

## A year of cancer coverage in the Spanish written press

### Un año de cobertura sobre el cáncer en la prensa escrita española

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#### Abstract

**Objective:** The purpose of the article is to carry out a descriptive analysis of the coverage of cancer in the printed editions of the two main Spanish commercial newspapers: El Mundo and El País. **Methods:** A descriptive method was carried out analysing the newspapers published between February 2017 and January 2018. **Results:** During the analysed period, El Mundo published a total of 26 pages with information related to cancer and El País 18. The news was published to a greater extent in the health and science sections, and the five most mentioned types of cancer were breast cancer, lung cancer, colon cancer, prostate cancer and skin cancer. **Conclusions:** The coverage of cancer in El Mundo was significantly higher compared to El País, not only in the number of pages but also in the number of articles. The celebration of the World Cancer Day, which is celebrated annually on 4 February, seems to result in a greater coverage of news about the disease on that day.

Keywords: Cancer; cancer coverage; cancer types; newspapers; written press.

#### Resumen

**Objetivo:** El artículo tiene como propósito llevar a cabo un análisis descriptivo de la cobertura dedicada al cáncer en las ediciones de papel de los dos principales diarios generalistas españoles de pago: El Mundo y El País. **Métodos:** Se ha realizado un método descriptivo analizando los periódicos publicados entre febrero de 2017 y enero de 2018. **Resultados:** Durante el periodo analizado El Mundo publicó un total de 26 páginas con información relacionada con el cáncer y El País 18. Las noticias aparecieron publicadas en mayor medida en las secciones de salud y ciencia, y los cinco tipos de cáncer más nombrados fueron el de mama, pulmón, colon, próstata y piel. **Conclusiones:** La cobertura sobre el cáncer en El Mundo fue sensiblemente superior en comparación con la de El País, no sólo en número de páginas sino también en número de artículos. La celebración del Día Mundial Contra el Cáncer que se celebra anualmente el 4 de febrero parece tener como resultado una mayor cobertura de noticias sobre esta enfermedad durante dicha fecha.

Palabras clave: Cáncer; cobertura cáncer; tipos de cáncer; periódicos; prensa escrita.

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## Introduction

According to the World Health Organization (WHO), cancer is the second cause of death in the world (WHO, 2018a). In 2015, almost one death in six was due to this disease, totalling 8.8 million. According to the figures published by the WHO, in 2014 28% of the total number of deaths in Spain were caused by cancer: 69,000 men and 42,600 women (WHO, 2014).

The fact that there is a high life expectancy in Spain means that the incidence of cancer is also high since aging is a fundamental factor in its appearance. This is both because risk factors accumulate in certain types of cancer with age and because cellular repair mechanisms lose effectiveness with age (WHO, 2018a).

A large part of the incidences of cancer are due to genetic factors or to the existence of chronic infectious diseases such as Hepatitis A and B or the human papillomavirus (Stewart & Kleihues, 2003). Simply administering vaccines against the human papillomavirus and against Hepatitis B could prevent 1 million cases of cancer each year (Plummer et al., 2016), since these diseases are the cause of the incidence of 25% of cases of cancer in low and middle income countries.

Approximately 30% of cancer deaths are due to five behavioural and dietary risk factors (high body mass index, insufficient consumption of fruit and vegetables, lack of physical activity and consumption of tobacco and alcohol) and, can therefore be prevented (WHO, 2014b). Moreover, 50% of cancer incidences could be reduced by modifying behaviour (Torres-Nieto, 2016). Tobacco alone is responsible for 22% of the deaths caused by cancer.

The early detection of cancer increases the likelihood of survival for those affected. If cancer is diagnosed early, the treatment is more likely to be effective. The probability of survival increases, mortality is reduced and treatment is cheaper. Early diagnosis and treatment bring notable improvements in the lives of patients (WHO, 2018a). Hence, awareness-raising for society should be one of the main tools for its prevention.

