

# Role of health education programmes within the Libyan community

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## دور برامج التثقيف الصحي في المجتمع الليبي

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**خلاصة:** تم تقييم مدى فاعلية البرامج الليبية القائمة في مجال التثقيف الصحي، من أجل معرفة كيفية تحسين هذه الخدمة. فطلبنا إلى عينة ممثلة من أفراد الجمهور أن يجيبوا على استبيان حول المعارف والسلوكيات الصحية وتأثير الأوساط المختلفة للتثقيف الصحي. ولقد قام المشاركون الذين بلغ عددهم 872 شخصاً بترتيب أوساط التثقيف الصحي بحسب فاعليتها. فجاء التلفزيون في رأس القائمة بينما جاءت الكتيبات والنشرات في النهاية. ونوصي بإعادة تنظيم استعمال الأوساط المختلفة للتثقيف الصحي لدى تخطيط هذه الخدمات مستقبلاً.

**ABSTRACT** The effectiveness of existing Libyan health education programmes was evaluated in order to assess how the service may be improved. A representative sample of the general public completed a questionnaire on health knowledge, healthy behaviours and the impact of various health education media. The 872 participants ranked health education media by effectiveness, with television ranked highest and booklets and leaflets lowest. We recommend reorganization of the use of different health education media in future planning.

## Rôle des programmes d'éducation sanitaire dans la communauté libyenne

**RESUME** L'efficacité des programmes actuels d'éducation sanitaire en Libye a été évaluée afin de déterminer comment on pourrait améliorer le service. Un échantillon représentatif du grand public a rempli un questionnaire sur les connaissances en matière de santé, les comportements sains et l'impact des différents moyens d'éducation sanitaire. Les 872 participants ont classé les moyens d'éducation sanitaire en fonction de l'efficacité, la télévision occupant la première place et les brochures et plaquettes la dernière. Nous recommandons de réorganiser l'utilisation des différents moyens d'éducation sanitaire dans la planification future.

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## Introduction

Health education programmes in the Libyan Arab Jamahiriya aim to give people the opportunity to think about health and to undertake voluntary changes in their health-related behaviour. They include the provision of information and exploration of values and attitudes. They are directed at helping people make decisions about their health and acquiring the necessary skills to change their behaviour. They are designed to encourage self-esteem and to empower people to take action about their health.

Health education services have been developed and improved over the past 20 years. Today the General Secretariat of Health and Social Welfare plays the key role in health education programmes via the National Committee of Health and Social Education, which was formed in 1995.

This committee is responsible for the planning and implementation of national health and social education programmes. It organizes programmes, projects, training and research, and supports local authorities and health related boards with their health education activities. It provides information and advice about health directly to members of the public and supports other individuals and organizations who also provide health education to the public.

A variety of methods, both formal and informal, are used. Some are personal, involving a health worker in direct contact with an individual or a group. Others are impersonal, for example the use of posters, leaflets and the mass media (newspaper, radio and television). The committee concentrates on the mass media as these are popular and effective forms of communication. They are increasingly used to inform the public and draw attention to health issues, which then become a matter of public interest and debate [1].

The two national television channels and the seven national and local radio stations present a variety of health spots between other programmes several times a day, 7 days a week. Each of the national television channels presents three health education programmes a week; one of half an hour and two of 15–20 minutes. In addition to round the clock health spots, the radio stations each present between two and four half an hour to one hour health education programmes a week. These programmes and spots broadcast different messages about protecting and promoting health [2].

In addition, educational material, such as leaflets, booklets and posters on the same messages are frequently produced and distributed.

Long-term and short-term health campaigns are organized with the cooperation of related authorities and agencies, such as the Annual Arab Maghribian Campaign against diarrhoeal diseases, the Annual Arab Maghribian Immunization Week, World Anti-smoking Day, the International Week for Supporting Breastfeeding and World AIDS Prevention Day.

This study was designed to evaluate the overall effectiveness of existing health education programmes and the media being used; to assess whether they increase knowledge and improve healthy behaviours within the Libyan community. The results can then be used as a basis for improving the health education service.

## Materials and methods

During 1997, 1500 copies of a closed-ended questionnaire were given to a representative sample of the general public, (males and females of different ages and levels of education, in both urban and rural areas).

The questionnaire was answered anonymously and confidentiality assured. Questions covered knowledge about health and healthy behaviour, the effectiveness of different health education media in disseminating health information and which factors influenced decisions to adopt healthy behaviours. The questionnaire was revised and approved by the National Committee for Health and Social Education.

