

Health Promotion Through the Media: Challenges and Opportunities

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Abstract-Aim: The world is changing from day to day, developing new tools of communication. The greatest tool developed in the 21st century is the media. Media provides news of all kinds, including health information. The aim of this study is to describe the role of media, analyzed according to the case study of swine flu news in newspapers in Turkey.

Method: This study seeks to examine the way in which swine flu (and the subsequent actions and discussion) was reported in the Turkish press, with particular attention to the framing devices used and the factors that might influence these framing decisions. Newspapers were chosen to represent the media as the design of the study. Influenza-related news for two consecutive years was chosen as the analytical subject; 575 related news reports were found.

Results: There were 496 news reports in the first study year, and 50 in the second. Influenza news occurred primarily (300 news sources) between October-December 2009, while only 14 appeared during the same period in the second year. It was observed that the news pieces were initially located on first pages/covers and the upper part of the pages, covering larger areas. Disease and prevention related pictures were chosen at the crisis point, in particular. In the second year, the area occupied by swine flu news was smaller, occurring on inner pages and written by reporters ($p<0.05$).

Conclusion: Health-related media content is provided when the subject is high on the public agenda, and if the issue poses a threat to the society, such as during crisis periods. In fact, protection is more important for health, so that health related topics should be provided in advance of crisis periods.

Keywords- Health; News; Communications Media; Newspapers; Pandemic

I. INTRODUCTION

There is little evidence available for public health authorities and/or stakeholders for policy-making, capacity building and the implementation of interventions. This may be due to the lack of mechanisms that can promote interactions between researchers, policy-makers, stakeholders and communities who can affect the perception of research findings. Media is one of those stakeholders, which has a role in policy action and public health intervention. Media coverage of health-related issues can potentially shape decisions of policy-makers and individual beliefs, attitudes and behaviours about illness management [1].

Many different types of news are available for consumers across a range of different media; this has created many news forms and news interests. Public responsibilities of media must be evaluated, because the opportunity to create more news and news programmes that must coexist within the same medium subsequently decreases the value [2]. Stories which include public life and privacy, as well as complex stories, crisis events, and important issues such as health are of great interest to media consumers [3]. News journalism must also continue to be evaluated for the tendency to oversimplify complex stories.

During a crisis time, viewing figures for all news outlets increase [4]. 'News consumers' do not want to wait for information because they can also obtain information from TV channels and the Internet. Reporters must present only the news, which is popular for that time. In order to increase circulation of the newspaper, reporter's choice will be important [5]. Numerous studies have investigated the ways in which the media portrays infectious and other diseases in recognition of the important role the media plays in framing health risk information and the impact this might have on public understanding and decision-making related to such risks [6]. Public education is also achieved in the presentation of health news to the public. Studies have analysed the quality of risk information provided in news coverage regarding infectious diseases by coding for variables such as risk comparisons (e.g., comparing the likelihood of catching a disease with other health risks), other risk scenarios (e.g., references to past influenzas such as the coverage of avian influenza), and the inclusion of self-efficacy information and providing health education [6]. The aim of this study is to describe the role of media in the reporting of swine flu news in newspapers in Turkey during the period of 2009-2011.

II. METHOD

This study seeks to examine how swine flu (and the actions and discussion it generated) was reported in the Turkish press, with particular attention to the framing devices used and the factors that might help influence these framing decisions. Newspapers were chosen to represent the media in the design of the study. We investigated swine flu coverage in the three largest Turkish daily newspapers, according to circulation figures.

This study draws from press coverage of swine flu from 01.05.2009-30.04.2011, a period which encompasses the emergence of the virus, its arrival and proliferation in Turkey, and the eventual implementation of the government's vaccination program. The first swine flu cases were reported in May of 2009, sparking an influenza-related crisis (pandemic) in this year. All newspapers in the given period were examined. The search terms used to identify stories about swine flu included: swine flu, H1N1, swine influenza, swine fever, pig flu. These search criteria yielded a total of 575 stories (excluding letters to the editor and stories in which one of the search terms was mentioned briefly, but swine flu was of only peripheral or minor interest). Content analysis and portrayal (description of the samples/presentation of the data) of the news were analysed [5]. Reviewers used a structured form with three sections and twenty-one questions for content analysis at National Library archives.

