

QUALITY OF HEALTH EDUCATION POSTERS IN PRIMARY HEALTH CARE CENTERS IN AL-KHOBAR TOWN, EASTERN PROVINCE

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هدف الدراسة: تقييم جودة الملصقات التثقيف الصحي المعروضة بمراكز الرعاية الصحية الأولية **منهج الدراسة:** دراسة مقطعية تم إجراؤها على عينة عشوائية مكونة من 138 ملصق معروض في ثلاثة مراكز للرعاية الصحية الأولية، بمدينة الخبر. تم اعداد استمارة تقييم لجمع المعلومات. كما استخدم نظام معايير لقياس ملاءمة الملصقات حسب معايير معدة مسبقاً. **نتائج الدراسة:** كانت المواضيع التي تناولتها الملصقات من ضمن المشاكل الصحية السائدة بالمملكة العربية السعودية في 134 (97.1%) من الملصقات. وقد كانت مدة العرض في أكثر من ثلث الملصقات أكثر من عام. كما كان مصدر المعلومات غير معلوم في 74 (53.6%) ملصقا. و أظهر التقييم أن 109 (79.0%) من الملصقات ذات نوعية عالية. **الاستنتاجات:** أظهرت الدراسة أن نوعية الملصقات مرضية نسبيا ما عدا عدم ملاءمتها لبعض المواصفات. و يتوجب استخدام تقييم الملصقات ضمن تقييم برامج التثقيف الصحي بمراكز الرعاية الصحية الأولية. **الكلمات المرجعية:** التثقيف الصحي – ملصقات – تقييم – الرعاية الصحية الأولية

Background: Health Education (HE) is vital to each of the seven other central elements of Public Health Care (PHC). HE must be carefully planned and implemented. A crucial part of HE is planning, production and placement of effective HE posters.

Objective: Assess the quality of health education posters in Al-Khobar PHC centers.

Methods: A cross-sectional study of a sample of 138 HE posters in three PHC centers in Al-Khobar was conducted. The quality of posters in relation to set criteria was measured using a data sheet and scoring system developed by the investigator.

Results: The health education subjects displayed were among the common health problems in Saudi Arabia in 134 (97.1 %) of the posters. More than one-third (34.8%) had been displayed for more than one year. In 74 (53.6%) of the posters, the source of scientific information was unknown. The assessment showed that 109 (79%) posters were of optimal quality.

Conclusion: The study showed that the health education posters in PHC centers in Al-Khobar were relatively satisfactory, though they did not fulfill some of the required criteria. Health education posters should be included in the assessment of health education programs in primary health care centers.

Key Words: Health education, posters, assessment, primary health care.

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INTRODUCTION

Health Education (HE) is an important component of Primary Health Care (PHC) and is listed by the World Health Organization as one of its eight essential elements.¹ Moreover, it is central to each of the other seven elements. Several studies have shown that health education programs don't always meet expectations.² Many reasons are given for this. Health Education succeeds when it is carefully planned and implemented.

The reluctance of many health educators to evaluate their programs is documented in literature.³ One author indicated the difficulty in making a "balanced appraisal of the effectiveness of an intervention in the area of health education".⁴ Evaluation is a continuous process conducted by the teacher and learner throughout patient education. By using the evaluation process, both parties benefit from the feedback that reinforces success and readdresses problems.⁵

In many health centers in Saudi Arabia, the most commonly used method of HE is through wall posters. These, as well as other HE activities, are hardly ever evaluated. This raises the question of whether these wall posters are put up to fulfill the objectives of the first PHC element or just for decorative purposes, i.e., to make the PHC center more appealing and attractive.

Consequently, this study was initiated with the aim of assessing the quality of health education posters in Al-Khobar PHC Centers. Assessment is perceived in two components; one is an assessment of the posters by the investigator, the other is assessment of the posters from the point of view of health center attendees. This paper addresses only the first component.

