

SUMMARY

Population education is a new area and as yet no readymade model exists which could be adopted to suit the conditions prevailing in our country. We have to tread new ground keeping in view our cultural background and present needs and future aspirations. The essence of the programme should be to give the learner an insight into the totality of issues connected with population - including the nature, causes/determinants, consequences of population growth, both at the micro and macro levels; the nature of dynamics of the reproductive process, and finally the possibilities of planning family size and population growth (Mehta, 1972). The main aim of population education is to help the individuals in responsible decision-making which involves foreknowledge and understanding of the consequences of one's own actions. Government of India proposes to extend population education to youth in schools and colleges as well as to those out-of-school to make the promotion of adopting 'small family norm' easier (Indian Express, 19.7.1982).

Though this education is to be provided to individuals of all age groups, looking to the meagre resources of our country, priority should be given to the students of secondary level, since they are at the threshold of marriage and family and will have to soon

take decisions regarding their own reproductive behaviour to improve their quality of life. The future pattern of our population growth will depend on the decisions they take in the near future regarding their family life.

Therefore, the present study was undertaken with the main purpose to develop, execute and evaluate a population education programme for secondary school students of Udaipur, Rajasthan.

Method

The present study was completed in two phases.

They were:

Phase I : Development of a Population Education Programme.

Phase II: Execution and Evaluation of the Population Education Programme.

PHASE I : DEVELOPMENT OF A POPULATION EDUCATION PROGRAMME

Procedure

In order to develop a meaningful and need-oriented programme on population education for the students of secondary classes the following were taken into consideration:

1. A complete survey of the theoretical and research literature including the draft

syllabus prepared by NCERT (1971) to formulate an hierarchically ordered curriculum with suitable concepts for the understanding they promote in the students.

2. A survey to find out the existing knowledge and understanding of the target group on different population issues at the micro and macro levels to collect the benchmark data to build a need-oriented or knowledge-based curriculum. This survey was conducted by Karnick and Dave (1978) on 550 students of IX and X classes studying in the coeducational and non-coeducational secondary schools of Udaipur District, Rajasthan. The findings of the study indicated that:

- (a) Population education programme must develop in the Ss the knowledge and understanding of all the four major areas of study, namely, demography, determinants and consequences of population growth, human reproduction and family planning, and that
- (b) greater emphasis must be given to the various concepts, under the four major areas of study, while conducting the

programme on population education, as they lack knowledge and understanding about the specific population concepts.

This, based on the literature search and the results of the study conducted by Karnick and Dave (1978) a basic framework of population education programme was prepared by the investigator for the secondary school students of Udaipur, Rajasthan.

PHASE II: EXECUTION AND EVALUATION OF THE POPULATION EDUCATION PROGRAMME

Sample

In order to conduct and evaluate a population education programme developed by the investigator 100 Ss (50 boys and 50 girls) of IX and X classes studying in the two non-coeducational schools of Udaipur, Rajasthan, were selected. These two schools were selected/based on the co-operation extended by the school authorities for the said purpose.

Tools

The following tools were used for the purpose of data collection in the present study.

1. Knowledge Inventory: The Knowledge Inventory developed by Karnick and Dave (1978) was made use of by the investigator for the present study to find out the knowledge

content of the Ss on the four areas of population education under study.

2. Story Situations: In order to find out the level of understanding of the Ss two parallel sets of 5 story situations along with the probe questions representing three designated areas of study, i.e. leaving the area on demography, were formulated. These were administered to the students both before and after the experimental programme.

3. Daily Lesson Evaluation Proforma: A pretested lesson evaluation proforma was used to find out the suitability and acceptability of the lessons taught to the Ss in terms of content, teaching method and language and teaching aids.

4. An Overall Programme Evaluation Guideline: A pretested overall programme evaluation guideline prepared by the investigator was used to find out the reactions of the Ss on the various components of the total programme.

Procedure of Executing and Evaluating the Programme

The overall framework of the programme was split up into eight lessons. These lessons were then pilot-tested on a small group of boys and girls. Based on the results of the pilot study the lessons were modified and finally nine lessons were prepared with their objectives, detailed content, audio-visual aids, assignment for the students and evaluation measures.

These lessons were then experimentally taught by the investigator with the help of the audio-visual aids like film, film-strips, charts, black-board drawings/illustrations, separately to the group of boys and girls during their regular school hours. The lessons were supervised by a senior trained supervisor. Discussions were held at the end of each class hour to clarify the doubts/understandings of the Ss. In order to evaluate the programme one group pre-test - post-test experimental design was used. The knowledge inventory and the story situations were administered to the Ss before and after the experimental teaching. The daily lesson evaluation sheets were provided to the Ss after the teaching of each lesson and the overall programme evaluation guideline was administered to the Ss after the completion of the total programme.

Besides these, the remarks of the supervisor, the two heads of the institutions and the observations of the investigator also fed into the evaluation of the total programme.

Data Analysis and Major Findings

The data collected from the Ss on pre-test and post-test was subjected to analysis in terms of gain in knowledge and change in the level of understanding of the Ss regarding the vital areas of population under study. The qualitative analysis of the total programme by the Ss, the supervisor,

the two heads of the institutions and the investigator aimed at the suitability and acceptability of the programme in terms of the content, teaching method, audio-visual aids, time-spent, preference for the sex of the teacher to teach such a course and above all the need of population education for the secondary school students.