Analysis included:

- 1) Descriptive factors: newspaper name, publication date and day, page, story placement on the page, page width.
- 2) Visual material usage: number of visual materials, area and quantity of this visual material, main theme or object of this visual material.
- 3) Main content of the news: Topic, source of the news, general approach to influenza (number of news sources and news types), vaccine and prevention of disease, cases and explanations related to prevention methods.

Data was analysed by the SPSS 15.0 statistical package program for social sciences, descriptive statistics, and the use of chi square tests to compare groups ($p < 0.05$).

III. RESULTS

Influenza-related news was analysed over a period of two consecutive years, in which a total of 575 news reports were found. There were 496 influenza news reports in the first study year, and 50 in the second. Influenza news mostly appeared (300 news report) between October-December 2009, while only 14 appeared during the same period of time in second year.

Influenza news was analysed according to its location on the page and overall placement in the newspaper. In the first study year, (44.7% of the news were situated at first or last page on the other hand this percentage was 10% at the second study year. In the first study year, 61.1% of related stories were located on upper part of pages, whereas 68.0% located on the lower part of pages during the second. The difference in placement of related news in the newspapers between the two years was statistically significant ($p < 0.001$), as shown in Table 1.

TABLE 1 FEATURES OF SWINE FLU NEWS IN THE ANALYSED NEWSPAPERS FROM 2009-2011

New features	First study year		Second study year		
	N	%	N	%	p
Location of the news					
First/last page	217	44.7	5	10.0	p<0.001
Inner pages	279	56.3	45	90.0	
Place on the page					
Upper page	303	61.1	16	32.0	p<0.001
Lower right	193	38.9	34	68.0	
Number of columns					
One	203	40.9	35	70.0	p<0.001
Two and more	293	59.1	15	20.0	
Area of the news (cm ²)	332.9±380.4		109.8±99.5		
Minimum	6.0		28.0		p<0.05
Maximum	1750.0		430.0		
Total	496	100.0	50	100.0	
News sources*					
Managers/politics	337	65.6	14	28.0	p<0.05
Bulletins	118	23.8	11	22.0	
Reporters	111	22.4	16	32.0	
Health professionals/WHO	107	21.6	8	16.0	
Other written sources*	4	0.8	1	2.0	
Content of the news**					
Case report	131	26.4	38	76.0	p<0.05
General information	55	11.1	19	38.0	
Prevention methods	339	68.3	24	48.0	
Others***	19	3.8	7	14.0	

*Explanations by issue-related persons.

**There was more than one choice for news sources; the percentages were calculated according to the total number of news sources available.

***Pandemic, drug production, other viral diseases.

Influenza news was also analysed according to the related column number in the newspaper (Table 1). The areas of the news reports were primarily two or more columns long in the first year (59.1%), but were typically one column long in the second study year (70.0%). The difference between the two years was statistically significant ($p < 0.001$), as shown in Table 1.

Each new report included an average of 1.36 sources during the first year, and 1.0 sources in the second year. The main news sources political/managerial explanations (65.6%) during the first study period. Reporters' studies (32.0%) and political/managerial explanations (28.0%) were the major news sources in the second study year ($p<0.05$), as depicted in Table 1.

Primary content during the first year included explanations of prevention methods (30.4%) and case reports (26.4%). Case reports (76.0%) and prevention methods (48.0%) were the primary contents of swine flu news in the second year ($p<0.05$). As shown in Table 1, the area of the news reports averaged $332.9\pm380.4\text{ mm}^2$ in the first year, and $109.8\pm99.5\text{ mm}^2$ in the second year ($p<0.05$).

The use of visual materials in news was also analysed. Four thirds (75.0%) of the news contained visual material in the first year, and 34.4% did not visual material in the second year. Visual material availability was statistically significant between the two years of the study ($p<0.001$). Visual materials were typically two or fewer in both years, but there were more news reports with three or more visual materials in the first year (15.6%) as compared to the second year (2.9%). Visual material usage frequencies were statistically different between the two years ($p=0.022$), as shown in Table 2.