The growing interest of Spaniards in health issues (Blanco Castilla & Paniagua, 2007), has meant that the related information has increased considerably in the general information media (González Borjas, 2004). As a result, health issues now have a dedicated section in many media.

In health journalism, the journalist should primarily identify issues and problems related to health by taking into account the social context and the quality of life of specific public. Furthermore, the journalist should disseminate this information in a critical, ethical and respon-

sible manner, from an integral perspective, and help to produce it (Blanco Castilla & Paniagua, 2007). The model for cancer control includes social mobilisation as a fundamental tool to achieve control of the disease (Torres-Nieto, 2016). It is thanks to dates such as 4 February, World Cancer Day, when health journalists have the ideal opportunity to raise awareness and mobilise society to advance in the prevention and control of this disease.

The press is the first source of health information for a good part of society (Catalan-Matamoros, 2015) so the media play a key role in promoting health and preventing diseases (Balcázar, Montero & Newbrough, 2003). Media plays as well a significant role when members of the public make important decisions about their health care (Levitan, 2011) and it is likely to contribute towards influencing public perceptions on preventive health measures (Hilton et al., 2010).

The press is therefore an important source of information about health (Vasterman, Yzermans & Dirkzwager, 2005) and journalists are considered to be valuable channels to promote preventive measures (Leask, 2002).

In the case of cancer prevention, previous studies show that newspapers pay relatively little attention to it, not generating enough public knowledge about this topic (Stryker, Moriarty & Jakob, 2008). By analysing the themes of the published information we will be able to see if this trend applies to the Spanish press as well.

With this study we have tried to answer the following questions in relation to the coverage dedicated to cancer in the two commercial daily Spanish newspapers with the largest number of readers, *El Mundo* and *El País*:

- What is the coverage of cancer in Spain?
- What types of cancer are mentioned in the articles? Are they in line with the cancer types that cause the largest number of deaths?
- What are the predominant themes in the published information?
- Does World Cancer Day have an effect on the number of published articles close to that date?

## Methods

To answer the questions raised, the study was based on the analysis of news content as a way to analyse the data. Content analysis is a research method that uses a series of procedures to categorise and identify certain characteristics within a text (Meyer et al., 2016).

The news items covering cancer information were collected in the Spanish press between 1 February 2017 and 31 January 2018.

Mynews was used to search for information in the two

commercial newspapers with the highest circulation rates in Spain according to the Estudio General de Medios (General Study of Media) in Spain (AIMC - Asociación para la Investigación de Medios de Comunicación, 2017). Mynews is a professional media agency that monitors all national newspapers and provides copies of all articles. During the study period El País had 1.217 million daily readers, and El Mundo had 0.761 million daily readers.

A search was made for the following terms in the database: “cancer”, “cáncer”, “oncolog” or “oncólogo”. After the analysis of the content of the articles, one was removed from the study as the term “cancer” was not used from a health or medical point of view but metaphorically: “UKIP: Fields to enclose Islamic cancer “. Six advertisements about cancer treatment appeared as well in the search of Mynews. They were eliminated from the study because they were not articles.

Additionally, five articles published by El Mundo and four published by El País, which did not appear in Mynews search result were included in the study. These nine articles did not appear in the search results because none of the key words were included in their titles however, as they were published on the same pages as some of the analysed articles, their inclusion was considered relevant.

