# Coverage of Cancer News in Pakistani Print Media: A Content Analysis Study of Daily Pahenji Akhbar – A Sindhi Language Newspaper

Rameez Ali Mahesar<sup>1</sup>, Yasira Naeem Pasha<sup>2</sup>, Mubina Pathan<sup>3</sup>, Mariam Israr Khan<sup>4</sup>

<sup>1</sup>Department of Media and Communication Studies, Shah Abdul Latif University, Khairpur, Pakistan, <sup>4</sup>Department of English, Shaheed Benazir Bhutto University, Shaheed Benazirabad, Pakistan, <sup>2</sup>Department of Architecture and Planning, Dawood University of Engineering and Technology, Karachi, Pakistan, <sup>3</sup>Information Technology Centre, Sindh Agriculture University, Tandojam, Pakistan

## **Abstract**

Background: Newspaper coverage is a key source of cancer information. Although it was of profound significance to understand how the local newspapers of Pakistan cover the cancer news. Aims and Objectives: To counter this, the present study was aimed to examine the cancer news coverage of the last year 2020. Materials and Methods: Using content analysis technique, the whole year coverage in daily Pehnji Akhbar was investigated to determine which topic and the type of cancer were most frequently mentioned in the news, and what was the locality the cancer news was most frequently reported from. Results: In total, 90 cancer-related news were generated, out of which 7.5% of news were found as an average in each month during the whole year of 2020. Death was the topic of the majority (90%) of the news (contributing to 74% male deaths and 15% female deaths). However, blood, liver, throat, and mouth cancers were the most frequently mentioned-types in the news related to male victims. In terms of localities, the rural areas were the highest contributors of the 57 cancer news (contributing to 48% male victims and 14% female victims). Conclusion: It was found that cancer is increasing at an alarming rate in the rural areas of Sindh. Recommendations: Keeping in view the significance of the newspapers, it would help proffer the public with adequate information on cancer by increasing the mentions of particular types of common cancer. Also, it would be beneficial if the newspapers consider relating the news to the profiles of the victims.

Keywords: Cancer, mortality, news reporting, print media, public health

#### INTRODUCTION

Cancer is a significant public health issue and is one of the leading causes of death worldwide. The International Agency for Research on Cancer (IARC) released its latest report on cancer on December 14, 2020, which estimated that one in five people falls victim to cancer globally throughout their lifetime, and one in eight men and one in 11 women die from this fatal disease. These new figures proposed that over 50 million people live currently within five years of a past cancer diagnosis. Furthermore, the report estimated that 19.3 million new cases emerged in 2020, in which the proportion of cancer deaths has contributed to 10 million. Half of the cancer incidences and cancer deaths have been reported to nine and five million in Asia only, respectively.<sup>[1]</sup>

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However, the predictions have been made that the number of cancer cases would amount to 21.7 million and 13 million cancer victims will die by 2030. [2] Another estimation for the U.S. only has been made that the number of new cancer cases will mount to 1.9 million while the cancer death would also arise 608,570. [3]

Address for correspondence: Rameez Ali Mahesar,
Department of Media and Communication Studies, Shah Abdul Latif
University, Khairpur, Pakistan.
E-mail: rameezalimahesar@gmail.com

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In Pakistan, cancer has turned out to be one of the leading causes of death as far as non-communicable diseases are concerned. Until now, studies from Pakistan that have reported age-standardized cum cancer-specific occurrences as well as gender-wise comparative mortality rates lack. To this end, in the current article, we have offered an overview of the cancer burden in Pakistan – especially in Sindh, including the estimated number of new cancer cases and deaths in 2020 by age. The current research work offers an overview of the cancer-related news coverage in representative Sindhi language local Sindhi newspaper of Pakistan. Based on the detailed analysis of relevant news using content analysis, the researchers discuss the implications of the present coverage of cancer issues in the newspaper. Afterward, the figures given in the news report have been compared with those generated by IARC.

