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Oral Cancer: Exploring the Stories in United Kingdom Newspaper Articles

Abstract

Objective:

Reports suggest that patients with oral cancer delay seeing help because they are unaware of the symptoms. The majority of adults (95%) engage with news reports and 40% read newspapers. Newspaper oral cancer stories may influence awareness and health seeking behaviour. The aim of this study was to explore how oral cancer is portrayed in UK newspaper print media.

Design:

Qualitative content analysis of articles from 10 newspapers with the widest UK print circulation. All articles using the terms "mouth cancer" and "oral cancer" over a 3 year period were retrieved. Duplicates, non-cancer and non-human articles were excluded. Content analysis was undertaken.

Results

239 articles were analysed. Common topics included "recent research", "survivor stories", "health information" and "celebrity linkage". Articles were often emotive, featuring smoking, alcohol, sex and celebrity. Articles lacked a proper evidence base and often failed to provide accurate information about signs and symptoms, information about prevention and signposting to treatment.

Conclusions

Opportunities to save lives are being missed. Further work to improve social responsibility in the media and develop guidance to enhance the quality of information, health reporting and signposting to help are indicated.

Introduction

Oral cancer is associated with an estimated 400,000 deaths worldwide every year.[1] In the UK, the incidence of oral cancer incidence has reportedly risen by a third and mortality has increased by 10%. The likelihood of developing oral cancer increases with age with only 6% of oral cancers arising in people under the age of 45.[2] Most cases are detected in the advanced stages of the disease at which time the prognosis is poor. Methods to support and enhance early identification, diagnosis and treatment of oral cancer are therefore important for increasing survival rates.

It has been suggested that the lack of public awareness about oral cancer symptoms needs to be addressed by further public education.[2] Oral cancer leaflets have been shown to raise long-term knowledge and awareness of oral cancer amongst the general public.[3] Mouth cancer awareness campaigns often highlight symptoms including ulcers which do not heal, white patches, unusual lumps or swellings in the mouth or head and neck area to raise awareness.[4,5] Despite this, most oral cancer patients present at a late stage of disease. One qualitative study found that while people with symptoms had spoken to their partner, family or friends, many did not seek medical help until much later.[6] Patients attributed their delayed presentation to a lack of knowledge of signs and symptoms rather than a lack of access to care services.

Ofcom reports[7] suggest that 90% of adults read the news with 40% of adults reading printed newspapers. The majority of people who read newspapers are over the age of 45, however newspaper articles are increasingly accessed through the internet with most people using multiple platforms (including TV, radio and the internet) for accessing news content.

Media campaigns involving news stories can be effective in changing public behaviour, for example, a systematic review found that mass media campaigns are effective in reducing alcohol-impaired driving and alcohol-related crashes.[8] There is evidence to show that many types of cancer are covered by news stories,[9] these articles may be important for cancer and specifically oral cancer awareness. The content and messages within oral cancer news stories coverage received little attention. The media may be a powerful and effective way of promoting oral cancer awareness. However it also has the potential to convey incorrect or confusing messages to the general public.

Aims and objectives

The aim of the study was to explore how oral cancer is portrayed in UK newspaper print media.

The objectives were to illuminate: newspaper print media story content, how signs and symptoms of oral cancer are covered, signposting to care and emotive language used in stories.

Methods

A content analysis of oral cancer stories in the newspaper print media was used. This was a primarily inductive process with some deductive analyses in relation to known symptoms.

Ten UK non-specialist newspapers with the greatest print circulation were identified using the Audit Bureau of Circulations.[10] The online database Nexis was used to retrieve data using the terms "mouth cancer" and "oral cancer" from newspaper articles printed between 1 August 2011 and 31 October 2014.

Textual data from included articles were retrieved and formatted as word documents. All articles retrieved were read. Duplicates, non-human articles and articles with no relevance to oral cancer were excluded from analyses. Image data was not retrieved for analysis.

Thematic content analysis was used.[11] This followed a number of steps undertaken in parallel based on established methods.[12] Initial coding was carried out manually and themes were entered into Excel. All data were then uploaded to NVivo 10 software which was used to assist analysis. This served as a tool for recording the coding of data.