TABLE 2 VISUAL MATERIAL DISTRIBUTION IN SWINE FLU NEWS REPORTS IN THE ANALYSED NEWSPAPERS IN 2009-2011

Features of visual material usage	First study year		Second study year		
	N	%	N	%	p
Number of visual materials					
One	242	65.1	30	88.2	p=0.022
Two	72	19.4	3	8.9	
Three and more	58	15.6	1	2.9	
Visual material format					
Picture	365	98.1	31	91.6	p<0.001
Illustration/ Graphic	7	1.8	3	8.4	
Subject of visual materials					
Health professionals	31	8.3	3	8.9	p<0.05
Prevention methods	157	43.1	1	2.9	
Sick people	57	14.5	17	50.0	
Managers/politics	65	17.5	4	11.8	
Others*	62	16.6	9	26.4	
Visual material area (cm ²)	109.81 ±130.51		28.83 ±46.9		
Minimum	1.00		0.00		p<0.01
Maximum	850.00		162.50		
Total	372	100.0	34	100.0	

*Pictures, symbols of WHO, laboratories, flag, mint-lemon, virus, deaths.

Photos appeared with the highest frequency in visual material during both study years (98.1% and 91.6%, respectively). Illustrations were used more frequently in the second study year (8.4%). The differences between visual material choices were statistically significant ($p<0.001$), as shown in Table 2.

The primary content of the visual sources were prevention methods (43.1%) in the first study year. Sick people and their illnesses (50.0) were the primary subjects of visual materials in the second study year ($p<0.05$), as shown in Table 2. The mean area of the visual object was $109.81\pm130.51\text{ cm}^2$ in the first year and $28.83\pm46.9\text{ cm}^2$ in the second year. Variance analyses were statistically significant ($F=13.54$, $p<0.01$), as shown in Table 2.

IV. DISCUSSION

Health related news, either visual or written, is frequently used to attract interest in the media. We described the approaches used by newspapers to approach the swine flu health crisis from 2009-2011, and will discuss the possible negative and positive outcomes of this treatment. In May 2009, the pandemic news appeared and expanded in Turkey. Swine flu is a notable example because of its importance as a health problem, and its similar prevalence in both visual and written media [7, 8]. In this study, the highly circulated Turkish newspapers were reviewed during the initial crisis and the following year.

The placement of swine flu news was primarily on first pages/cover pages and the upper part of pages during the first year of the study. The areas of news reports were larger (generally consisting of more than one column) and included more explanations from policy-makers and managers regarding the swine flu pandemic, as well as bulletins, reporters' stories and comments from professionals. The general theme of the news was illness and methods of prevention in order to generate interest, and it was found that three-fourths of the stories included visual materials in the first year of the study. Disease and prevention related photos were particularly prominent during the pandemic period. Swine flu did not result in many fatalities, and was not a significant health problem in the second year of the study. Hence the news area became smaller (generally one column in length), and shifted from first pages to inner pages. Explanations from policy-makers were also replaced by reporters' stories. In the first study year, newspapers had chosen to use case studies in order to generate interest. Newspapers continued to use visual materials in the second year, but they were smaller and their contents differed from images used during the swine flu pandemic year. Visual materials were usually one-column long, and illness was their primary theme. The differences between all the parameters were statistically significant between the two study years ($p<0.05$).

Newspapers, journals, radio and television play an important role in contemporary journalism and are used as effective means of mass communication. They tell stories from neighbourhoods and abroad, and attempt to describe the world. Millions of people benefit from newspapers, journals, radio and television daily. Mass communication helps people to solve their problems and meet requirements. As literacy increased, newspapers become a powerful force in the world [9].