Participants were asked about 10 particular health issues and asked to tick each issue they were aware of having received information on. The participants were then asked about the practical application of each health issue and asked to tick if they practised this behaviour. In addition, presentations were made using different health education media and participants requested to rank them in order of their effectiveness in raising awareness. Finally, the participants were asked to choose from the sources presented those that they perceived to have an influence in promoting healthy behaviour. Completed questionnaires were individually collected and the resulting data were analysed using *Epi-Info* and *SPSS*. The rankings given by the respondents to the media presented were translated into scores. The ranked sources of information were compared with each other and the effectiveness of different media in disseminating information was compared with their effectiveness in changing behaviour.

## Results

Out of 1500 questionnaires distributed, 872 replies were received, a response rate of 58.13%. Table 1 shows the distribution of participants according to their age, gender, level of education and the area they lived in. Table 2 shows the number of participants

Table 1 Distribution of respondents by sociodemographic variables

Variable	No. (n = 872)	%
<b>Area</b>		
Urban	648	78.0
Rural	188	22.0
<b>Sex</b>		
Male	410	47.0
Female	462	53.0
<b>Level of education</b>		
Illiterate	23	2.64
Read and write	23	2.64
Primary school	40	4.59
Preparatory school	112	12.84
Secondary school	361	41.40
University	313	35.89
<b>Age (years)</b>		
≤ 20	124	14.0
21–30	435	50.0
31–40	207	24.0
≥ 41	106	12.0

with some knowledge on each selected health issue. The number of participants practising each of the healthy behaviours is given in Table 3.

The rankings given by the participants of the effectiveness of the different health education media in raising knowledge about health issues is shown in Table 4. The effectiveness of these media in influencing healthy behaviours is given in Table 5 and a comparison between health knowledge and practising healthy behaviour in Table 6.

The results showed that 83% of the participants knew about the hazards of smoking and 84% did not smoke. Information on the adverse effects of, or misuse of, pharmaceuticals had been received by 71% of the participants, and 73% indicated that they now used pharmaceuticals properly. A total of 68% of the participants had some knowl-

Table 2 Distribution of respondents according to knowledge of selected health issues

Health issue	No. (n = 872)	%
Importance of hygiene in the prevention of disease	769	88
Tooth care and oral health	703	81
Prevention of cardiovascular diseases	477	55
Role of exercise in health protection	712	82
Adverse effects of the misuse of pharmaceuticals	622	71
Harmful effects of smoking	725	83
Significance of vaccination	612	70
Observance of safety rules for prevention of accidents	596	68
Role of regular medical check-ups in the prevention of disease	584	67
Importance of the use of oral rehydration therapy to protect children with diarrhoea from dehydration	490	56

edge on safety rules for the prevention of accidents, of whom 71% now followed road safety rules. Also 81% were aware of

tooth care and oral health and 84% regularly used toothpaste and tooth-brushes.

Table 3 Distribution of respondents by their practice of healthy behaviours

Healthy behaviour	No. (n = 872)	%
Good personal hygiene	832	95
Regular use of toothpaste and tooth-brush	731	84
Healthy diet	587	67
Regular physical exercise	410	47
Proper use of pharmaceuticals	638	73
No smoking	735	84
Adherence to the vaccination programme	543	62
Observance of road-safety rules	618	71
Regular medical check-up	366	42
Use of ORT for child diarrhoea within the family	518	59

ORT = oral rehydration therapy

## Discussion

Our findings may be explained by the widely used behaviour change model, knowl-

Table 4 Effectiveness of different health education media in raising health knowledge

Media used	Total scores %
Television spots	73.5
Television programmes	70.0
Books, magazines and newspapers	50.9
School health education	50.4
Radio programmes	48.6
Radio spots	47.1
Health professionals	43.1
Posters	36.1
Lectures, symposia, mosque	36.0
Booklets and leaflets	30.6

**Table 5 Effectiveness of different sources of information in influencing healthy behaviours**

Source of influence	Participants selecting the source	
	No.	%
	<i>(n = 872)</i>	
Family	706	81
Television	581	67
Books	510	58
School curricula	473	54
Magazines	452	52
Radio	344	39
Friends	323	37
Newspapers	318	36
Health professionals	306	35
Posters	256	29
Lectures/symposia/ mosque	252	29
Peers/colleagues	210	24
Booklets/leaflets	180	21

edge-attitude-behaviour change. According to this model, people appear to pass through a series of distinct stages before they adopt a new practice. These are: awareness, interest, evaluation, trial and adoption.