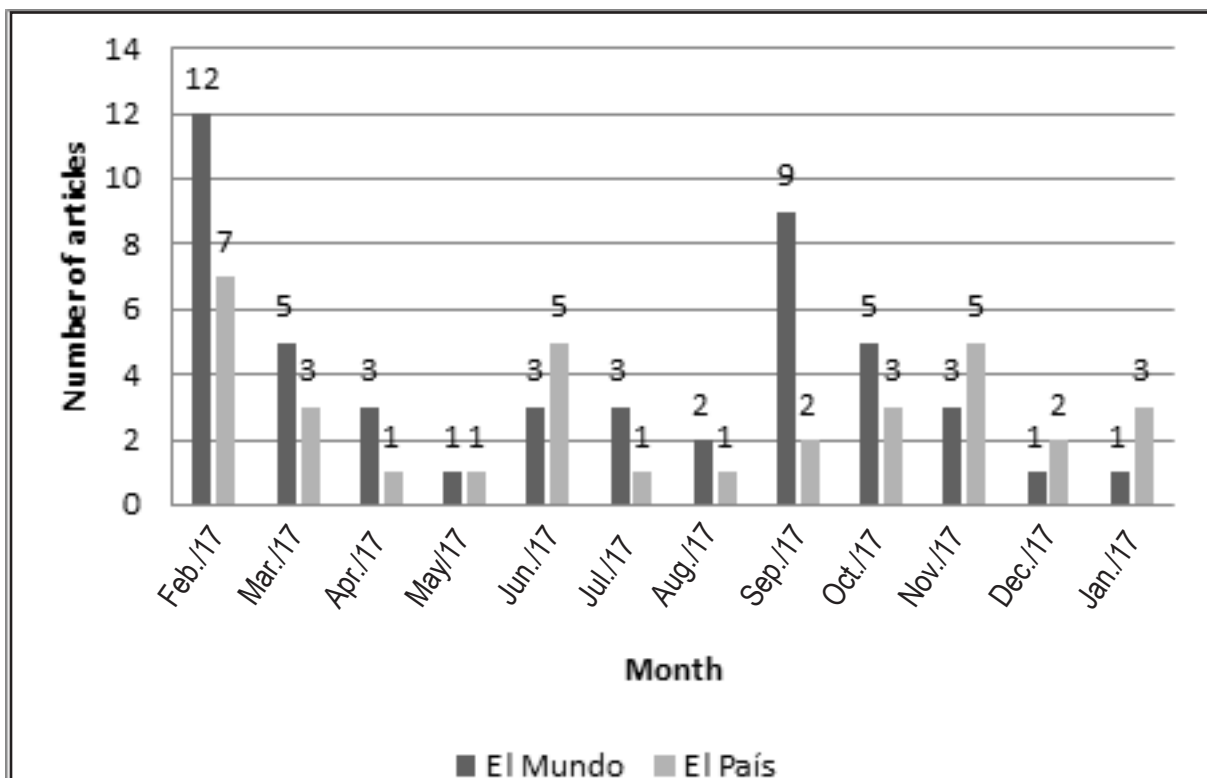
A quantitative analysis of the content of the information was carried out by analysing the following parameters: publication dates, surface of the published page, section of the newspaper in which the article appeared, journalistic genres, type of cancer and thematic.

## Results

In total, 82 articles were analysed; 48 were published by El Mundo and the remaining 34 by El País. The analysis of the number of pages occupied by the articles devoted to cancer resulted in 26 pages for El Mundo and 18 for El País. In both cases, the average published space of each news item was approximately half a page. The average length of each article is in the order of 580 words in both newspapers.

The difference between the two newspapers is in the sections in which the studied articles were published. While in El Mundo 95% of articles covering cancer information appear in five sections (health (67%), opinion (8%), society (8%), science (6%), science/health ( 6%)), in El País nine sections are required to reach 95%, with the five main sections being Science (35%), National (26%), Sports (9%), International (6%) and Society (6%), For the record, in the period in which the study was conducted, El País did not have a dedicated health section.

As can be seen in Figure 1, articles on cancer have an uneven distribution throughout the year. It is to be noted that both El Mundo and El País published a large number of their articles in February, coinciding with the World Cancer Day. El Mundo published 25% of the total number of articles on cancer in February and El País 20%. Of the 12 articles published in February, El Mundo published 11 on the World Cancer Day. In the case of El País, only one of the seven articles published in February was published on that date.