#### Status of cancer in Pakistan

Pakistan is one of the world's developing countries facing the most intractable problems related to education, poverty, unemployment, and health so ahead. At present, its population rate is 22,08,92,332. However, besides other diseases, cancer is increasing at an alarming rate in the country. The number of new cancer cases in the country has emerged to 178,388 (males contributing to 33% and females contributing to 51%). In comparison, the death rate has mounted to 117,149 (males contributing to 52% and females contributing to 48%). The risk of cancer detection among people before they reach 75 years is 11.9 (contributing to 11.5% and 12.3% in males and females, respectively). The risk of cancer deaths among people before they reach 75 years is 8.3 (contributing to 8.3% and 8.2% in males and females, respectively).

To this end, the cancer diagnosis ratio is observed more among females contributing to 51%, than their counterpart males contributing to 33%. However, the deaths caused by cancer are observed more in males contributing to 8.3% compared to their counterparts, females contributing to 8.2%. The cumulative ratio of cancer deaths among both genders before the age of 75 years is 8.3.

As far as the types of cancer being diagnosed among both genders are concerned, the report has brought to the surface top five most frequent cancer types. Lip cancer, lung cancer, oesophagus cancer, colorectal centre, and leukaemia are the top five types of cancer that have frequently been found in males. Breast cancer, lip cancer, cervix uteri cancer, oesophagus cancer, and ovary cancer are the top five types of cancer that have frequently been found among female counterparts.

For the last five years, breast cancer has been getting ranked the number one cancer type found incredibly in females. Although 25,988 new breast cancer cases have so far come to the surface, the mortality rate has mounted to 60,458 due to breast cancer. Breast cancer as a cancer type is placed atop to have killed and caught the victims savagely.<sup>[4]</sup>

#### **Problem statement**

Although news media such as newspapers are the effective

means of information in present-day society, people have now approached sharing information. The news media invariably remains a critical element in obtaining knowledge, especially on the far side of people's direct experience. [5] In this way, the nexus between readers and the news content turns sturdier that empowers to inflict a direct media impact on people. [6] However, health is an essential aspect of human life and is always a common concern. People are more concerned with the information related to preventative measures, diseases, medications, and the factors that promote health. Thus, it is important to appraise how Sindhi language newspapers cover and treat health issues because Sindhi language newspapers are the dynamic sources of health information in Sindh for diverse readers. This study may bear positive implications against cancer prevention as well as cancer control. Hence, it is particularly important to understand how the newspaper media covers the issues related to cancer. It is because the public mostly believes in this coverage as a key source of information.[7] This type of study has never been done in Pakistan using Sindhi language newspapers despite the fact that these are the best sources of information regarding local issues.

#### **Objective**

The objective of this study was threefold. First, this study was aimed to examine the content quantity to determine the frequency of cancer-related news. Second, this study was aimed to investigate what topic was the most frequently mentioned in the news coverage about cancer news. Third, this study was aimed to determine which type of cancer was mostly mentioned in the news related to cancer.

#### Literature review

Several comprehensive content analysis studies on cancer have been carried out worldwide. For example, such related studies have been executed in the United States, Canada, the United Kingdom, and China. [8-11] These studies concluded that news coverage was disposed to pay more attention to certain types of cancer, which the news was not connected with cancer mortality or incidence. [12] Researchers have a study and found a few biases in the middle of the news coverage concerning cancer coverage and the incidents of cancer types. Albeit breast cancer influenced the coverage against specific cancers, it was the main center of 29.6% of newspaper stories related to specific cancer sites.

Some researchers have also carried out their study based on the comprehensive content analysis of cancer coverage in Japanese newspapers. They found that about half was carried inside at least one particular type of cancer, emphasizing breast, lung, and leukaemia. They also found that their study suggested that the articles with regard to cancer did meet daily across the whole year.<sup>[13]</sup>

Comprehensive content analysis has been carried out for cancer coverage in major newspapers of China. The research indicated that cancer news coverage had focused on breast cancer rather than other types of cancer. However, some common cancers were presented inadequately, and rarer cancers were presented excessively in the news related to cancer coverage.

Further research assessed the coverage of six noticeable diseases from 1977 to 1997 in the big U.S newspapers. [14] They came to know that newspaper coverage of these wide-ranging classifications of afflictions was the most responsive to mortality degrees and trends. It was one of the most covered, "high range of death" diseases.

