Introduction: Mass media are very important in health education programmes. Health promoters rely on them to play a crucial role in their campaign.

Aim: The aim of the study was to study the patterns of contribution of the Saudi daily newspapers on two international health occasion during the year 1416H (World AIDS Day 1995 and World Health Day 1996).

Material and Methods: The study was retrospective, carried out by reviewing eight daily Saudi newspapers including all issues covering three months before and extending three weeks after each occasion. All newspaper materials concerning the two occasions were specified, and data obtained from them included types of materials, topics and characteristics of the paper.

Results: The study revealed that the newspapers gave more coverage to World AIDS Day than on World Health Day. This meant that journalists considered that AIDS
was more interesting to the readers than the environmental topic of World Health Day. Most of the materials especially in World Health Day were published in the inner pages. These findings are in consonance with previous work, which showed that Saudi journalists had little interest in environmental issues. Nearly two thirds of the materials were news items about ministerial and activities of other organizations. Informative articles on health education and readers’ participation were minimal.

**Conclusion:** It was concluded that newspapers took not much interest on health matters especially health education.

**Key Words:** Health occasions, health education, newspapers, AIDS, environment, Saudi Arabia

---

**INTRODUCTION**

One of the simplest definitions of health education, is that, it is that part of health care concerned with promoting healthy behavior. It depends on conveying information on health to target groups in a way that influences their behavior for the better, by inducing a change in their attitudes and practices for the achievement and maintenance of good health.

Methods used in health education vary a great deal according to circumstance. They each have their advantages and disadvantages. For the individual, counseling is the most appropriate; group health education is usually in the form of lectures, symposia, discussions, etc. Lastly, methods such as the use of the mass media are suitable for a large number of people. This utilizes the radio, television, newspapers, etc. They have the advantage of reaching a large number of people in a very short time.

The mass media can be of great help in the promotion of health, particularly in influencing public opinion. The media also bring recent developments and innovations in the health sciences to the attention of decision makers.

With the rapid technological advancement in communication, methods of health education have improved tremendously. A lot of interest has been generated in interactive methods. In some countries, clinics and hospitals are now beginning to provide health-oriented software and information systems on-line to patients at home and on-site in waiting room, hospital room and health education libraries.

Educative video games are also used successfully in many communities. Though technology is useful in many instances, there should be caution in adopting new gadgets promoted by commercial interests especially in developing countries.

However, the mass media remain the most important channel of health education. Health promoters rely greatly, upon them, and consider them a crucial part of their campaign. The aim of this study was to study the contribution of the daily Saudi newspapers on two international health occasions during the year 1416H (World AIDS Day 1995 and World Health Day 1996).

**MATERIAL AND METHODS**

Reviewing eight daily Saudi newspapers namely, Al-Jazira, Al-Riyadh, Al-Madina, Al-Yom, Al-Nadwa, Al-Bilad, Okaz and Al-Shark Al-Awsat carried out this retrospective study. All issues of these daily newspapers covering a period of three months before and extending three weeks after each of the two occasions were included in the study.
Any newspaper material concerning the two occasions was specified, cut and filed. The following data were obtained on each material using a special form designed by the authors: (1) Characteristics of material: Name of the newspaper, page on which material appeared (first, last or inside) and when the material was covered in relation to occasion (before, during or after). (2) Topics covered: Scientific, international events, activities, discoveries – research – statistics and analyses – opinions – book summaries (3) Type of material: News, article, reportage announcement and readers’ comments.

Data management and statistical methods:
After data on all materials were collected, they were revised and entered into an IBM compatible personal computer. After the revision of the data, frequency distributions were tabulated, and comparisons were made using X² and Fisher Exact Test according to requirements.

The 5% level was chosen to indicate statistical significance. EPI5 and SPSS/PC+ software were used.6-10

RESULTS
1. Size of coverage
As shown in Table 1, the total coverage of the two occasions amounted 139 newspaper materials, 89 (64%) of which were about World AIDS Day (WAD) and 50 (36%) about World Health Day (WHD). Jazira newspaper had the highest percentage of materials (18.7%), followed by Okaz and Al-Yom (17.3% and 16.5% respectively). The least was by Al-Shark Al-Awsat (2.2%).

