur, respectively were selected through multistage cluster sampling methods. In both the villages 120 girls of 13-18 years were selected through surveying 150 families at preliminary stage. Three groups of 40 girls were made in both the districts and three types of treatments were given to these group. Group one i.e. T₁ was given simple, iron folate tablet supplementation, group two i.e. T₂ was given education on anemia through video and group three i.e. T₃ was given combination of T₁ & T₂ methods i.e. iron folate supplementation along with education through video.

A video programme on anaemia was specially developed for this purpose. A video script was prepared keeping several important points in mind, as it is a pre-visualized description of the video and audio elements. Since picture is a dominating feature in the video therefore the shot description was carefully laid down before actual shooting of video. Proper sequencing of shots according to the script was perfectly matched with the time segment and auditing of the whole raw shooting was finally done by selecting best shots, out of the available material with camera shooting team.

Majority of the individuals who formed target groups were illiterates. However, few adolescent girls had attended primary school one time or other. To test the knowledge gained on anaemia pre and post knowledge test schedules were developed by repeated interactions with selected subjects on both the villages. Even after formulating the effective but very simple pre and post test schedules as per the need of participants, the investigators faced with the difficulty of filling the questionnaire as majority of respondents were functionally illiterate. Therefore, as last resort investigator individually asked each respondent the question given in this schedule. The questions in said schedule broadly covered four major aspects viz., what is anaemia ? What are the reasons responsible for anaemia ? What are the symptoms of anaemia ? and What is the treatment of anaemia ? Participants of each treatment group were tested for pre treatment haemoglobin level and pre education knowledge on anaemia. After 90 days of educational intervention and distribution of iron folate tablets as per plan, haemoglobin and post-education of each participant girl in each village was estimated. For testing haemoglobin Sahil's methods was followed (Frinkin et. al 1990)

RESULTS

The pre and post intervention knowledge test scores in village Mogra Kalan and Gundoj are set in Table 1 and that of haemoglobin level in Table 2.

Table 1. Mean knowledge test score of participants before and after treatments

Village/ Treatment	Pre-treatment			Post-treatment		
	Mean (score)	Std. Error (±)	Range	Mean (score)	Std. Error (±)	Range
Mogra Kalan						
T ₁	0.95	0.24	0.0-6.0	1.15	0.27	0.0-7.0
T ₂	1.30	0.25	0.0-5.0	10.87	0.28	8.0-15.0
T ₃	1.70	0.30	0.0-6.0	15.54	0.27	12.0-21.0
Gundoj						
T ₁	2.90	0.29	0.0-6.0	4.27	0.35	0.0-8.0
T ₂	2.27	0.29	0.0-6.0	12.67	0.31	9.0-17.0
T ₃	2.22	0.28	0.0-6.0	14.82	0.54	9.0-18.0

T₁ = Simple iron folate supplementation

T₂ = Education on anaemia through video

T₃ = Combination of T₁ and T₂

Table 2. Mean haemoglobin level of participants before and after treatments*

Village/ Treatment	Pre-treatment			Post-treatment		
	Mean (score)	Std. Error (±)	Range	Mean (score)	Std. Error (±)	Range
Mogra Kalan						
T1	8.29	0.04	8.0-8.8	9.36	0.07	9.0-11.5
T2	8.54	0.07	8.0-9.3	9.33	0.10	8.0-11.0
T3	8.25	0.04	8.0-8.7	10.37	0.05	10.0-11.0
Gundoj						
T1	8.81	0.08	8.0-9.9	10.04	0.08	9.0-11.0
T2	8.71	0.09	8.0-9.7	9.51	0.10	8.0-10.5
T3	8.77	0.07	8.0-9.6	11.13	0.07	9.8-11.8

*Treatment T₁, T₂ and T₃ are same as given in Table 1

Before intervention in village Mogra Kalan knowledge of anaemia of participants was very poor and therefore, mean knowledge test score ranged between 0.95 (treatment T₁) and 1.70 (treatment T₃). The situation was slightly better in village Gundoj as before educational intervention, the knowledge on anaemia of participants in terms of mean score ranged from 2.22 (treatment T₃) to 2.90 (treatment T₁). In the first treatment T₁, no education on anemia was given to the participants on both the villages. They were provided only simple iron folate supplementation. Before iron folate supplementation mean haemoglobin level of participants in this group was 8.29 g/ 100 ml at village Mogra Kalan and 8.81 g/ 100 ml in village Gundoj. The post intervention knowledge score in treatment T₁ at both the villages exhibited slight improvement in participants level of Knowledge on anaemia. It was very interesting that when treatment – T₁ group was not given any education on anaemia, how the participants improved their education level ? To find out the answer of this trend few participant of treatment T₁ group was selected randomly and matter was discussed through unstructured interviews. Through said unstructured interviews it was found that participants gained this amount of knowledge on anaemia through the medical doctor, when he advised them how to take iron folate tablets at the time of distribution of medicine. On an average, however, post treatment hemoglobin level was found 11.4 % and 13.9 % higher than pre-treatment level in village Mogra Kalan and Gundoj, respectively.

In the treatment T₂ main educational strategy was adopted to educate adolescent girls in both the villages about the anaemia and its consequences, and simple nutritional interaction required for its prevention. The instructional tool was prepared video programme on anaemia. Iron folate supplementation was not given to this group at all. In this treatment group, mean pre-interaction knowledge test score was 1.30 at village Mogra Kalan and 2.27 at village Gundoj. Data on post-intervention mean knowledge scores exhibited a quantum jump on both the villages. At village, Mogra Kalan it was 10.87 and at village Gundoj it was 12.67. More over, post-intervention mean haemoglobin level of participants also registered on increase of 9.2 % each in village Mogra Kalan and Gundoj.

The third treatment T₃ involved combination of treatment T₁ and T₂. Thus in treatment T₃, the selected group of participants at both the villages were given iron folate supplement and as well as education on anaemia. Pre-intervention mean knowledge test score in this group was 1.70 and 2.22 at village Mogra Kalan and Gundoj, respectively. The data gathered, clearly indicated that when educational treatment was combined with iron folate supplementation, the gain in knowledge on anaemia of participants was maximum. In village Mogra Kalan and Gundoj, post-intervention mean knowledge test score increased to the level of 64.4 % and 61.8 %, respectively in comparison of pre-intervention mean knowledge test score. In this treatment, mean haemoglobin level of participants also exhibited maximum improvement. At village Mogra Kalan mean haemoglobin level of participant improved 25.7 % and at village Gundoj 25.5 % after the intervention.

DISCUSSION

When education on anaemia along with iron folate supplementation was imparted, the participants at both the villages were benefited the most both in terms of haemoglobin level improvement and gain in knowledge of anaemia. According to Kashyap and Young (1989) use of mass media play very important role in improvement of knowledge related to nutrition of rural folk. If nutrition education is combined with medical intervention, the target population become more receptive, which in turn facilitate adequate follow up interventions. Coloane (1983) emphasized need for multi-sectoral approach for promoting nutrition and emphasized that nutrition education is necessary step for developing better understanding of nutrition issues.

The findings of present investigation call for integration of nutritional supplementation and nutrition education programmes in large-scale national rural development programme. If nutrition education programmes are carried out independent of other development and nutrition supplementation programme, the results will have impact on a small section of society. The innovative instructional tools like video programmes can very effectively impart functional nutrition education to rural folk and therefore, should be given proper place in large-scale national and/ or state level rural development and poverty alleviation programmes.

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