Another argument also describes that coverage in the newspapers highlighted breast cancer more but represented other cancers inadequately with high incidence and mortality rates, especially lung cancer.<sup>[15]</sup>

#### **Materials and Methods**

The specific news report related to cancer was collected by Daily Pahenji Akhbar – a new Sindhi language newspaper of Sindh (Pakistan). A total of 90 news about cancer were taken from the newspaper sample throughout the year from January 1, 2020, to December 31, 2020. News that was primarily about cancer were captured through an online archive service for the newspaper where the main search with the keyword cancer was performed in the Sindhi language. The news carried inside two or more than two cases, or which brought health practitioners, politicians, and other public statements regarding cancer, and the depth reports were excluded from this study. Besides, editorial articles, letters, advertisements, and legal notices were also omitted from the current study's analysis. The present research universe comprises all the news published in the 12-month editions of the newspaper bearing the health content across the whole year 2020.

## **Unit of analysis**

The news related to cancer were the units of analysis in the current study. Cancer news was described as the news covering the types of cancer, localities of people living with cancer, age and sex of the victims, cancer-caused mortality, and cancer diagnosis.

#### Results

Table 1 shows that the total number of cancer news was 90. Although 72 news were about male victims of cancer, 18 news were about female victims. In terms of male victims, 31 out of 72 news mentioned the age bracket of the victims ranging from one to 25 years, and with the same age bracket, the female victims were mostly found in 15 news. Thus, both male and female cancer victims were mostly found in the age bracket ranging from one year to 25 years.

Table 2 shows that in the majority of the news regarding the male proportion of the people living with cancer, blood, liver, throat, and mouth cancers as the cancer types were mentioned in the news. As a type of cancer, blood cancer was mentioned in the news in the majority as a study found that blood cancer was among the most repeated types of cancer. <sup>[16]</sup> The news most frequently mentioned blood and brain as the common cancer among females living with cancer.

Table 3 shows that although 25 news stated the victims to be married (males contributing 20% and females contributing nearly 8%), 27 news stated them to be unmarried (males 19% and females 11%). The rest of the news (38) did not mention the marital status of the victims.

Table 4 shows that although the table shows that the highest proportion of the news (63%) reported the cancer incident from the rural locality (males contributing 48% and females contributing 14%), there were 33 news that was found to have reported from urban areas. According to the figures, it is illustrated that cancer disease is rapidly increasing in rural areas. Even the news related to female cancer victims were not so many but were many among the given figure. It is also increasing in the urban areas as 33 out of 90 news reported cancer incidents from urban areas.

Table 5 shows that although the table shows that the highest proportion of the news (90%) reported the death caused by cancer (males contributing 74% and females contributing 15%), the news mentioned that the diagnosis was only nine (males contributing five percent and females contributing four percent). It is clear that the number of deaths caused by cancer is growing fast.

Table 1: Distribution of news depicting age and gender of the victims

| Gender | п  | Age      | Frequency | Total |
|--------|----|----------|-----------|-------|
| Male   | 72 | 1-15     | 15        | 90    |
|        |    | 16-25    | 16        |       |
|        |    | 26-40    | 0         |       |
|        |    | 40 above | 11        |       |
| Female | 18 | 1-15     | 9         | 18    |
|        |    | 16-25    | 6         |       |
|        |    | 26-40    | 1         |       |
|        |    | 40 above | 2         |       |

Table 2: Distribution of news depicting the types of cancer

| Gender | Types of cancer  | Frequency |
|--------|------------------|-----------|
| Male   | Liver cancer     | 6         |
|        | Mouth cancer     | 9         |
|        | Throat cancer    | 9         |
|        | Lung cancer      | 2         |
|        | Brain cancer     | 2         |
|        | Blood cancer     | 10        |
|        | Cancer in knee   | 1         |
|        | Cancer in bone   | 1         |
|        | Abdominal cancer | 1         |
| Female | Tongue cancer    | 1         |
|        | Blood cancer     | 2         |
|        | Brain cancer     | 2         |
|        | Mouth cancer     | 1         |
|        | Liver cancer     | 1         |
|        | Abdominal cancer | 1         |

