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Evaluation of Health Education Sessions

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Objective: Health education is a necessary component of any health service that seeks to promote and improve the health of its population. Evaluation is an essential component of a good health education program. This study aims to evaluate the health education sessions conducted on group of subjects attending a primary health care center, and describe the methods used in these sessions.

Design: Cross section study.

Setting: The study was carried out at King Faisal University primary health care center, AI-Khobar, Saudi Arabia during the year 1999.

Method: Health education sessions are conducted twice per week throughout the year. Total of 104 sessions, 56 were selected randomly for evaluation. The sessions were evaluated with a structured checklist. Each item of assessment was graded as "good" or "poor" according to the speaker's performance during the session. Data were entered into a personal computer, incorporating the Statistical Package for Social Sciences Version 7.0.

Results: The total number of health education sessions delivered by a medical team composed of 11 residents, 38 interns, and 6 nurses, was 56. Significantly more residents, than interns and nurses, delivered topics of high priority to their audience during the sessions ($P < 0.04$). However, significantly more interns used incentives during their delivery ($P < 0.03$). There was significantly less audience participation with interns than that observed for residents than residents, or nurses ($P < 0.04$). Cross- tabulation of audience participation by topic showed that significantly more subjects who were knowledgeable of the topic exhibited audience participation (78.3 %) than those who were not aware ($P < 0.02$).

In 39 (75 %) of the sessions, there was good participation of the audience. Participation was good in 32 (72.7 %) when the subjects discussed were directed to the right target group.

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Conclusion: Residents and nurses had better audience participation than interns did. It is very important to consider the factors likely to make the presenter more persuasive. It is possible that residents' and nurses have good audience participation because of their longer contact and experience with patients than interns who spend only one month in the clinic. Audience participation was more when the topic was important; the session objectives were clear and appropriate for target group. The health educator should keep the message simple and direct. He should use visual aids and make, the presentation interesting.

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Health education is a necessary component of any health service that seeks to promote and improve the health of its population[1]. It is " a process with intellectual, psychological and social dimensions relating to activities which increase the ability of people to make informed decisions affecting the well being of their families, community and themselves. It facilitates learning and behavioral change in both health and consumers including children and youths "[2].

Group health education, in contrast to individual health education, can result in rapid progress in the health of the community. Health education conducted for groups can be successful if the message is of interest to that group.

Evaluation is an essential component of a good health education program. Health educators, generally, seem reluctant to evaluate their programs[3]. But it is necessary for the improvement of the process of health education so that the simplest and most effective ways could be found for the delivery of the message. This study aims to evaluate the health education sessions conducted on group of subjects attending a primary health care center, and describe the methods used in these sessions.

METHODS

The study was carried out in King Faisal University primary health care center, in the city of Al-Khobar, Saudi Arabia, during the year 1999. The center services include health education sessions that are delivered for groups of patients attending the center for various curative and preventive services. The sessions were conducted twice per week (104 sessions). Fifty-six patients out of 104 were selected randomly for evaluation. The selection was on weekly basis. The sessions were evaluated with a structured check-list designed by three family physicians working in the clinic. The check-list involved the following items: previous knowledge of participants about subjects presented, importance of the subject, the appropriateness of the group as the target for that subject, clarity of the objectives of the session, the quality of rapport with the audience (greeting, communication etc), questions and answers, conduct of the session, simplicity of the theme, use of audio-visual aids and posters, quality of the speaker's voice, the use of religious values and culture, audience participation, and the use of incentives at the end of the session. Each item

of assessment was graded as 'good' or 'poor' according to the speaker's performance during the session. The grading was done by a consultant family physician who attended the session. The check-list also included information on the professional status of the person who conducted the health education session (whether resident, intern, or nurse), as well as his/her gender.

Data were entered into a personal computer, incorporating the Statistical Package for Social Sciences Version 7.0. Frequency distribution tables were generated and Chi-square-test was used to assess the significance of difference between categories of evaluation classified by gender and professional status of the person conducting the health education session. A p-value of 0.05 or less was considered as indicative of statistical significance.

RESULTS

Fifty- six of health education sessions were delivered by a medical team composed of 11 residents, 38 interns, and 6 nurses. Males and females constituted 62.5% and 37.5% of the medical team respectively.

The topics included four groups which dealt with behavior modifying, child health, chronic diseases, and miscellaneous topics as shown in table 1.

Table 1**: Frequency of health education topics delivered**

Subject	Number of Sessions %
Behavior modifying:	
Safety at home	7 (12.5)
Smoking	6 (10.7)
Personal hygiene	5 (8.9)
Drug addiction	3 (5.4)
Exercise	3 (5.4)
Children Health:	
Breast-feeding	1 (1.8)
Nutrition	2 (3.6)
Diarrhea	3 (5.4)
Chronic diseases:	
Diabetes mellitus	1 (1.8)
Hypertension	2 (3.6)
Dermatological Diseases	3 (5.4)
Psychiatric diseases	1 (1.8)
Renal failure	6 (10.7)
AIDS	3 (5.4)
Other subjects :	
First aid	3 (3.6)

Insomnia	4 (7.1)
Heat stroke	1 (1.8)
Headache	3 (5.4)

When the delivery of health education sessions were compared between males and females, there was no significant difference on the aspects of evaluation, but when posters were used and incentives given, significantly more females than males used posters and offered incentives ($P < 0.03$ and $P < 0.05$, respectively). Table 2.