**Figure 1.** Monthly publication of articles related to cancer.

The journalistic genres of the articles published in El Mundo were news articles (26), news reports (8), news in brief (7), interviews (4) and opinion (3). In El País the prevalence of the news articles turned out to be considerably higher (24) when compared with the other two journalistic genres in which articles with information on cancer appeared: news reports (9) and opinion (1).

The types of cancer named in the articles of each

newspaper can be seen in Table 1. In El Mundo, 43.8% of the cases do not mention any specific type of cancer. In El País, the number decreases to 26.5%. There are not many differences in the most mentioned types of cancer by each newspaper. While in El Mundo the most frequently mentioned cancer types are breast (18.8%), lung (16.7%) and colon (10%), in El País the most frequently mentioned are breast (20.6%), lung (20.6%) and leukemia (20.6%).

**Table 1.** Types of cancer named in the articles.

Type of cancer	Total		El Mundo		El País	
	n	Percentage	n	Percentage	n	Percentage
General	30	21.6	21	43.8	9	26.5
Breast	16	11.5	9	18.8	7	20.6
Lung	15	10.8	8	16.7	7	20.6
Colon	8	5.8	5	10.4	3	8.8
Prostate	8	5.8	2	4.2	6	17.6
Leukaemia	8	5.8	1	2.1	7	20.6
Skin	7	5.0	2	4.2	5	14.7
Pancreas	6	4.3	3	6.3	3	8.8
Ovary	5	3.6	3	6.3	2	5.9
Brain	5	3.6	1	2.1	4	11.8
Liver	4	2.9	2	4.2	2	5.9
Stomach	3	2.2	2	4.2	1	2.9
Uterus	3	2.2	2	4.2	1	2.9
Testicles	3	2.2	1	2.1	2	5.9
Esophagus	2	1.4	1	2.1	1	2.9
Tongue	2	1.4	1	2.1	1	2.9
Kidney	2	1.4	1	2.1	1	2.9
Bladder	2	1.4			2	5.9
Cervix	2	1.4			2	5.9
Optic nerve	1	0.7	1	2.1		
Ear	1	0.7	1	2.1		
Gallbladder	1	0.7			1	2.9
Renal	1	0.7			1	2.9
Penis	1	0.7			1	2.9
Lymphoma	1	0.7			1	2.9
Bones	1	0.7			1	2.9
Mouth	1	0.7			1	2.9

The predominant themes of the articles are shown in Table 2. In a number of articles there were several predominant themes so the total computation is 93, although the number of total articles analysed was 82.

The main themes were divided into several categories. "Research" deals with cancer research, either for healing or for the detection or diagnosis of cancer cases. The "Fight against cancer" category includes articles dealing with people with cancer, the incidence of cancer or how this incidence affects society. Articles were also found in which cancer treatment is the main topic. Another common topic was cancer prevention as

well as diagnosis/detection of the disease. The awareness of society was also addressed in a number of articles, as well as the possible causes of certain types of cancer.

El País addressed the issue of malpractice on several occasions. In a small number of articles culture, psychology and fashion were the main topic. Research (26.9%), fight against cancer (20.4%) and treatment against cancer (19.4%) are the most covered topics by the two newspapers and combined cover two thirds of the total number of articles. None of the remaining issues reached 10% of the total number.

**Table 2.** Main topics covered in the articles.

Main topic	Total		El Mundo		El País	
	n	Percentage	n	Percentage	n	Percentage
Research	25	26.9	15	30.0	10	23.3
Fight against cancer	19	20.4	9	18.0	10	23.3
Treatment	18	19.4	12	24.0	6	14.0
Prevention	8	8.6	4	8.0	4	9.3
Diagnosis/detection	6	6.5	4	8.0	2	4.7
Awareness	6	6.5	1	2.0	5	11.6
Causes	4	4.3	3	6.0	1	2.3
Malpractices	3	3.2			3	7.0
Culture	2	2.2	1	2.0	1	2.3
Psychology	1	1.1	1	2.0		
Fashion	1	1.1			1	2.3

## Discussion and conclusions

The greatest limitation of this study is the non-inclusion of the word “tumor” (“tumour” in English) in the search criteria as this would have increased the identified number of articles on cancer.

