THE NOMINAL GROUP PROCESS IN THE IDENTIFICATION OF THE HEALTH INTEREST OF ETHIOPIAN SECONDARY SCHOOL STUDENTS

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ABSTRACT: The health interest of 114 Ethiopian students and 28 teachers in a secondary school in an Ethiopian town was studied by nominal group process. Accordingly, the leading topics of interest to the students were mental health, endemic infectious diseases, sexually transmitted diseases, skin diseases and cancer. Contrary to their pupils, teachers ranked liver diseases and endemic infectious diseases as their priority of health interest, but ranked mental health lowest. Gender differences in the choice of health topics were apparent among the students. To a certain extent, the health concerns of the students reflect the health problems prevalent in their community. As a technique, the study confirms the utility of the nominal group process institutions where simple and rapid methods of identification of health interest are sought.

INTRODUCTION

In Ethiopia, over 4 million students are enroled in primary and secondary schools (1). Health education is not taught as a separate subject, but is integrated in the basic sciences curriculum, as is the case in several countries (2,3). Local health care institutions are expected to conduct school health education programmes, but health workers often have difficulties in deciding relevant topics for health instruction. The aim of this survey is to report on a method of identifying the health interest of the students in a situation where health education curriculum is absent or obsolete.

MATERIALS AND METHODS

The survey setting is the community of Addis Zemen, a roadside town of 8, 741 people (1) in the Gondar region of northwestern Ethiopia. Because of the existence of a health center in the town, the Department of Community Health of the Gondar College of Medical Sciences has been running public health programmes in Addis Zemen as part of the undergraduate training of physicians in community health. In November 1986, a team of senior medical students conducted the survey in the secondary school (grades 9-12). Five of the thirteen sections (average section size = 22 students) with an age range 5-18 years were selected by means of a simple random sampling. A total of 114 students and all teachers (28) were included in the study.

The study technique used in identifying health interest and educational needs is the Nominal Group Process originally developed in the 1960's by NASA in the USA (5). The modification of the original technique to suit school health education situations in Brazil by Candeias and Marcondes (6) is adopted in this study because of its simplicity relative to the original techniques.

Accordingly, the students were requested to generate, in silence, two questions on their health interests and to write them on a card designed and provided for the purpose. After ten minutes, the questions were written on a blackboard and during the next half an hour they reviewed,

clarified or proposed any items. Each student then voted on five items he/she considered most important according to his/her interest.

He/she entered the votes according to priority in the space provided on the survey card. These were further tabulated by class and sex, and the summation of points was obtained. The latter were converted into ranks. The same procedure was repeated for teachers.

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RESULT

Table 1 shows comparison of the fist five-health interests of students and their teachers. The five health interest preferences of students according to their order of ranking were epilepsy and fainting, endemic infectious diseases,

Table 1. Comparison of the first five health interest of students and teachers.

Health interest preferences	Rank order				
	Grades				
	9	10	11	12	Teachers
Epilepsy & fainting	1	2	1	1	5
Endemic infectious diseases	2	3	3	4	2
STDs	3	-	2	5	3
Skin diseases	4	1	-	2	-
Cancer	5	-	5	-	-
Asthma	-	4	-	-	-
Nervous tension	-	5	-	-	-
Tuberculosis	-	-	4	-	-
Heart diseases	-	-	-	3	-
Liver diseases	-	-	-	-	-

sexually transmitted diseases (STDs), skin diseases and cancer. In contrast to students the leading health interest topics of teachers were liver diseases and infectious diseases (malaria, typhus, dysentery, etc.), but teachers ranked epilepsy lowest. Table 2 indicates that concern for mental health was reported more frequently by girls than boys. With regard to endemic infectious diseases and sexually transmitted diseases, their ranks were unaltered when data was analyzed by gender indicating concern for these health problems by both students and their teachers. The analysis of data by gender had also provided further categories of health interests, namely, gastritis, eye diseases, diabetes and haemorrhoids.

Table 2. Comparison of the first five health interests of students and teachers by sex.

