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Spotlight on the news: A critical review of cancer disclosure

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The global occurrence of malignant neoplasms has more than doubled in recent years. In Brazil, neoplasms represent 17% of all known causes of death and are considered the second leading mortality cause. This growth rate is astonishing, but the World Health Organization states that 40% of these cases could be prevented. However, this requires the population to be well-informed of the correlation between risk factors and cancer. This paper is a literature review of articles on cancer disclosure in the Brazilian media, including 195 news from different newspapers, 177 radio reports, 170 issues of three important Brazilian magazines and 51 television news segments only. The results found in Brazil are compared with international studies, aiming to identify the characteristics of the media frame. We suggest that some important aspects of this disclosure in the Brazilian media could perpetuate the image of pain, death and suffering associated with cancer, as mentioned by 70% of respondents in a national survey. These aspects may hinder the diffusion of a prevention and early diagnosis policy, which is essential to decrease cancer incidence and death rates.

Key words: Media, cancer, scientific disclosure, health.

INTRODUCTION

In 2008, the International Agency for Research on Cancer (IARC)/WHO (World Cancer Report, 2008) released a report on cancer's impact worldwide, showing that the rates of this disease had more than doubled in the last 30 years. The IARC's report attests that this significant increase in cancer rates is the result of factors such as population growth – closely related to improvements in living conditions – which has consequently led to the aging of the population. This impact of living conditions according to a World Health Organization report (WHO, 2007) will mainly affect poorly and moderately developed countries. WHO estimated in 2005 that three quarters of deaths worldwide would be due to cancer and might occur in poor or developing

countries like Brazil (WHO, 2007). The estimation of cancer incidence for 2012 in Brazil is 520,000 cases.

The purpose of this review is to discuss the findings of some studies on cancer disclosure in the Brazilian media and correlate them with other international studies. Then, we compare these results with the Brazilian public perception of cancer, released recently by a national survey (INCA, 2007).

We begin with a brief panorama of epidemiological data on malignant neoplasm. Subsequently, by considering information a major factor, we present some characteristics of the Brazilian media and discuss the role it can play in cancer prevention and early diagnosis. Based on national research, we describe what the population actually knows about some risk factors associated with cancer. Then, we discuss health disclosure, showing studies that analyze the news space given to cancer. Also, regarding news circulation, this

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study discusses the characteristics of the media frame (Entman, 1993; Scheufele, 1999) on cancer.

In summary, we discuss in this paper what we learned from studies developed in recent years and what can be done about cancer disclosure in the Brazilian media to help demystify the disease in order to encourage prevention and early diagnosis.

Malignant neoplasm in Brazil

Since 2003, malignant neoplasms have constituted the second leading cause of death in the country, according to the Brazilian National Cancer Institute (in Portuguese, Instituto Nacional do Câncer; INCA), representing nearly 17% of known-case deaths reported in 2008 to the Mortality Information System (in Portuguese, Sistema de Informações sobre Mortalidade). Estimations of the Brazilian Ministry of Health pointed out the occurrence of about 520,000 new cases in 2012-2013, with a one-third mortality rate. The country's health authorities have reported a 43% increase in cancer mortality in recent decades (INCA, 2011).

These impressive numbers are quite different from decades ago when there was higher mortality from infectious disease (Omran, 2001). This scenario reflects a significant change in living standards, with better working conditions, nutrition and health. Although the growth of these chronic degenerative diseases is alarming, the World Health Organization attests that at least 40% of cancer cases could be prevented if healthier lifestyles were adopted, such as quitting smoking, increasing physical activity, eating properly, avoiding too much alcohol and sun exposure at inappropriate times, as well as adopting safe sex practices (WHO, 2007).