According to the WHO (WHO, 2014), 25% of the deaths in Spain in 2014 were a consequence of cancer. However, in the two newspapers with the largest circulation in Spain, news articles about cancer appear, as an average, only once every 7 days in *El Mundo* and once every 11 days in *El País*. Diseases derived from problems with the cardiovascular system are the main cause of death in Spain, so it would be advisable to carry out a similar study to the one described in this article to compare whether the coverage of cancer is at the same level. There are, however, some studies (Muñoz Álvarez, 2011) that show that coverage of cancer is not as represented as other diseases that cause fewer deaths, such as multiple sclerosis or obesity.

Previous studies support that cancer is not among the main topics related to health and medicine (Revuelta, 2006), in health content in the Spanish press (Márquez Hernández, 2010) and not even in health and social content of local press (Hernández García, 2011). Therefore, it could be stated that cancer coverage is not as widespread as it should be due to the number of deaths that it causes every year (if compared with other causes of death, such as traffic accidents). An increased awareness in society and a change of habits could prevent many cases of cancer, as indicated earlier in this article. To achieve these two objectives it would be advisable to have greater coverage of cancer by the media.

During the analysed period, *El Mundo* had a greater coverage of cancer compared to *El País*, not only in terms of the number of articles but also in regards to the number of pages. It is also relevant to mention that *El País* did not have a specific section dedicated to health as *El Mundo* does. For readers interested in news about cancer, it will be more difficult to find information about these topic in *El País*, since only 35% of the articles are in the science section of the newspaper, and the rest are spread across ten sections. In the case of *El Mundo*, 67% of articles dealing with cancer are published in the health section.

The incidence of different types of cancer in Spain in 2014 was as follows: colon ( $n = 32,232$ ), prostate ( $n = 27,853$ ), lung ( $n = 26,715$ ), breast ( $n = 25,215$ ), bladder ( $11,584$ ) (WHO, 2014). The first four are also the four most mentioned types of cancer in the articles analysed in this study. Bladder cancer is only mentioned twice so it is clearly under-represented when compared to other

types of cancer. Breast cancer is over-represented in the articles analysed because, despite being the fourth cancer in number of incidences, it is the most named in the articles analysed.

It is also relevant to indicate that the five most frequent types of cancer that appeared in the headlines of the Spanish press (Revuelta, De Semir, Armengou & Selgas, 2012), breast, lung, prostate, colon and skin, appear among the six most mentioned ones in the articles analysed.

21.6% of the articles published by *El País* and 43% of those published by *El Mundo* do not mention any specific type of cancer. This indicates that the coverage of cancer in *El Mundo* is more general than in *El País*, while *El País* tends to target cancer types more often.

Concerning the main topics covered, research, fight against cancer and treatment are the most recurrent. In the case of articles covering research and treatment, the articles analysed have a more positive spin.

From a prevention policy point of view, it would be advisable to have a larger presence of news on diagnosis and prevention, awareness and causes of cancer to enable readers to make changes in their habits and thus reduce the chances of contracting the disease. The little attention to cancer prevention is still in line with previous studies (Stryker, Moriarty & Jakob, 2008).

One of the objectives of this study was to analyse whether the celebration of World Cancer Day has an influence on the publication of articles on cancer. As we have seen in the results, this seems to be true. Although the celebration of this date helps to raise society's awareness of cancer, it would also be advisable for the information to be spread out more over time and that more information is published on cancer, since 50% of cancer cases could be reduced by modifying behaviours. One of the objectives of journalists is to provide citizens with the information they need to make decisions about their lives (American Press Institute, n.d.). This is even more relevant in case of health journalists as they can even help save lives by making readers modify their habits.

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