The major findings of the study are broadly grouped under: (a) Gain in knowledge and understanding of the Ss, and (b) Evaluation of the programme.

Gain in Knowledge and Understanding

1. Both boys and girls have made significant gains in knowledge and understanding at .01 level of significance on all the major areas of population education under study after the experimental teaching.

2. The sexwise comparison in terms of percentage of gain in knowledge reveals that the girls have consistently made greater gains in all the four areas under study.

3. Both boys and girls have gained least knowledge in the area of determinants and consequences of population growth. The girls have highest percentage of gain in knowledge in the area of family planning whereas boys have highest percentage of gain in knowledge in the area of human reproduction.

4. In terms of gain in knowledge the girls have gained more correct knowledge than boys whereas the boys

have attained more understanding of the population concepts than the girls after the experimental teaching.

5. In spite of the fact that the Ss specially the girls have correct knowledge regarding how conception takes place and the determinants and consequences of large family size, they find it difficult to accept that family size can be controlled by the couple. The major reasons for this being their deep-rooted religious beliefs and traditions regarding the importance that is attached to 'Pooja' and 'Manata' (vows) to have a son to ensure security in old age.

Evaluation of Population Education Programme

1. The overall evaluation of the population education programme for secondary school students by the Ss, the supervisor and the investigator indicates that the content, teaching method, audio-visual aids and the evaluation procedure adopted by the investigator is found suitable and acceptable to the secondary school students with a few modifications.

2. The Ss, the investigator and the two headmasters have expressed that human reproduction and family planning must be included in greater details in their curriculum on population education. (However, the supervisor feels that some of the concepts under these two topics can be deleted).

3. The Ss, the supervisor and the investigator

feel that the teacher who teaches population education must be well acquainted with the subject-matter and be frank, confident, and scientific in approach. Boys have expressed no specific preference regarding the sex of the teacher whereas girls have preferred to be taught only by a female teacher.

4. The Ss, the investigator and the two headmasters stated that the content for boys and girls must remain the same whereas the supervisor feels that though the basic content must remain the same the emphasis may vary during the teaching, regarding the specific contribution of their reproductive behaviour on the quality of life.

5. The Ss, the supervisor, the investigator and the two headmasters feel that population education should become an integral part of the regular school curriculum for secondary school students on a priority basis as these students are at the threshold of marriage and family. They do, however, believe that this education is important for individuals of all age groups.

Conclusions

1. Since the population education programme developed by the investigator is found suitable and acceptable for the students of secondary schools of Udaipur, Rajasthan, with the few modifications suggested, it can be adopted for wider use by the Rajasthan State. In the long-term objectives of the state, it is proposed to plan the curriculum on population education for secondary level. Till now the curriculum planning has been achieved only for standards 3-8.

2. The role of the teacher is very crucial and for the success of the programme more emphasis be given on teacher training both in terms of knowledge and attitude towards teaching of population education content.

3. Population education should become an integral part of education at all levels. However, priority must be given to the secondary school students.

RECOMMENDATIONS FOR FURTHER RESEARCH

1. A comparative study of the wholistic vs. the integrated approach be undertaken to teach population education to secondary school students to determine its suitability for the students.

2. A study be undertaken to find out the opinion of the parents and teachers for the introduction of human reproduction and family planning concepts for secondary school students.

3. An evaluation research be undertaken to find out the efficacy of the different teaching materials to impart information on the various topics of population education to the secondary school students.

4. Baseline studies be undertaken to find out the knowledge and understanding of children of different age levels regarding population situation.

5. A similar study on development, execution and

1 evaluation of population education programme be undertaken for the students of primary and middle grades.

6. A follow-up study be undertaken to measure the change in attitudes and fertility related behaviour in those students who have attended population education programme.

RECOMMENDATIONS TO CURRICULUM PLANNERS OF
RAJASTHAN STATE (OR TO POPULATION EDUCATION
CELL, SIERT, UDAIPUR, RAJASTHAN)

1. The population concepts which have been experimentally tried out be included in the secondary school curriculum.

2. Sample teaching units be prepared and tried out on an experimental basis for different school subjects before their actual inclusion in the text-books of different grades of schooling.

3. Workshops be organized for teachers for the preparation and experimental tryout of:

- (a) various audio-visual aids,
- (b) self-learning modules,
- (c) manuals and guidelines for teachers to help them teach population education.

4. The classroom teaching materials be prepared on a large scale and distributed to the schools for use.

5. Training workshops be organized to prepare and

standardize the evaluation tools for different grade levels and subjects in which population concepts are being integrated.

6. Population education be offered as a compulsory subject by the teacher-training colleges of the state.

7. In-service training programmes be undertaken to train the large number of teachers to teach population education.

8. Workshops be organized to find out the efficacy of the various in-service teacher training strategies i.e. face to face peer training, self-learning modules, correspondence course for teachers of urban and rural areas.

9. Operational researches be undertaken focusing on pilot tests of curriculum changes, new units, materials and teacher-training strategies.

10. The curriculum development activity must also encompass the out-of-school youth and the individuals of older generation for imparting population education.

11. A follow-up study be undertaken from time to time to find out the changes in the knowledge, attitude and practices of the younger generation who have attended population education course.