Table 2**: Relationship of health education sessions' assessment aspects to speaker's gender**

Assessment aspect	Males Number (%)	Females Number (%)	P-value*
High topic priority	29 (82.9)	16 (80.0)	0.4
Right target group	27 (77.1)	16 (80.0)	0.8
Clarity of session objectives	31 (88.6)	20 (100.0)	0.1
Use of question and answer style	30 (85.7)	19 (95.0)	0.5
Greetings offered	35 (100.0)	20 (100.0)	-
Good communication skill	27 (77.1)	19 (95.0)	0.08
Friendly attitude shown	35 (100.0	20 (100.0)	-
Clarity of language	29 (82.9)	15 (75.0)	0.35
Theme simplicity	33 (94.3)	19 (95.0)	0.2
Use of audiovisual aids	19 (54.3)	13 (65.0)	0.5
Use of posters	22 (62.9)	19 (95.0)	0.03
Clarity of voice	35 (100.0)	20 (100.0)	-
Use of religion	22 (62.9)	11 (55.0)	0.4
Good audience participation	22 (62.9)	17 (85.0)	0.08
Use of incentives	10 (28.6)	11 (55.0)	0.05

* Chi-square test

Significantly more residents than interns and nurses, delivered topics of high priority to their audience during the sessions ($P < 0.04$). However, more interns used incentives during their delivery ($P < 0.03$), but there were less audience participation than those of residents, or nurses (P 0.04). (Table 3).

Table 3**: Relationship of health education sessions' assessment aspects to speaker's professional status**

Assessment aspect	Residents	Interns	Nurses	P- value
	Number(%)	Number (%)	Number (%)	
High topic priority	10 (90.9)	30 (78.9)	5 (83.3)	0.04
Right target group	8 (72.7)	31 (81.6)	4 (66.7)	0.6
Clarity of session objectives	9 (81.8)	36 (94.7)	6 (100.0)	0.3
Use of question and answer style	10 (90.9)	34 (89.5)	5 (83.3)	0.9
Greetings offered	11 (100.0)	38 (100.0)	6 (100.0)	-
Good communication skill	9 (81.8)	31 (81.6)	6 (100.0)	0.5
Friendly attitude shown	11 (100.0)	38 (100.0)	6 (100.0)	-
Clarity/simplicity of language	10 (90.9)	30 (78.9)	4 (66.7)	0.5
Theme simplicity	11 (100.0)	35 (92.1)	6 (100.0)	0.8
Use of audiovisual aids	7 (63.6)	24 (63.2)	1 (16.7)	0.2
Use of posters	7 (63.6)	28 (73.7)	6 (100.0)	0.5
Clarity of voice	11 (100.0)	38 (100.0)	6 (100.0)	-
Use of religion	7 (63.6)	23 (60.5)	3 (50.0)	0.08
Good audience participation	10 (90.9)	23 (60.5)	6 (100.0)	0.04
Use of incentives	1 (9.1)	19 (50.0)	1 (16.7)	0.03

* Chi-square test

Cross-tabulation of audience participation by topic priority for audience showed more patients were aware of topic priority 36(78.3%) than those who were not aware ($p < 0.02$).

Table 4**: Audience participation by topic priority, clarity of objective and target group**

Items	**Good Audience Participation**	**P-value**
Yes	36 (78.3)	-0.02
No	4 (40.0)	
Clarity of Objective		
Yes	39 (75)	.066
No	1 (25)	

Target group		
Yes	32 (72.7%)	.467
Mixed	8 (66.7%)	

However, cross-tabulation of audience participation by clarity of the objectives of the session for the audience showed that in 39 (75%) sessions, there was good participation of the audience. Participation was good (Table 4) in 32 (72.7%) when the subjects discussed where directed to the right target group.

DISCUSSION

Health education topics delivered covered a variety of important subjects essential for patients. Female health educators have used posters and offered incentives more than the males.

Residents and nurses had better audience participation than interns. It is very important to consider the factors likely to make the presenter more persuasive. It is possible that residents' and nurses have good audience participation because of their longer contact and experience with patients than interns who spend only one month in the clinic. It has been suggested by Weeks[4] that such factors as gender, credibility appearance make the presenter more persuasive. The message is likely to be better retained if more thoughts and efforts are into the session[4]. Audience participation was more when the topic was important, the session objectives were clear and appropriate for target group. The physician must be able to communicate with his patient in a way that fosters learning on the part of the patient and alters behavioural processes enough to maximize the medical outcome.

The health educator should keep the message simple and direct. He should use visual aids and make the presentation interesting. They should be given more training in how to promote their health message and the basic techniques of health education.

Unfortunately, the immense therapeutic potential of patient education is still under utilized in spite of the fact that patient education has a clear impact on health outcome by reducing morbidity, mortality, and risky behavior[5]. The use of visual aids can clarify or reinforce an idea, enliven rather dull material but they must be simple and appropriate to be effective. Demonstrations in the lecture can be enhanced with models and plastic specimens[6]. The objective in health education is to try to change the behavior of the audience into healthy one. The presentation should be in the form of a discussion so that the audience can express their opinions and clarify their ideas.

Communication is very important in health education. It includes all methods that can convey thoughts or feelings between persons. It is the successful process of sending and receiving messages to bring about mutual understanding between the communicator and the listener[7.] Effective communication is the key to changing

people's health behavior. In health education, it is not simply a matter of conveying messages, but awareness of the people's attitudes, beliefs and customs. This should be presented to suit the understanding of the listener. Verbal and non-verbal ways such as facial expression, flag, pictures, also appearance, gestures, accent, the total impression a person all contribute to the effectiveness of the conduct of health education[2] .

CONCLUSIONS

The evaluation of health education is often neglected. This study attempted to assess the health education sessions/material given in the Primary Health Care (PHC) setting. It is hoped that this evaluation will be appreciated by all those working in Primary Health Center.

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