What the population knows about cancer

Is the population well-informed about the close link between cancer and risk factors associated with this disease? The research project "Perception of Brazilians about Cancer" (in Portuguese, *Concepção dos Brasileiros sobre o Câncer*), conducted by the Brazilian National Cancer Institute (INCA, 2007) in seven capitals throughout the country, had the opinions of more than 2,100 people older than 16 years about 16 different issues. The survey showed that respondents were knowledgeable about various associations between risk factors and cancer. For 73% of respondents, cancer was known to be preventable, but they did not always adopt healthy lifestyles. The majority of the respondents (98.7%) were aware of the correlation between smoking and cancer. Likewise, the vast majority (95.4%) knew of

the connection between sun exposure and cancer. In relation to alcohol, this association was more tenuous, although still quite significant (83.6%). However, for other risk factors, the association with cancer was much lower: 62% did not know that an inadequate diet could cause cancer, 41% did not know the association between cancer and physical activity and 53% did not know that sex without a condom also increases the risk of developing cancer (INCA, 2007).

The research also demonstrated that people were well-informed about cancer treatments. More than 80% said that there is a treatment for the disease and 90% highlighted the importance of early diagnosis – but did not necessarily mean that they actually sought it.

Paradoxically, other results from "Perception of Brazilians about Cancer" showed that, for most people (70%), the disease is directly linked to death and pain. This research confirmed the stigma that the population has about malignant neoplasm. Although Brazilians have some awareness about prevention, treatment, early diagnosis and the connections between some risk factors and cancer, neoplasms are unfortunately still seen with prejudice and this fact may hinder the early diagnosis of the disease.

An American Cancer Society study has pointed out five main myths that inhibit the involvement of Brazilians in the prevention, diagnosis and treatment of cancer: "cancer is not a problem in my country", "my fate is to have cancer", "cancer is a death sentence", "there's nothing we can do" and "I'm alone" (American Cancer Society, 2009).

This scenario is particularly worrisome, since fatalistic views about cancer make people believe that it is pointless to prevent it, which leads to reduced adoption of preventive habits (Niederdeppe and Levy; 2007; Niederdeppe et al., 2010). Even the fear of discovering a disease that is believed to be incurable also leads people to undergo fewer diagnostic tests, making it impossible to achieve another key factor in healing, which is an early diagnosis (Straughan and Seow, 1998; Chavez et al., 1997).

The media's role in early cancer diagnosis and prevention

To reflect further on this point, it is worth emphasizing the influence that the media can exert on public opinion. According to a report from the American Cancer Society "the media can play an essential role in cancer prevention as well as eliminating myths related to this disease. And it can also stimulate a broad dialogue providing public information on tobacco control, proper nutrition, healthy lifestyle, early diagnosis and

vaccination”.

Even though the devotion of the media is not extremely faithful to the original studies published in scientific journals, as pointed out by Clarke and Robinson (1999) in studies of testicular cancer, mass communication is undoubtedly an important vehicle for many parts of society, especially regarding the spreading of health information. The media has a social function beyond the role of merely informing. Lupton (1999) attests that “for many laymen, media constitute one of the most important information sources on health and medicine issues. Media would thus be responsible for creating a vision of medical knowledge, treatments and disease. In this field, it would both enlighten ‘innocent victims’ and ‘the ones deserving their own fates’.”

Moreover, the mass media could have a strong impact on constructing realities, that is, “framing the image of reality... the media effect is limited by an interaction between mass media and recipients. Nisbet and Lewenstein (2002) argued that having a more understanding of some issues reported in the news is essential to better understand the communication area and to reflect strategies in some areas. Media discourse is part of the process by which individuals construct meaning...” (Scheufele, 1999). So, we must say that the public is not entirely passive and are able to select, interpret, and use media content according to each culture and individual beliefs, which are difficult to empirically assess (Severin and Tankard, 2001).

However, media studies show that the press can play a significant role in influencing public opinion (Anastasio et al., 1999; Entman, 1993; Price et al., 1997; Tal-Or et al., 2010).

“Since 1970, framing as a theoretical and research approach has proven useful in understanding what factors influence media coverage... ‘framing’ suggests that news media play an important role in making certain public issue more salient than others while also providing a specific news angle that characterizes those events” (Crawley, 2007).