Table 3: Distribution of the news stating the marital status of the victims

| Gender | Married | Unmarried |
|--------|---------|-----------|
| Male   | 18      | 17        |
| Female | 7       | 10        |
| Total  | 25      | 27        |

Table 4: Distribution of news reporting the localities of the victims

| Gender | Locality of victim | Frequency | Total |
|--------|--------------------|-----------|-------|
| Male   | Urban              | 28        | 72    |
|        | Rural              | 44        |       |
| Female | Urban              | 5         | 18    |
|        | Rural              | 13        |       |

Table 5: Distribution of news according to their topics

| Gender | Death | Diagnose | Total |
|--------|-------|----------|-------|
| Male   | 67    | 5        | 72    |
| Female | 14    | 4        | 18    |
|        |       |          | 90    |

## DISCUSSION

Newspapers are deemed to be the big means of health information such as cancer among the masses. However, they are characterized to be more credible information sources than other media like the Internet and television. The idea to this end was of profound importance to understanding how the Sindhi language newspapers cover the news about cancer. This study found that Daily Pahenji Akhbar – a Sindhi language newspaper of Pakistan published the news related to cancer throughout 2020. Meeting the objectives, a comprehensive content analysis study was carried out for the previous year's coverage. It brought to the surface that the overall frequency of news was 90, though it constituted 7.5% of news reports each month. As far as the gender-wise difference was concerned, only 18 news reports related to cancer were about female victims. The age bracket for both genders to be diagnosed with cancer was found during the news report from one to 25 years in 46 news items. Thirty-four out of 90 news mentioned the cancer type, and the blood, liver, throat, and mouth cancers were most frequently mentioned in this news as a study had found that blood cancer was among the most repeated types of cancer. These studies, including the current study, have seen blood, liver, throat, and mouth cancers to be the most frequently mentioned types in the cancer-related news. Thus, it was found that breast cancer has influenced the coverage as compared to other specific cancers. The finding in the farmer and later studies differs by dint of regions as the social cum public health issues vary from country to country.

In terms of topics in the news, the majority (90%) of the news reports had the topic of mortality caused by cancer (contributing to 74% and 16% news of mortality in males and females,

respectively). Apart from this, 25 news reports stated that the victims were married (males contributing to 20% and females contributing nearly to eight percent), 27 news stated the victims to be unmarried (males 19% and the females 11%). It exposed that those unmarried have lesser chances of being died or diagnosed with cancer. In terms of localities, the newspaper reported the highest proportion (63%) of the cancer incidents from rural localities (males contributing 48% and females contributing 14%).

## CONCLUSION

The present paper examines the general cancer-related news in Sindhi language newspaper, performing a comprehensive content analysis study. The news related to cancer was found to cover across the whole year of 2020 in Sindhi language newspapers. However, it can be argued that they could be of profound significance as being the significant sources of information against cancer for Sindhi people. Bearing in mind the importance of newspapers as a dominant information channel of cancer, it could be indispensable to inspire publishers towards the quantity of the increased articles concentrated on the cancer continuum; also, the write-ups paid more attention to the stoppage in particular.

#### Limitations

The present study has the following limitations;

The reporters took the data from across the previous year of Sindhi newspaper coverage. Hence, the current results may therefore not find any seasonal coverage. Furthermore, the present study analyzed only one Sindhi language newspaper of Pakistan - Daily Pahenji Akhbar, although the current results may not reflect other mass media. Apart from cancer continuum, cancer prevention, cancer control, and cancer site, this study examined the topic of cancer news, the type mentioned frequently in the news about cancer, and gender-wise differences in cancer deaths and cancer detections. Above all, this is the first study that has executed a comprehensive content analysis study to examine the cancer news in Pakistan's Sindhi language newspaper. In the end, the studies to be done in the days ahead should compare the types of cancer incidences with the frequency of news coverage and investigate more variables, like framing or thematic, statistics regarding the cancer reporting, means for the news related to news, also the efficacy messages at most.

## **Recommendations**

Although the worldwide concern about rising incidences of cancer is increasing today, educational programs should be designed in the educational institutes cum health organizations to prevent cancer.

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#### **Conflicts of interest**

There are no conflicts of interest.

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