Health interest preferences	Rank Order									
	Grade/Sex									
	9		10		11		12		Teachers	
	M	F	M	F	M	F	M	F	M	F
Epilepsy & fainting	1	3	1	5	4	4	2	1	5	5
Endemic infectious diseases	1	4	2	3	3	3	-	-	3	5
STDs	2	2	4	-	2	2	2	2	2	-

Skin diseases	-	3	1	-	-	3	3	1	-	-
Asthma	-	5	-	-	-	-	-	-	-	-
Nervous tension	5	-	-	-	-	-	5	-	4	-
Tuberculosis	4	-	-	-	-	-	4	3	2	-
Heart diseases	-	-	-	-	-	-	-	-	3	-
Gastritis	-	-	3	4	-	-	-	-	-	-
Eye diseases	-	-	-	2	1	1	-	-	-	-
Diabetes	-	-	-	5	-	-	-	-	5	4
Haemorrhoide	-	-	-	5	5	5	-	-	-	-

DISCUSSION

The Nominal Group Process has been quite acceptable to students and their teachers. However, we had to contend with several indigenous and descriptive terms for some of the health interest items and their medical equivalents. The health interest items identified in this survey to a certain extent correspond to health problems observed in the community of Addis Zemen. For instance, in a study on the perceived morbidity of the inhabitants of Addis Zemen during a four-week recall period Zein etal (7) identified eye diseases and sexually transmitted diseases as the top-ten leading causes of morbidity in that community. Furthermore, these authors found congruence between morbidity rates as detected by the interview method and clinical diagnoses by health center staff. This confirmed the findings of Luttywama (2) and . Shamma & Lorfing (3) in which Ugandan and Lebanese school children not only asked questions that reflected the health problems prevalent in their respective communities, but also ranked health interests similar to their British counter-parts.

While the pattern of ranking of infectious diseases by school children as first or second priority health interest item has been reported in both developed and developing countries, unlike Addis Zemen school children, mental health is ranked lowest (2,3). The reason for ranking mental health by Ethiopian school children, particularly by girls is not apparent. The prevalence of epilepsy in the Ethiopian population is 5 and 8 per thousand in urban and rural communities respectively and constitutes an important medical and social problem in Ethiopia (8).

It is interesting to note that such popular topics as cigarette smoking, human sexuality, drug and alcohol abuse which are frequently cited by school children in the countries are not mentioned in Addis Zemen. Also, as this survey antedates the extensive world-wide media campaigns against AIDS, Addis Zemen children nor their teachers could not possibly have mentioned those new diseases.

The difference between teachers and children in ranking health concerns is probably due to differences in age as well as cultural back-grounds. In Ethiopia, teachers are recruited and assigned to schools by the central government, and do not necessarily teach in the regions from which they originate.

The observation (5) that the nominal group process (individual silent effort in a group setting) facilitates the generation of a large number of relevant dimensions than conventional interacting groups (spontaneous group discussion) is also borne out in this study.

As well as enabling the health team to decide on relevant topics for school health education, there was also a sudden interest in health matters in the school in Addis Zemen.

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REFERENCES

I. Ethiopia: Central Statistical Office. Population and Housing Census Preliminary Report. Addis Ababa. Central Statistical Office. 1984.

2. Luttywama, J.S. A guide to predicting the health interests of school children. Int.J. Hlth. Educ. 1967; 14: 90-99.

3. Shamma, A.C. & I.M. Lorfing. A survey on health interest among Beirut school children. Int. J.. Hlth. Educ. 1973; 16: 167-174.

4. Ethiopia: Central Statistical Office. Ethiopia: Abstract. Addis Ababa, Central Statistical Office. 1986.

5. Van de Ven, A.H. & A.L. Delbecq. The Nominal Group as a Research Instrument for Exploratory Health Studies. Am. I. Publ. Hllh. 1972.

6. Candeias, N.M.F. & R.S. Marcondes. Identifying educational needs of school children in a secondary school in Sao Paulo. lm. I. Hlth. Educ. 1980; 23: 42-48.

7. Zein Ahmed Zein, et .1. The prevalence of perceived morbidity in Addis Zemen town, north-western Ethiopia. 1987.

8. Redda T.Haimanot. The pattern of epilepsy in Ethiopia. Eth. Med. I. 1984; 22: 113-118.