Data were coded by newspaper name and 'newspaper type', (broadsheet or tabloid). Headlines, body text and concluding statements were all examined. Textual searches across all content were carried out in order to identify and categorise information content including signs and symptoms, types of information, risk, and emotional terminology.

Results

A total of 279 articles were identified. Following exclusions of duplicates, non-human and non-relevant articles, 239 were analysed. These comprised 78 broadsheet and 161 tabloid articles (Table 1).

Table 1: Table showing the count of articles for each newspaper type

Paper Type	Newspaper	Number of articles
Broadsheet	Times	21
	Telegraph	19
	Independent	15
	Guardian	23
Total Broadsheet:		**78**
Tabloid	Daily Mail	33
	Daily Express	27
	The Sun	46
	The Daily star	9
	The Daily Record	15
	The Mirror	31
Total Tabloid:		**161**
Total number of articles:		**239**

Content of articles

Six main types of articles were identified, recent research, health information, celebrity linkage, survivor stories, legal issues and cancer as an "other" issue in stories (Figure 1). Within these, topics of smoking and alcohol, signposting to health services, risk factors, negative emotional language and signs and symptoms predominated (Figure 2).

Figure 1: Count of articles for each type of content presented by newspaper (Tabloid or Broadsheet)
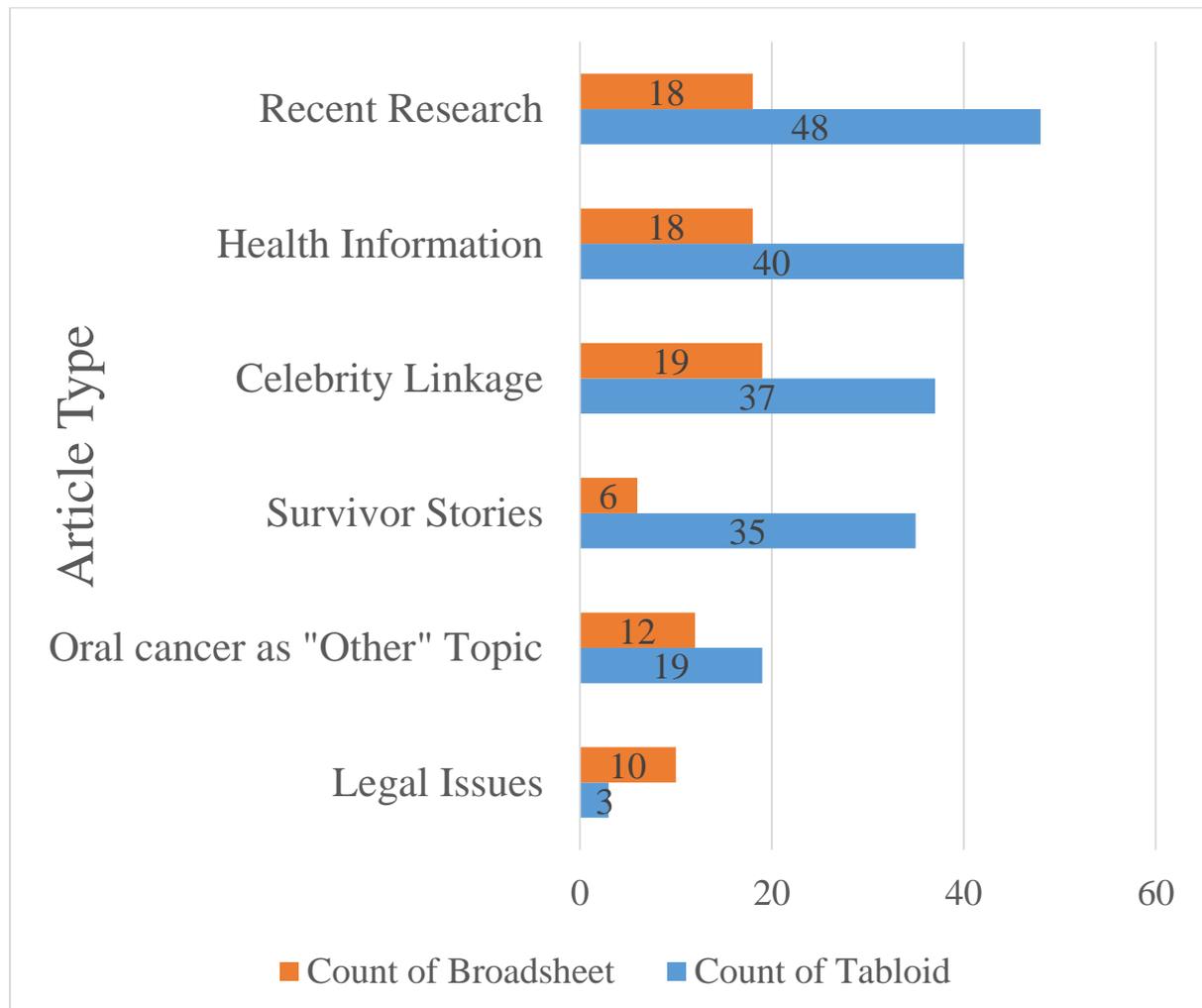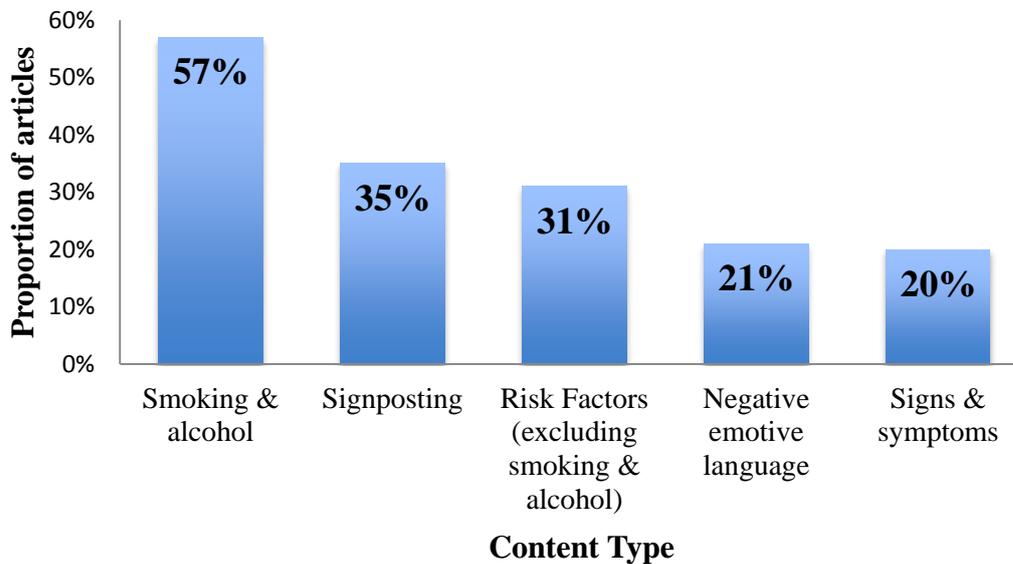
Figure 2: Proportion of articles which included the following content types: Smoking and Alcohol, Signposting to help, Risk Factors for Oral Cancer, Negative Emotive Language, Signs and Symptoms.

Content Type
* Articles could contain more than one content type

Recent research

The most common type of article related to recent research evidence in the news. Oral cancer was often one of several types of cancer described in a story. While most cited evidence, this was limited to statements from 'experts'. Terms such as 'professor, University, doctor, Dr, dentist, prof', and expert' were identified in 198 references (38 of 66 these articles). Articles often had a relatable, headline statement with tabloids containing phrases like 'Big C' to refer to cancer.

The Sun:

'Cuppa to cut Big C'

The main body of the articles often had a tone of authority. Risk was a key feature of these stories. Specific risk factors, e.g. smoking and alcohol were discussed in the majority of these articles (56 of 66). A number of articles referenced or described unusual preventative advice. Common topics included aspirin to cure cancer and the preventative effects of tea (111 references in 15 articles referring to tea). While there was a significant amount of information about risk factors, only a small number included signs and symptoms (4/66 articles) or guidance on where to find further information, for example recommending visiting the doctor (14/66 articles).