Nevertheless, in some issues, such as the importance of physical exercise or a medical check-up for health protection, knowledge is not necessarily translated into practical application. One possible explanation for this discrepancy is that knowledge can be held by an individual who does not know how best to express it in behavioural terms.

Three previous surveys of health promotion interventions concluded that the majority of health promotion interventions are effective [3-5]. Gatherer et al. [3] found that of 62 studies, 85% reported improved knowledge levels, of 39 studies,

**Table 6 Comparison between health knowledge and healthy behaviour**

Health issue	Knowledge	Behaviour
	%	%
Personal hygiene	88	95
Oral health/toothpaste and tooth-brushing	81	84
Prevention of cardiovascular diseases/healthy diet	55	67
Regular physical exercise	82	47
Proper use of pharmaceuticals	71	73
No smoking	83	84
Vaccination programme	70	62
Regular medical check-up	67	42
Accident prevention/ road-safety rules	68	71
ORT for child diarrhoea	56	59

ORT = oral rehydration therapy

65% reported changed attitudes in the desired direction, and of 123 studies, 75% reported behavioural change.

With the issue of personal hygiene, 95% of the respondents asserted that they looked after their personal hygiene, but only 88% knew the importance of personal hygiene in health protection. The interpretation of this finding was made clear by the participants themselves. They considered the family the most important influencing factor in promoting healthy behaviours, and therefore a number of them may have adopted or copied these behaviours without passing through the stages of acquiring specific knowledge or adopting attitudes. They obtained their health knowledge from family, friends, peers or other non-official sources.

The participants considered television the most efficient medium for raising

health knowledge, with a total score of 73.5%. Also, 67% of the public saw television as one of the major influencing factors in adopting healthy behaviours, second only to the family as a source of influence.

Television in the Libyan Arab Jamahir-iyah is becoming the most potent of all media, due to the ability of extensive television coverage to reach mass audiences [6] and the intensive, well-designed communications prepared and disseminated by the National Committee of Health and Social Education in collaboration with the Libyan television channels [1]. This can also be attributed to the greater authority material seen on television is perceived to carry over information which is obtained from other sources. This is in agreement with several studies which have shown that mass media campaigns promote health knowledge [7], change attitudes [8] and may change behaviours [9], suggesting that simple messages are best when they are transmitted visually, as on television [10].

Furthermore, one survey in Egypt showed that the vast majority of mothers who knew how to give oral rehydration therapy learned to do so from television [11]. Another study revealed that the television health and social educational series, *Family house*, has been watched by almost 95% of the Egyptian adult population, and about 80% of them reported learning health messages as a result [12]. In Britain in 1992, the 90-minute television programme, *Health show*, reached 8 million people. Among a sample of people who had written for follow-up materials, 75% reported making long-term changes to their lifestyle [13].

Results from our study show that television spots were clearly favoured over regular programmes. People prefer to be reached many times with the same simplified messages through spots, which serve as a reminder and a reinforcement, than to

receive the message all at once within a longer television programme. Moreover, repeated dissemination of messages means that more people will be reached. This finding reflects the relative success of the design of spots and the content of the messages chosen.

Similar results have been shown by several studies. The *British medical journal* (1985) concluded that the lives of more than 100 000 Egyptian children had been saved as a result of the highly successful health education campaign, which used television public service announcements in advocating oral rehydration therapy for children suffering from diarrhoea [14].

In our study, the participants ranked the family as the most potent factor influencing their practice of healthy lifestyles. It was mentioned by 81% as a crucial element leading to the adoption of healthy behaviours. Parents and siblings have a definite influence as role models for children in reinforcing healthy behaviours [15]. The strong cohesion of the average Libyan family and its commitment to Islamic precepts make family influences pivotal. They address such behaviours as personal hygiene and physical exercise, oral health, healthy diet, breastfeeding, not smoking or drinking alcohol and abstention from sexual activities between unmarried couples.

Participants ranked books, magazines and newspapers third in increasing health knowledge with a score of 50.9% and school health education fourth, with 50.4%. In addition, 58%, 52% and 36% of the participants selected reading books, magazines and newspapers respectively as factors influencing them to practise healthy behaviours. The school curriculum was mentioned by 54%.