Based upon these issues, we questioned: how are the Brazilian media promoting cancer? In other words, how is the issue of cancer featured in a Brazilian news report?

Media as focus

According to the latest Brazilian National Survey by Household Sampling, released in 2010 by the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística; IBGE, 2009), the media in the country is characterized by a higher penetration of radio

and broadcast television. The percentage of households with a radio is 88.1%. This number may be greater, as this study does not consider radio listeners in cars, for instance. Across the country, there are televisions in 94% of households and only around 4 million daily newspapers are sold throughout the country, an increase of 2% in 2009, according to Institute of Verified Circulation (IVC, 2010). The country has 190 million of inhabitants (IBGE, 2010).

Considering the epidemiological data on cancer and the impact that media can have on public opinion, in the present review, we discuss some results obtained from studies that focused on the media and cancer in Brazil in the first decade of the 21st century in comparison with others that focused on the same theme in the rest of the world. We discuss some of the most important findings regarding Brazilian public perception on the same theme.

METHODOLOGY

This study is a literature review that gathered articles on cancer disclosure in the Brazilian media, covering 195 news from different newspapers, 177 radio reports, 170 issues of three important Brazilian magazines and 51 television news reports only on cancer. We compared the results found in Brazil with those found in international studies, aiming to identify the characteristics of the media frame (Entman, 1993; Scheufele, 1999).

The scope of these selected studies includes scientific articles from the print and online media, TV newscasts, magazines and radio news programs on cancer.

The following electronic databases were searched: PubMed, Sage, Wiley Online Library and Scielo, a Brazilian database. The search was limited to articles that contained the following keywords: <cancer>, <news media>, <mass media>, <agenda setting> and <media framing> (in both English and Portuguese).

Dates of articles ranges were determined by search engines between 1980 and 2011. Inclusion criteria were studies that examined the news framing about any kind of cancer in national daily newspapers, radio news, news magazines and newscasts. Exclusion criteria were themes that do not encompass the media frame on cancer. We found 102 articles in the academic databases.

Article titles, abstracts and, when available, the full text were analyzed. The resulting materials were read and reviewed by Verjovsky and Jurberg (2010). Then, we summarized the main topics considered important for discussion in some aspects of the media frame (Entman, 1993; Scheufele, 1999) on cancer. The content of cancer issue can be investigated by asking this question: what are the “frames” used in news pieces? Frames in the media emerge as the presence or absence of keywords, common phrases, images, sources of information and the connection among them, as well as sentences that cluster to reinforce a certain issue (Entman, 1993).

Preceding the results, we discuss previous findings on public perception based on the study “Perception of Brazilians about Cancer” (INCA, 2007).

RESULTS

Space given to cancer news

A Brazilian study entitle “O poder das escolhas – o que é

publicado pela mídia sobre câncer, o que sabem os jornalistas e o impacto do conhecimento na sociedade” has shown that the media gives considerable space to cancer when compared to other diseases of epidemiological relevance. The study identified greater cancer coverage compared than AIDS and malaria in the Brazilian print media. This work focused on nine newspapers (Folha de São Paulo, Estado de São Paulo, Jornal do Brasil, O Globo, O Dia, Jornal do Comercio, Extra, O Povo and Fluminense) and three national circulation news magazines (Veja, IstoÉ, Época) in 2002-2003 and 2005-2006. Also, the number of articles, opinion articles and notes in social columns, referring to cancer in the selected newspapers was 20% higher in relation to AIDS and five times higher than the number of news items referring to malaria. This comparison is relevant because it also contrasts diseases of worldwide occurrence like cancer and AIDS with malaria, an infectious illness that symbolizes “old health problems” (Prata, 1989).