The Express:

"PROOF ASPIRIN FIGHTS CANCER, A REGULAR, dose of aspirin can slash the risk of developing cancer by almost a quarter, research has revealed…"

Survivor Stories

Survivor stories described people's personal experiences of cancer. Often these were emotive tales of uncommon and unusual events. By reporting on people's personal experiences many articles highlighted signs and symptoms (21/41 articles) and signposting for further information or advice. There was less discussion on risk, as often these 'survivors' did not have the common risk factors for developing oral cancer. Negative emotive language in these harrowing stories (14/41), often related to the treatment they received.

> **The Daily Record:**
>
> *"Kerry, of Paisley, now faces gruelling chemo and radiotherapy…"*

A number of stories also focused on missed diagnosis and how their lives were saved by other sources. For example, Google (featured in eight headlines).

> **The Star:**
> *"MUM'S LIFE IS SAVED BY GOOGLE; GP put her on antibiotics"*

At the end of each of these articles. There was usually a quote with words of warning from the survivor commonly urging others with symptoms to get them checked by a doctor.

> **The Daily Record:**
>
> *"She wants to warn people who go to their GP with a sore mouth or throat not to be fobbed off with pills or excuses and press for full medical tests."*

Health Information

These articles focused on promoting cancer awareness and messages often included "expert" opinions. These articles highlighted signs and symptoms of cancer for specific audiences, for example, the presence of a persistent mouth ulcer. The information contained within these articles was often aligned to medical and dental advice. Most referred to oral cancer as a subsection of a more generic cancer article (43 articles), and a few (15/58) described oral cancer as a major theme.

These articles often included detailed descriptions about the complaint, potential causes and treatments for oral cancer. There was also signposting to doctors or dentists to encourage those with symptoms to seek help (30 out of 58 articles).

> **The Daily Record**
> *"Each year, more than 6000 people in the UK are diagnosed with mouth cancer, but few know the signs to look out for or who is at risk…*
>
> *Only about half of the adult population in the country is registered with a dentist, so they're not getting regular check-ups…*
>
> *there's a lack of awareness not only on the part of the public, but also among the profession."*

> **The Daily Mail**
> *"If any mouth ulcer lasts longer than three weeks, you should seek advice from your GP."*

Celebrity Linkage

Links to celebrities were often used in articles either as a platform from which to promote a public health message or as an interesting celebrity story. A common subject within this theme was the Hollywood star Michael Douglas, who reported that he had acquired the HPV virus through his sexual activities and had subsequently developed oral cancer as a result of this. Many of these articles used the sexual link for risqué headlines.

> #### The Guardian
> *"Michael Douglas has struck a blow for oral sex"*
>
> #### The Sun
>
> *"Licking time bomb; IT'S OFFICIAL: ORAL SEX GIVES YOU CANCER"*

Within this theme there was a large amount of risk information, but signs and symptoms and where to get further help were often omitted. Articles mainly focused on the celebrity's experiences and emotions or on the outcome for the person with cancer. Many articles discussed how this disease affected family life. Articles often opened with a with a celebrity story followed by an 'expert' comment and an advisory message.

The wording was often negative and emotional. Many the articles highlighted a lack of awareness of the link between oral sex, HPV and oral cancer. Some extended this further and presented an argument that boys as well as girls, should be vaccinated against the HPV virus. Articles ended with a statement, or a quote, to summarise the story, but no further health advice.

> #### The Daily Star
> "Hollywood legend Michael Douglas blamed his tongue cancer partly on his sexual exploits earlier this year…Nigel Carter, chief executive of the British Dental Health Foundation, says the rise is "very worrying". He said: "There is a gap in public knowledge about what causes mouth cancer.""

Legal Issues

The type of articles where broadsheet news articles outnumbered those in the tabloids was legal issues (10 broadsheets to 3 tabloid). Articles covered smoking and alcohol (n=9), medical negligence and criminal activities. The headlines were often factual rather than personal, but the language used in tabloid articles was more informal with abbreviations.