Jazira’s coverage of WHD was significantly greater than that of WAD (X²=9.08, p=0.003). However, Al-Yom published significantly more materials about WAD than WHD (X²=4.13, p=0.042). There was no statistical difference on the coverage of the two occasions by the other newspapers.

2. Characteristics of the coverage
A. Page of publishing
Table 2 shows that most materials were published on inner pages (81.3%), and fewer on the first or last pages (6.5% and 12.2% respectively). Significantly, more materials about WHD appeared on the inner pages than those on WAD (X²=3.89, p=0.049), and no statistical significance was found between the two occasions with regard to the first and last pages.

Okaz was the newspaper that published the highest number of materials on the first page, while Al-Bilad was the paper that published most materials on the last page (44.5% and 41.2% respectively).

B. Time of publishing
The study showed that the newspaper campaign on WAD started 11 days before the day and continued 12 days after it, covering a period of 24 days. The campaign on WHD, however, covered a period of 51 days, starting 42 days before the day and ending 8 days after it.

The time distribution of materials was almost similar on the two occasions for approximately one third of the material was published before, nearly one half during, and one fifth after each of the occasions. There was no statistical significance between the two occasions (Table 3) (N.B. the expression “during the occasion” was used for the special day, one day before and another after).

Jazira published the highest percentage of materials before and after the occasions (23.2% and 21.2% respectively), while Okaz had the highest percentage during the two occasions (20.3%).
### Table 1: Distribution of newspaper materials covering World AIDS Day and World Health Day according to newspapers and occasions

| Newspaper | WAD | WHD | Total | Test of Significance |
|-----------|-----|-----|-------|----------------------|
| Jazira    | 10  |     | 16    | 26       | X²=9.08*; p=0.003     |
| Riyadh    | 10  |     | 6     | 16       | X²=0.02; p=0.892      |
| Okaz      | 18  |     | 7     | 24       | X²=1.52; p=0.218      |
| Madina    | 7   | 14.0| 14    | 10.1     | X²=1.33; p=0.249      |
| Madina    | 6   | 12.0| 6     | 12       | X²=1.12; p=0.289      |
| Yom       | 19  |     | 8     | 23       | X²=4.13*; p=0.042     |
| Shark Awsat | 3 | 0   | 0     | 3        |†FET=0.553             |
| Bilad     | 16  |     | 5     | 21       | X²=1.59; p=0.208      |
| Total     | 89  | 64.0| 50    | 36.0     |                        |

*Statistically significant †Fisher Exact Test ‡Percentage calculated out of total of 139

### Table 2: Distribution of newspaper materials covering WAD and WHD according to pages of publication and occasions

| Page       | WAD | WHD | Total | Test of Significance |
|------------|-----|-----|-------|----------------------|
| First      | 7   | 8   | 9     | FET=0.489            |
| Last       | 14  | 15.6| 17    | X²=2.82; p=0.093     |
| Internal   | 68  | 76.6| 113   | X²=3.89*; p=0.049    |
| Total      | 89  | 100 | 50    | 100                  |

### Table 3: Distribution of newspaper materials covering WAD and WHD according to time of publishing and occasions

| Time of publication | WAD | WHD | Total | X² value  |
|---------------------|-----|-----|-------|-----------|
| Before              | 30  | 33.7| 47    | 33.8      | 0.00 (p=0.972) |
| During              | 42  | 47.2| 64    | 46.0      | 0.13 (p=0.717) |
| After               | 17  | 19.1| 28    | 20.2      | 0.17 (p=0.683) |
| Total               | 89  | 100 | 50    | 100       |