Regarding news circulation in weekdays, another study entitled “Nunca aos domingos: um estudo sobre a temática câncer nas emissoras de televisão brasileira” has indicated that cancer coverage in Brazilian newscast circulated freely, but was restricted on weekends as well as holidays like Christmas and New Year’s Eve (Verjovsky and Jurberg, 2010). Only three of 51 news items on cancer were broadcast on Sundays during the period of the study (2006 and 2007).

The work also provided some explanations for this phenomenon, given by the producers of some of the major Brazilian news programs:

“During holidays, health news needs in general to be positive – people who have overcome illness or struggle to overcome it, treatments that alleviate pain, techniques and surgeries that bring hope and healing. On these occasions, people are more sensitive and want good news” (T.L. – TV Record, in Verjovsky and Jurberg, 2010).

“On those days, the coverage is lighter and less factual – economic and political institutions in general don’t work. When we paginate the newscast, it may be outside the daily profile. Anyway, stories about cancer in general have an orientation and are often associated with scientific discoveries, which make them lighter and more compatible with TV news these days” (E.T. – TV Globo, Verjovsky and Jurberg, 2010).

Perhaps this result is associated with the idea that consumers of news want to read, hear and see positive

news items on certain days and at certain times. However, if the media choose, in contrast, to publish negative news during weekends or holidays like Christmas and New Year’s Eve, they could experience economic losses from advertisers who do not want to associate their brand with bad news. Thus, the frame is associated with a process that is not restricted to the choices of journalists and editors, but with the market and ideology.

The same study shows that 59% of cancer news items were aired in prime-time, which means at night, regardless of the month analyzed (Verjovsky and Jurberg, 2010). These results indicate that the print and broadcast media give importance to the subject of cancer, although television has restrictions on certain days, which give preference to lighter news. This feature is already an indication that media producers also reflect the fear of cancer shown by 70% of the interviewed in the “Perception of Brazilians about Cancer” study (INCA, 2007).

Scientists, doctors and specialists or laymen and patients?

Newspapers, magazines and radio preferably offer their space to specialists, doctors and researchers on cancer, as observed in Brazilian studies (Jurberg et al., 2006; Jurberg and Macchiute, 2006, 2007) and others such as Clarke and Amerom (2008), thereby contributing to what we believe is the consecration of the media, backing up the opinion of an “authority” on a specific theme (in this case, cancer). For TV journalism, the appeal to the common citizen, the spectator, is the main concern (Verjovsky and Jurberg, 2010). It is important to highlight that, only for the latter media vehicle, the average citizen – families, patients and the general population – place more emphasis on interviews (103) compared to specialists and health professionals (64). According to journalist and producer statements, this characteristic contributes to making news sellable and to enhance the information that is produced to be consumed.

This idea corroborates a study by Seale (2001a) on cancer coverage compared to religious aspects in the American media. In his view, cancer coverage often focuses stories of personal transformation against all odds. These are thrilling stories, and that is why they are “sellable”.

This aspect, combined with the statements of producers described in the paper, helped us to conclude that the selected stories in the analyzed period (2006-2007) tended to highlight the views of ordinary citizens rather than those of scientists and medical doctors. This means, basically, a desire to approach this theme

Table 1. Types of cancer more often reported by different news media.

Parameters	Breast cancer	Skin cancer	Lung cancer	Prostate cancer	Reproductive tract cancer	Hodgkins cancer	Overall cancer
Brazilian printed media	15.3%	10.2%	3.5%	-	-	-	-
Brazilian news radio station	24.8%	6.7% (seasonally)	-	12.4%	-	-	-
Brazilian magazine covers	<i>Saúde!</i> 22.9% / <i>Veja</i> 40%	-	<i>Veja</i> 20%	<i>Saúde!</i> 8.1%	-	-	<i>Saúde!</i> 49.1% / Revista Fapesp 100% / <i>Veja</i> 50%
Brazilian television news programs	17%	31% (seasonally)	-	4%	4%	-	35%
U.S., Brazilian, Chilean, Argentinean, Uruguayan and Mexican newspapers	16%	6% (seasonally)	8%	8%	-	-	-
Media studies in Canada and U.S	35%	10%	-	5%	15%	15%	-
U.S. women's magazine	34.9%	-	-	-	-	-	-

according to the preferences of the public (Verjovsky and Jurberg, 2010). According to a journalist from the BandNews channel (R.B.), a criterion for the selection of assignments in health and science is the human component:

News with which people can identify themselves, in which they can see stories, situations that they already lived or may live, are more coveted than news with specialists talking, with graphics, with authorities in general. It does not mean that they cannot be included, but they must be part of the history, the supporting cast, not the protagonists (Verjovsky and Jurberg, 2010).

Clarke and Amerom (2008) also noticed "celebrities are often used to providing a name, face and story to a disease".

The assignment begins with reading daily newspapers and later the assignment meeting to define the priority issues of the day... the chosen ones are those with more appeal to the target audience (M.M., TV Brasil, in Verjovsky and Jurberg, 2010). Above all, we must assume public interest. The higher interest, the better we accomplish the newspaper function. Next, we have to consider aspects such as originality and

the potential of the image (a video tape with good visual appeal is better than without) (R. B. Grupo Bandeirantes in Verjovsky and Jurberg, 2010).

However, this choice of themes and approaches that seems to have better public appeal, in the eyes of the editor, is quite subjective. Often, the lack of a character has the consequence of not broadcasting news that is more scientific (like laboratory results) in newscasts, while in the print media, this limitation does not seem to exist.

Types of cancer most often cited

In relation to the types of cancer that are more often reported by the Brazilian media, we have identified from several analyzed studies the prevalence of breast, prostate, lung and, seasonally, skin cancer (Table 1). These are exactly the most common types of tumors that affect the Brazilian population. The Brazilian National Cancer Institute announced in November 2011 that cancer estimates for 2012-2013 are 520,000 new cases and the types most frequently found are non-melanoma skin cancer, breast cancer (52 cases/100,000), prostate cancer (62/100,000) and lung cancer (18/100,000).

As shown in Table 1, a similar frame panorama was

Table 2. Themes more often used by different media regarding cancer.

Parameters	Superficial approaches about the importance of prevention	Prevention methods	Cure	Diagnosis	Campaign	Epidemiology	Treatments	Risk factors	The main symptoms for each type of cancer cited
Brazilian daily newspapers	50%	24%	6 %	-	-	31%	22%	-	7%
Brazilian TV news	50%	-	-	-	20%	-	17%	30%	-
Brazilian news radio station	49%	-	6.2%	-	-	-	-	8%	-
Brazilian magazines	-	-	Few	-	-	-	-	Few	-
newspapers from five countries in Americas and U.S.	-	9%	-	19%	-	-	30%	30%	-

found in studies from other countries. Additionally, Seale (2001b) analyzed newspaper articles worldwide in which there was significant coverage of a person with breast cancer.

From hysteria to enthusiasm: different approaches to cancer

The approach that the media embraces when relating to cancer is essential to support or dispel myths and prejudices about this disease. This concern is not only in Brazil. Other countries, such as the United States, also maintain a distorted view about cancer, which is reflected in the way the media discusses this theme:

“The bombardment of bad news, particularly about purported cancer risks, runs the gamut: The pesticide Alar® and apples, estrogen replacement therapy and possible breast cancer risk, benzene contamination of Perrier sparkling water, second-hand smoke, asbestos in schools, the artificial sweetener saccharin and cancer in rats, radon and lung cancer. The list goes on and on” (Russell, 1999).