Newspapers appear in black-and-white and in colour according to their place of production. They are also organized with more or fewer stories and pictures appropriate to their production technique. Newspapers have more time to generate news than visual media tools, allowing them more freedom to identify sources and collect verified data. Another advantage of text media is that it is a written source, which can be saved and re-read. Written media tells stories with more detail and depth, and can also use time more conveniently than both radio and television. Newspapers can increase the page number and give more places to stories when the number of necessary stories is increased. Radio and television can never use this feature of written media. People read newspapers when they want to learn about a subject thoroughly. This is an important specialty of newspapers as compared to radio or internet sources. Newspapers also have special editions and specific parts for specific topics that can be communicated to many people [10].

Newspapers are used for health education in many countries, as is the internet and radio. Communication media tools are used widely to increase community awareness about a health problem and to generate support and ensure campaign participations. Health problems, solutions, prevention techniques and priorities are the major themes of news information. This information differs among countries, but the primary goals do not. Health news helps to increase health status [11]. Health related news was analysed as; health news that are informative and health news a new reports-programs [12]. Health information, reports, and news were described according to changing or developing human behaviour [13].

The roles of health related news are clearly directed at public education, particularly during crisis times. However, health is a continuing process and health promotion and prevention is an accumulation. Media has the advantage of source diversity [14]. Prevention-oriented health news increases the success of health programs. In our study, it was found that health news was used to increase circulation numbers, and lost its news value if the theme was not the primary agenda. In fact, media is an important platform, which brings researchers, policymakers and society together. It has influence over health risk information, decision-making and public education [6]. One previous study recommends that governments could be more successful if they used media in disaster/illness preparedness packages due to its significant effect on community education [15].

A health herald is the special member of press who works at a press institution for the purpose of enlightening the public on the issues of health. This news should be realistic and must be based on scientific sources. Health news helps people to educate themselves on health issues; however “number of deaths” was often chosen to present a crisis, in order to arouse interest. The severe or interesting news reports about health can only arouse interest, and at crisis times, media uses this interesting news to sell newspapers [5, 16]. One of the roles of the health reporter should be the presentation of developments in public health. They should use different sources when presenting news related to health. Health professionals from different fields such as universities, governmental hospitals, private health centres, primary care centres, chambers of medical doctors, health-related associations, institutions, unions, syndicates and non-governmental organizations are all possible sources.

The Health Journalists Declaration in Turkey is an important source for community benefit. Reporters should not present hope (less) news. Project or research related news should not be presented as proven results in health stories. As per articles 6, 7 and 10 of the Declaration, health news should be presented together with scientific ideas and evidence. Health journalists must generate a continuous educational environment while preparing this news [17-19].

One of the important tasks of media is to publish the results of health related research regarding different sides of a subject. The generation of knowledge moves in cycles; information is produced and tested, evidenced and implemented through evidence-based policies in order to become knowledge. Today, researchers struggle to translate evidence into practice. Much research remains undistributed, or cannot be related to daily living. In this process, media has an undeniable role. Media can aid in the translation of research into practice. Media can help scientific evidence become common knowledge and applied in daily practice, first of the public and then of the policy-makers. By providing pertinent news, media can help governments to develop policies for public health programs. Public health research is a good tool that can be used by both politicians and society. Public health research results often require public policy decisions and public health programs to implement further research. The routine distribution and huge public access of media can create consciousness and eventual awareness. Health stories become a part of daily life and activities of the people reached by media outlets. Better understanding of how media works may improve the acceptableness of future public health programs.

There are several limitations in this study. First, our analysis is limited to newspaper coverage of swine flu issues. Newspapers are only one of many news outlets that may affect public opinion. However, the coverage of issues in newspapers is highly correlated to the presentation of the same issues in other communication media tools like radio, television and the internet. Secondly, both selection of news and the rules of content analysis may have shaped the results. In order to minimize this limitation, content analysis rules were determined before selection of the news.

V. CONCLUSIONS

Health related media content is provided when the subject is high on the public agenda and if the issue is a threat to society, such as during crisis periods. In fact, prevention is more important to overall health, so that health related topics should be provided before crisis periods. Media content is presented to society every day. Media has an effective role in public education. Media content must contain prevention methods and health education. Media is a very important tool that can be useful in upgrading public health status, in health promotion and education, and in prevention and the transition from scientific evidence to public policy. Readers must apply this knowledge to life and clinical practice.

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