The increased literacy rates in the country [16] have resulted in Libyans relying more on books, magazines and newspa-

pers, as well as school health education. It clearly makes more sense to encourage young people to adopt healthy lifestyles than to attempt to change unhealthy behaviour patterns in adulthood. Therefore there is general agreement that schools are a key setting for the promotion of health [17,18].

According to their effectiveness in increasing awareness, radio programmes and spots were ranked fifth and sixth, with total scores of 48.6% and 47.1% respectively. Radio was cited by only 39% of the participants as a source of influence in promoting healthy behaviours.

The role of health professionals in health education was ranked seventh with a score of 43.1%. Only 35% of participants mentioned physicians and other health professionals as one of their main sources of influence in adopting healthy practices. A survey by Wood et al. indicated that the public most often turns to the general practitioner as the principal source of medical information. They also showed that patients generally approve of the general practitioner in the role of health educator [19].

Furthermore, there is a high level of motivation amongst general practitioners to provide health education for their patients and, equally, considerable honesty about the difficulties they encounter in carrying this out. In a study by Tapper-Jones and colleagues [20], 95% of general practitioners agreed that patient education was important and 61% placed doctors' advice in the top three most effective methods of communicating health advice: however, 92% had encountered practical difficulties, including poor doctor-patient communication. Lack of time was highlighted by 76% of doctors as a barrier to providing more health advice for their patients and 54% said that time constraints were a major difficulty on their practices [20].

In this context, Boulton and Williams [21] said "the general practitioners approached their work in a way which is likely to inhibit them from putting their knowledge of health education and prevention in practice. They were largely disease-oriented, took a relatively narrow view of health education, and felt so constrained by circumstances as to respond to the presenting problem only".

These findings suggest that some health professionals have difficulties which prevent them from providing adequate education for their clients. These difficulties, which may be organizational, attitudinal or due to deficiencies in health promotion knowledge or communication skills, need identification before further planning of health education and promotion programmes in primary care can be carried out.

The participants ranked posters eighth in their effectiveness in raising awareness, with a total score of 36.1%. Only 29% of the sample regarded posters as a source of influence in adopting healthy behaviours. This finding concurs with Park and Park's comment that as a media of health education, posters have much less effect in changing behaviours than one would hope [22]. These results may mean that educational posters issued by health authorities either do not meet people's needs, or are not well distributed over the country.

Lectures, symposia and mosques were ranked the same as posters in both raising knowledge and changing behaviours. However, this method of communication is mostly one-way, with no way for groups to participate actively in learning, hence their failure to influence people's behaviour.

Alternatively, this finding may mean that the group health education approach, particularly the role of the mosque, is simply not well employed in the Libyan Arab

Jamahiriya, especially if compared with some other countries in North Africa and the Middle East, where mosques have had, for example, the added effect of lending credibility to immunization programmes [6]. Mosques can have a role in community health by promoting healthy lifestyles from a religious point of view, emphasizing the importance of prevention of AIDS and other sexually transmitted diseases, of not smoking, of avoiding alcohol and drugs, and of breastfeeding, immunization, accident prevention and personal and domestic hygiene.

Friends (37%) and peers and colleagues (24%) were seen by the participants as influences in practising healthy lifestyles. Several studies have shown that friends and peers exert a considerable influence on peoples' lives [23], and are of central importance to young people [24]. The only explanation for the relatively low percentage of participants indicating influence from friends, colleagues and peers is that only 14% of the sample were under 20 years of age. Within this group, 50% selected friends and 31% selected peers and colleagues as sources of influence for healthy behaviours.

Booklets and leaflets were seen by the participants as the least effective health education medium. They were given a total score of 30.6% for raising knowledge and they were mentioned by only 21% of the participants as having an influence on practising healthy behaviours.

## Conclusions

The participants acknowledged television as the most effective health education medium for raising health knowledge, and the second most influential factor in the practice of healthy behaviours, with family influence coming first. They valued television spots over regular programmes. Books, magazines and newspapers, as well as school health education, were regarded as important educational media, both in increasing health awareness and improving behaviour. However, the participants considered radio less important than school health education in both respects.

The results of this study suggest the need to reorganize the use of different health education media in future planning; placing an emphasis on television techniques, especially spots. However, another study might be required to select the exact medium most appropriate for each health issue and/or group of people.

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