### Table 4: Distribution of newspaper materials covering WAD and WHD according to topics and occasions

| Topics                      | WAD | WHD | Total | Test of Significance |
|-----------------------------|-----|-----|-------|----------------------|
| Scientific                  | 15  | 16.9| 22    | 15.8 X²=0.20 (p=0.658) |
| Discoveries Research Statistics | 17 | 19.1| 22    | 12.9 X²=8.31* (p=0.004) |
| International events        | 5   | 5.6 | 5     | 3.6 FET=0.159       |
| Ministry+others activities  | 48  | 53.9| 88    | 63.3 X²=9.37* (p=0.002) |
| Analyses Opinions Books     | 4   | 4.5 | 6     | 4.4 FET=1.00       |
| Total                       | 89  | 100 | 50    | 100                  |

70 Journal of Family & Community Medicine Vol.6 No.2 - December 1999
Table 5: Distribution of newspaper materials covering World AIDS Day and World Health Day according to types of materials and occasions

| Types         | WAD  | % | WHD  | % | Total | % | Test of Significance |
|---------------|------|---|------|---|-------|---|----------------------|
| News          | 49   | 55.1 | 33  | 66.0 | 82  | 59.0 | $X^2=1.58$ (p=0.208) |
| Articles      | 23   | 25.8 | 4   | 8.0  | 27  | 19.4 | $X^2=6.51$* (p=0.012) |
| Messages      | 0    | 0.0  | 3   | 6.0  | 3   | 2.2  | FET=0.045*            |
| Reportage     | 7    | 7.9  | 4   | 8.0  | 11  | 7.9  | FET=1.00              |
| Announcements | 10   | 11.2 | 5   | 10.0 | 15  | 10.8 | $X^2=0.05$ (p=0.822)  |
| Readers’ opinions | 0  | 0.0  | 1   | 2.0  | 1   | 0.7  | FET=0.360             |
| Total         | 89   | 100 | 50   | 100 | 139  | 100 |

3. Topics of Newspaper materials

Most published materials, for both occasions (63.3%) concentrated on ministerial or the activities of other governmental organizations. This was more obvious on WHD, when the coverage constituted 80.0% of all materials published, a percentage that is significantly higher than that of WAD (53.9%) (Table 4) ($X^2=9.37$, p=0.002). Jazira published the most on this topic, followed by both Okaz and Riyadh (17.1% and 15.9% respectively).

Scientific materials constituted 15.8% of the number of materials published. There was no statistical difference between WAD and WHD (Table 4) in this regard. Again Jazira was the newspaper that led in the number of material published (36.4%), followed by Okaz (22.7%).

Discoveries, research and statistics formed a small percentage of materials covered (12.9%). Those on AIDS published on WAD, were significantly more than those published on WHD ($X^2=8.31$, p=0.004) (Table 4). Al-Yom was the newspaper that published the largest number of such materials (38.9%).

International events formed a very small percentage (3.6%), distributed equally in five newspapers. They were totally absent on WHD. Similarly, analyses, comments and book reviews formed a minor percentage, and were present in three newspapers only. No statistical differences were found between WAD and WHD on these topics (Table 4).

4. Type of coverage

Table 5 shows that “news” was the most frequent type of materials published (about 60%). The two occasions had similar percentages (55.1% and 66.0%), with no statistical differences between them. There was not much difference among the newspapers except for Al-Shark Al-Awsat which published only one news item. Articles formed about one fifth of the materials published (19.4%). WAD articles were significantly higher than those of WHD (25.8% and 8.0% respectively, $X^2=6.51$, p=0.012). Al-Bilad published the highest number of these articles (22.2%).

Announcements formed more than one tenth of the materials (10.8%) and the percentages on the two occasions were close to each other. There was little reportage, approximately 8.0% for both occasions. Okaz, which published more than a third (36.4%) of this, was the newspaper with the highest coverage.

There was no “messages” on WAD, but there were three on WHD forming a very small percentage (6.0%) of the total coverage. This difference was of statistical significance (Fisher Exact Test = 0.045). The three messages were found in Jazira. Finally, except for one sole comment in WHD.
published by Okaz, almost no readers’ comments were published on the two occasions.

**DISCUSSION**

World Health Organization has specified a number of health occasions to be celebrated by the whole world since these special occasions present good opportunities for health education in different communities.1 Perhaps the two occasions, which generate the greatest interest and attention in various countries, are World AIDS Day and World Health Day.