In general, the analyzed studies show that the Brazilian media seems to frame the importance of cancer prevention, but lacks clarity about its risks factors, symptoms and the possibility of a cure (Table 2). Clarke

and Everest (2006) and Russel (1999) observed something similar in major Canadian magazines. They verified that, although prevention was a widely discussed topic, it was not clear what people should do to make it actually happen. Stryker et al. (2005) also identified, in a sample of 921 news reports about skin cancer published in the United States from 1979 to 2003, a high prevalence of treatment, prevention and detection coverage. However, warnings about how to identify a malignant skin lesion were almost never observed. In contrast, according to a study conducted by Castro (2010) on oral communication, the media seem to give more space to treatment and risk factors than to prevention and diagnosis (Table 2). Perhaps this discrepancy was due to the fact that this study brought together results from 20 newspapers from five countries in the Americas, including the U.S.A (only four of them were Brazilian).

So, if early diagnosis is crucial to a good prognosis of this disease and the media is the most important means of communication in Brazilian society that exerts a strong influence on changing behaviors (Anastasio et al., 1999; Tal-Or et al., 2010), how can we change this formula? Furthermore, the low amount of coverage of possible cures for cancer may play a role in the negative effect expressed by the population about this disease, according to previous research on public perception (INCA, 2007).

On one hand, Jurberg et al. (2006) and Jurberg and

Macchiute (2007) noticed that the term “cure” is still taboo. The print media and radio almost do not discuss this, reinforcing the media frame (Scheufele, 1999) and the perception of Brazilian society regarding their beliefs about cancer (INCA, 2007). On the other hand, some Brazilian magazines (1996-2004) were less cautious in disseminating successes on cancer treatment and referred to cures as hopeful. Also, the more scientific the magazine was, the more often this subject was approached, ranging from 50% in the most scientific news items about cancer to only 5% in more popular magazines.

Others authors have studied the harmful effects of scientific news about cancer. Among them, Freimuth et al. (1984) warned in that print media would have the capacity to produce as much as to contribute to this widespread fear about this disease, creating resistance in treating cases by making people believe that everything can cause cancer. Clarke (1992) and Clarke and Ameron (2008) also showed that the North American media focuses on dominant aspects related to medical treatment models and the pharmaceutical industry, reflecting medical and industrial views. There is a lack of issues related to risk factors or prevention.

Clarke and Everest (2006) point out that their North American studies found in news reports on cancer the mention of “the dreaded C word”, a reference to the moment of diagnosis as “a nightmare” and moments of panic embedded in coverage describing “terror, but followed by life after all”. This frame with common phrases like everything causes cancer and words that describe the disease as a nightmare reinforces fear about it and does not help demystify the disease.

Media conceptions about cancer

Regarding the presence of error, sensationalism and false hope, and although some studies (Brechman et al., 2009; Weigold, 2001) have demonstrated problems with the accuracy of science and health reporting in the mass media, Brazilian studies on the print media (2003-2005) and news magazines (1996-2004) provided a surprising outlook. In an analysis conducted by a cancer specialist, a scientific error rate of only 7.7% was found and a similar rate (7.8%) was noted in sensational headlines. On false hope, only 3.4% of news items gave baseless predictions to the reader on new treatments and cures (Jurberg et al., 2006). Among print magazines, little sensationalism was found (Jurberg and Macchiute, 2006).

These data demonstrate a maturing of the press in this case, which is currently more concerned about reporting a fact than simply using untrue resources to excite readers and sell more newspapers (Jurberg et al., 2006).

However, it is important to emphasize that these newspapers consider sensationalism as the presence of false hope and content misrepresentations so that the news might seem more important than it really is.

On the other hand, studies by Sontag (1991), Clarke and Robinson (1999), Grant and Hundley (2009) and Seale (2001a, b) on cancer analyzed different approaches that can also be correlated to sensationalism. When relating to cancer with war metaphors and “fight against the enemy”, “battle to be won” images, in those cases, the media tended to legitimize the image of horror mirrored by society regarding this disease. Cancer is something still associated with pain and suffering, as mentioned in the study “Perceptions of Brazilians about Cancer” (2007). These aspects instigate debate and make us think about whether the media really influences public opinion or just reflects it.