Health education posters were appraised with regard to a set of variables designed by the investigator. It was suggested that this study would compensate for the deficiency in the local literature on posters as a method of health education. The results may be of

use to planners and administrators in PHC in Al-Khobar and Saudi Arabia at large.

METHODOLOGY

This is a cross-sectional study which was conducted in March, 2000. Three PHC centers were selected randomly from the 11 PHC centers in the town of Al-Khobar using simple random sampling technique. A proportional random sampling technique was used to select 138 (51%) posters from a total of 270 displayed in the three PHC centers.

A data sheet was designed and administered by the investigator to assess each poster. The variables in the data sheet included the subject of the poster and its importance, duration of display, designer, presence of scientific error(s), clarity of health message, language of the poster, acceptability and suitability of the health message, size, colors, attractiveness of the poster and other variables.

A scoring system was developed by the investigator as a measure of assessment of poster quality. The ten variables used were: clarity of the health message through the text and/or picture, simplicity of language, presence of scientific errors in the write-up or the picture, acceptability of the health message for the community, cultural suitability of the picture, and size, color, and attractiveness of the poster. Each variable was given one point if it was present in the poster, or zero if not. The score for each poster was calculated as the sum of the points. The poster was considered of optimal quality if it achieved a score of seven points or more. The information for the duration of display of the poster was given by either the doctor or the head nurse. All variables were pre-coded, entered and analyzed using the Statistical Package for Social Science (SPSS) version 6.0. Frequency distribution tables were generated. Chi-squared test was used to assess the significance of differences between categories. A p-value of

0.05 or less was considered indicative of statistical significance.

RESULTS

A total of 138 health education posters were analyzed. Fifty-four of them (39.1%) were in Primary Health Center 1, 48 (34.8%) in PHC Center 2 and 36 (26.1%) in PHC Center 3. Most of the posters (71.7%) in these health centers had both written material and pictures; some had written material only (15.2%), or pictures only (12.3%). The health education subjects that were displayed were among the common health problems in Saudi Arabia in 134 (97.1%) of the posters. Regarding the duration of post-

ers, 48 or more than a third of them (34.8%) had been displayed for more than one year, 39 (28.3%) for 1–6 months, while for 21 (15.2%) the duration of display was unknown (Table 1).

The designer's name was written on most of the posters but was unknown for 16 (11.6%). Out of 138 posters, 46 (33.3%) were designed by the PHC health education department, 38 (27.5%) by health center nurses and only 3 (2.2%) by doctors. The rest were designed by schools or were taken from advertising pamphlets. Very few posters showed scientific errors, either in the write-up (2.2%) or in the pictures (1.4%).

Table 1: Summary of parameters used for assessing health education posters

Parameter	Frequency (%)
Subjects related to common health problems	134 (97.1)
Duration (\geq one year)	48 (34.8)
Designer "HE Department"	46 (33.3)
Designer "Nurses"	38 (27.5)
Designer "Doctors"	3 (2.2)
Designer "Others"	35 (25.4)
Designer "Unknown"	16 (11.6)
Scientific errors in the write-up	3 (2.2)
Scientific errors in pictures	2 (1.4)
Clarity of health message	112 (81.2)
Language simplicity	121 (87.7)
Acceptability of health message	130 (94.2)
Appropriate description of health message	104 (75.4)
Suitable size	111 (80.4)
Attractiveness	94 (68.1)
Suitable colors	117 (84.8)

Table 2: Distribution of posters by subject and health center

Center	Subject				Total
	General & Public Health (%)	Oral & Dental Health (%)	Adult problems (%)	MCH & Nutrition (%)	
Health Center 1	15 (62.5)	8 (21.1)	9 (30.0)	22 (47.8)	54 (39.1)
Health Center 2	5 (20.8)	17 (44.7)	14 (46.7)	12 (26.1)	48 (34.8)
Health Center 3	4 (16.7)	13 (34.2)	7 (23.3)	12 (26.1)	36 (26.1)
Total	24 (100)	38 (100)	30 (100)	46 (100)	138 (100)

p-value 0.024

Clarity of the health message was observed in 112 (81.2%) of the posters. The language used was simple in 121 (87.7%) of the posters. Arabic was used in 117 (84.8%), English in only 5 (3.6%) and both languages in 16 (11.6%) of the posters. The health message was considered acceptable from the cultural and social points of view for the Saudi community in 130 (94.2%) posters.