World AIDS Day (WAD), was first celebrated in 1988, after the World Health Ministers’ Conference for Discussion of the AIDS Prevention Programme (January 1988). During that conference, the first of December of every year was designated the World Day for AIDS Control, simply known as World AIDS Day.11

World Health Day (WHD), however, was first celebrated in 1950. The 7th of April, was the day of establishment of the World Health Organization in 1948.12 International health occasions are celebrated in various ways in different countries. In some countries, health education is carried out by means of competitions, symposia, and publication of posters etc. Other countries issue postage stamps or have mass media campaigns.13,14

This study showed that generally speaking, newspapers gave little prominence to health subjects. This was obvious, since most of the materials concerned with the two occasions under study were found in the inner pages of the papers. However, there was more interest by the media in WAD than WHD. This was evidenced by the greater coverage and the significantly larger number of articles on WAD that were given greater prominence by being published on the front and back pages. This may be due to the difference in the nature of the two occasions. WAD has a different slogan every year, but the original topic of AIDS is the same. Consequently, its scientific materials and literature are available beforehand. The topic for the WHD, on the other hand, changes every year. This means that some effort must be made to obtain information on every new topic. The slogan for the day under study was “Healthy Cities for Better Life”. It is an important environmental topic, but journalists considered AIDS, a disease with no known cure or vaccine of more interest to readers. This agrees with the results of a previous study, which showed that Saudi newspapers and magazines exhibit little interest in environmental issues and thus do not participate much in raising public awareness on environmental issues.15,17

In Saudi Arabia, however, statistics show that diseases, which depend on their transmission on environmental conditions, are of a higher priority than AIDS. Thus the newspapers/media should give equal if not more attention and coverage to the environment than AIDS.18,20

The period during which materials on WHD were published was longer than that of WAD (51 days and 24 days respectively), and most of the former (42 days) occurring before the occasion. This finding may be because, as stated earlier since there is a new topic for WHD every year, its slogan is specified few months prior to the date making it possible for newspapers to publish articles on the topic well before the due date. However, since the general subject of WAD doesn’t change, only its new slogan needs to be published close to the day. The distribution of the materials in terms of time was similar in both occasions; one third “before” to raise awareness, one half “during”, at the height of the campaign, and one fifth “after” the event to report the events.

Generally, newspapers allocated much
space to the activities of ministries and other organizations on both occasions (63.3%). This is similar to the distribution of the type of materials published in which news constituted nearly 60%. The news covered the activities that took place. Together with statements, by prominent personalities the sum total of these materials constituted 70%. Articles, reportage, messages and readers’ comments made up the remaining 30%. This meant that, in effect, actual health education would form a small fraction of this. Moreover, articles, which dealt mainly with health education, were largely absent.

One may add that the distribution of material types in this study, is similar to a previous study on the coverage of environmental issues in a Saudi newspaper in which “news” constituted the main area covered (58.7%), followed by other issues in small percentages. This lack of cooperation between the health sector and mass media is also evident in other countries. In some developing countries, the mass media hardly ever dealt with health education. In a series of discussion panels with mass media staff, the importance of health issues was emphasized resulting in the mobilization of the media to give prominence to health matters on these special occasions.

In Western countries, the mass media play a crucial role in health education. In a health education campaign for sports in Britain, which lasted several weeks, publications on the campaign in the 18 local newspapers covered 32 large pages. Radio and Television spent a total of five hours of broadcasting on the same issue. The mass media coverage was estimated to cost at a total of more than five million American dollars.

**CONCLUSION**

From the results, it could be concluded that the interest of Saudi newspapers on health matters was low. They showed more interest in World AIDS Day than to World Health Day. However, most of the materials published on both occasions concentrated on activities of the ministry and other organizations. They were in the form of “news” and “announcements”. Thus, materials directed towards health education were few and readers’ comments were minimal, (less than 1%). In other words, there was hardly any participation in health occasions through newspapers by the community.