The militaristic narratives created by media to discuss health issues are not restricted to cancer. Gwyn (1999) showed in his study how these metaphors are also frequently used to deal with AIDS. The author considers “the war against cancer” and “the battle against AIDS” resonant in a press that tries to permeate the collective imagination, representing external diseases that are invasive in an individual body and need to be “won”, as they cause considerable shame. The metaphor that refers to cancer not only describes people with this disease, but is also seen in two sub-items: “cancer victims” and “cancer survivors” (Grant and Hundley, 2009).

According to Sontag (1991), cancer (and tuberculosis before it) is spectacularly overloaded with trap metaphors, and this has cost many lives in the past. Unfortunately, many years after the Sontag studies, we still note that cancer is referred to by the media as a sort punishment, and they blame the patient for the beginning and cause of his disease, making him personally responsible for his recovery (Sontag, 1991).

Although, we have mapped out cancer disclosure in this decade in Brazil, and compared these findings with the reflections of international authors, we believe that this theme still deserves extensive analysis. Current and future results can also significantly contribute to a better understanding of this disease, especially in trying to prioritize health communication actions that can reduce prejudice and the stigma that the term “cancer” carries (INCA, 2007). Thus, by providing more information in a cautious way, the media can help break taboos and become a strong ally of the population in the quest for prevention and early diagnosis of this and other diseases.

Conclusion

In the studies conducted in last decade, we verified that,

in general, cancer is a prominent theme in the Brazilian media, but there is not a systematic routine in terms of writing about malignant neoplasms. However, the media appears to be attempting at least to limit the stigma that this disease still carries in society. Some characteristics of the Brazilian media on cancer disclosure are similar, which might reflect people's perceptions of a disease that is still associated with a death sentence. Niederdeppe et al. (2008) showed that routine cancer news coverage could be associated with cancer information seeking among a notable proportion of adults.

Independent in the media (radio, TV, newspapers and magazines) and almost completely, the theme of a "cure" was rarely mentioned in the beginning of the decade. Moreover, when a report deals with prevention, risk factors are not always mentioned. In terms of early diagnosis, the symptoms of many types of cancer are also not incorporated into the text. However, we hope to contribute to changing this scenario by discussing the theme of cancer in the media.

Communication and the media, in particular, are considered "windows to the world", whose choices and editorial decisions on what is going to be published can interfere with our behaviors, habits and lifestyles.

According to Powell et al. (2007), the media confer legitimacy to an emerging risk issue, and have in some cases, been found to influence public health policy decisions. Cohen (1963) noted that "the press may not be successful much of the time in telling people what to think, but it is stunning successful in telling its readers what to think about." So, why not take advantage of these instruments and provide information on early diagnosis and prevention? We believe that a series of cancer studies on the Brazilian media compared with other studies can provide a guideline for developing an effective health message.

Cancer has now been known for over 5000 years, as the first cases were reported 30 centuries before Christ (Teixeira and Fonseca, 2007). However, even after so many years, this disease is still related to pain, suffering and death (INCA, 2007). The studies presented in this review show that the Brazilian media has reinforced the correlation between cancer and hopelessness, just like in other countries (Clarke and Everest, 2006; Russell, 1999; Sontag, 1991; Gwyn, 1999; Grant and Hundley, 2009; Freimuth et al., 1984). As Gamson (2008) said:

"The media have a dual role: on one hand, journalists and their customary practices influence how the stories are told and how they are; hence, one of the actors who contributes to how it is framed and which sources are used in reporting it. On the other hand, the media is an arena—in fact, the master arena—in which a contest is taking place among multiple actors

who are attempting to shape meaning. The final product is a measure of the outcome of a framing contest".

It is therefore important that health professionals allied with journalists and work together in order not to exacerbate the stigma, perpetuating this media frame. Being clear about the actual chances of a cure, symptoms, tests and actions needed to achieve prevention and/or early diagnosis and scientific advances in this area is something in constant development.

Finally, we believe that these results should encourage health editors to be cautious when producing and publishing news on relevant diseases, such as cancer, in national and international public health coverage.

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