The pictures were thought to describe the message appropriately in 104 (75.4%) of the posters. One hundred and eleven (80.4%) of them could be easily seen or read from a distance but the script in the remaining posters was too small to be read. A large proportion, 94 of the posters (68.1%) were attractive and the choice of colors in 117 (84.8%) was esthetically pleasing.

The source of scientific information was unknown in 74 (53.6%) of the posters, but only 4 (5.4%) of them showed scientific errors in the sentences. Thirty-seven posters (26.8%) were from medical books, and 11 (8%) from pamphlets that were already available (Table 1).

Table 2 shows that the difference among the three Public Health Care centers regarding the distribution of posters by subject was statistically significant ($p=0.024$). A large number of posters that addressed general and public health problems (63%) and mother and child health/nutrition issues (48%) were in PHC Center 1, whereas nearly half of the posters on adult health problems (47%) and oral/dental health messages (45%) were in PHC Center 2.

An assessment of the posters by the score scheme showed that 109 (79.0%) posters were of optimal quality. Out of these, only 43 (39.4%) posters scored 9 points or more. However, only 8 (5.8%) out of the 138 posters scored 3 points or less.

DISCUSSION

The total number of HE posters in the three

PHC centers was reasonable, considering the availability of wall space and attendees' flow lines. Almost all the posters addressed important health issues. It was hoped that this would improve health awareness among the attendees.

More than a third of the posters had been on display for more than one year. New posters with important health messages attract the attention of attendees and although there is no fixed rule, posters should be changed every 3-6 months. By this time most of the regular PHC center attendees would have read the posters, perhaps more than once.

It is important that the designer be known, so the source of a poster can be traced in the event of any scientific error. However, for about 12% of the posters the designer was unknown. Moreover, very few doctors contributed to the design of the posters.

More than half of the posters did not indicate their source of information. This is alarming since health information meant for the public must be extracted from authentic sources. In fact, the source must be shown on the poster. The choice of health messages should not be left to just anyone to formulate, regardless of his training, as this may result in inaccurate information. Though more than 90% of the 74 posters of unknown source had no scientific error in the sentences, there is no justification for allowing the display of posters without control and authority.

Fortunately, only a few of the sentences and pictures in 2-3 posters had any scientific errors. The health message was clear and simple in almost all of the posters. They were mostly in Arabic, which conforms to the local culture. The relatively small number of non-Arabic speaking attendees justifies the small number of posters in English.

The opinion of attendees on the posters was not sought. It is important to evaluate the level of acceptability and comprehen-

sion of the target population by seeking the opinion of the attendees.

Some health messages were stressed more than others in some PHC centers. There should be a rational distribution of posters by subject in the health centers. This is vital as the choice of health education messages should be determined according to the priorities of health problems encountered in the PHC centers. However, this cannot be achieved without coordination among the concerned persons involved in HE.

To be effective in this community, all HE activities should be carefully planned, organized, implemented and evaluated by the HE administration. Health Education is vital for a good, responsible and forward-looking health service. Similarly, evaluation is an essential component of a good HE program⁶ and HE posters should be part of the evaluation in any health setting.

A Health Education poster is no ordinary piece of writing. It is implicit in the principle of an effective HE poster that certain criteria be observed before its display. The health message in a poster should be written, revised, pilot-tested and finally corrected before being put on display.⁷

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