**RECOMMENDATIONS**

It is recommended that Saudi newspapers should pay more attention to health topics. Also better rapport between the health sector and journalists should be established so that the help of the latter could be enlisted in giving priority to publish more health matters and health education. Finally, more newspaper space should be set aside for readers’ opinions on special health occasions.

**REFERENCES**

1. World Health Organization. Education for Health: A manual on health education in primary health care. Alexandria: Eastern Mediterranean Regional office of WHO, 1989; 25, 216. (In Arabic)
2. Park JE, Park K. Textbook of Preventive And Social Medicine. 12th edition. Jabalpur: Banarsidas Bhanot, 1989; 457.
3. Lieberman DA. The Computer’s Potential Role In Health Education. Health Communication 1992; 4(3): 211-25.
4. Gustafson DH, Bosworth K, Chewning B, Hawkins RP. Computer-based Health Promotion: Combining Technological Advances With Problem-Solving Techniques To Effect Successful Health Behavior Changes. Annual Review of Public Health 1987; 8: 387-415.
5. Lieberman DA, Brown SJ. Designing Interactive Video Games For Children’s Health Education. In: Morgan K, Satava RM, Sieburg HB, Mattheus R, Christensen JP. Eds. Interactive Technology And the New Paradigm For Health Care. IOS Press and Ohmsha, 1995; 201-10.
6. World Health Organization. New Approaches To Health Education In Primary Health Care. Geneva: World Health Organization, 1983; 7. (Tech. Report series 690).
7. Gabr B. A Manual For Field Testing Of Mass Media And Materials In Health Education. Beirut: Faculty Of Health Sciences - American University in Beirut, 1987; 57. (In Arabic).
8. Dowson - Saunders B, Trapp RG. Basic And Clinical Biostatistics. New - Jersey Prentice - Hall International Inc. 1990; 148-52.
9. Dean AG. Epi Info version 5 - a word-processing database, and statistics system for epidemiology on microcomputers. Geneva: The Programme On AIDS - WHO, 1990.
10. Norusis MJ. SPSS/PC+ Program Manual. Chicago: SPSS Incorporation, 1986.
11. Anonymous. What is World AIDS Day ? World AIDS Day Newsletter 1995; 2:2.
12. Manuila A. editor. EMRO Partner In Health In The Eastern Mediterranean 1949 -1989. Alexandria: APTC, 1991; 44
13. Kamper - Jørgensen F. Postage Stamps with WHO Messages. World Health Forum 1992; 13(1): 20-2.
14. Lamont G, Nani W. Christ With AIDS. AIDS/ STD Health Promotion Exchange 1996; 2: 6.
15. Benenson AS ed. Control of Communicable Diseases in Man. 15th edition. Washington, DC: American Public Health Association, 1990; 1-7.
16. Nakajima H. Editorial- World Health Day 1996 - Healthy Cities For Better Life. World Health 1996; 49 (1):3.
17. El-Medany IM, Mahmoud HH, Al-Roshoud RA. Assessment of the present situation of environmental awareness in Saudi journalism. In: General Secretary of Gulf Cooperation Council Countries And Riyadh Chamber of Commerce And Industry. Papers and Studies of the Symposium of “Environment And Development - Complementation Not Opposition”, 21-23 Jomada I 1413H. (15-17 November 1992) Part I. Riyadh Chamber Of Commerce And Industry, 1992.
18. Anonymous. Acquired Immunodeficiency Syndrome (AIDS) - Data as at 30th June 1996. Weekly Epidemiological Record 1996; 71(27): 206.
19. Anonymous. AIDS Update - Reported AIDS cases in the Eastern Mediterranean Region. EMR AIDS news 1998; 2(1): 8.
20. Ministry of Health. Annual Health Report 1996. (1416/1417 H.) Riyadh: Al-Badia Offset Printing Press, 1996; 27-30.
21. Abiaghona - Wardina LND, Malalaskira T. Collaboration of the efforts of mass media for health promotion. World Health Forum 1991; 10(1): 29-30. (In Arabic)
22. Player DA. Sport For All, Health For All. World Health Forum 1986; 7(4): 374-9.