> #### The Sun
> *"Should booze labels carry health warnings? MPs SUGGEST FAG-STYLE INFO ON ALCOHOL"*

Articles on smoking, often related to tobacco, for example, the trading status of snus/snuff in the European Union (EU). Medical negligence articles were relatively common. For example, stories about a dentist who failed to diagnose malignant ulcer and instead gave the patient mouthwash.

Cancer as an "Other" topic

There were a small number of articles which had a loose association with oral cancer; these were often obituaries. Articles were often written using emotive language and some contained information about oral cancer sites and treatment for someone who had died. Most often obituaries indicated that person had oral cancer (regardless if it was the cause of the fatality) alongside a brief summary of the life history. A few of these articles did describe how dentists can screen for oral cancer at routine appointments.

> ### The Independent
> *"He died in 1894, aged 79, having survived lip cancer during his money troubles"*

Discussion

This study investigated the content of articles portraying oral cancer in newspaper print media. The total number of articles found suggests that oral cancer appears less often in the news than other types of cancer.[9] However, there were many stories over the three-year period under investigation in this study and readership figures indicate that these stories would still have reached a wide audience.

Smoking, alcohol, sex, survivorship and celebrity often dominated articles. Content was often emotionally presented in a way that the reader could relate to the person in the story, or could identify with something happening in the story. Stories were often dramatic, tragic or eye-catching due to the frightening or risqué nature of the content. This echoes the stories of cancer battles[13] found in exploratory studies of generic cancer coverage in the media and studies of death being newsworthy.[14] This battle for life and drama associated with oral cancer may explain why oral cancer appears to be added in order to give weight, emotion or drama to an article.

There is evidence to suggest that celebrity coverage of cancers can increase requests for cancer screening,[15–18] highlighting the potential for oral cancer promotion. It is possible that the celebrities Michael Douglas and more recently Bruce Dickinson may also have an impact on oral cancer identification rates, however, full potential to save lives may not be realised because of a lack of signs, symptoms and signposting in these articles.

While oral cancer stories often highlighted a few specific risks, in particular, smoking and alcohol. Few articles provided clear information on signs, symptoms, risks and signposting and none included comprehensive information in all areas. Many articles focused on new research, but these articles often veered from key messages for prevention and care, often focussing on ineffective treatments. Descriptions of oral cancer and treatment in the news were very different when compared to public health messages and campaigns.[4,5] This distorted picture of oral cancer echoes those identified in a previous study, which also found that generic cancer treatment information in the news did not reflect reality.[19]

While risks were presented, articles did not present evidence-based literature relating to oral cancer to substantiate claims. Instead, articles used statements from 'experts' as a form of validation for the information presented in the article. This appeared to legitimise the information even if the information was inaccurate. Newspapers are considered to be a legitimate source of information when compared to other types of media[20,21] and the evidence suggests that the public rarely check the validity of this information[21]. This suggests that

poor quality and inaccurate information about oral cancer is being presented and that this information will be believed, without further verification.

This research focused on UK newspapers with the greatest print circulation. While this study has identified a number of areas, where health information messages could be improved, there are a number of limitations. This study did not cover all forms of articles published in the UK over the three-year timeframe and did not include local news media, magazines or internet only sources. This research did not cover analysis of visual imagery and only looked at textual data. Visual images are important within articles, contain information that may have the potential to contribute to improved oral health.

Conclusion

Oral cancer featured in a range of emotive newspaper articles, often featuring smoking, alcohol, sex and celebrity. Articles lacked a proper evidence base and often failed to provide accurate information about signs and symptoms, information about prevention and signposting to treatment. This lack of information means that opportunities to save lives are being missed. As a result, further work is needed to ensure that responsible health messages about oral cancer are included within newspaper print media articles in order to save lives. This should involve media guidance for responsible reporting of oral cancer to include: consultation with oral cancer experts to inform stories, including the signs and symptoms of oral cancer in articles, providing signposting to help for people who are concerned and ensuring that reports contain appropriate language and accurate information about risk and evidence in accordance with wider recommendations for reporting in health and science.[22]

References

1   Globocan. Globocan 2012 - Home. http://globocan.iarc.fr/Default.aspx (accessed 23 Mar2016).

2   Warnakulasuriya S. Global epidemiology of oral and oropharyngeal cancer. *Oral Oncol* 2009; **45**: 309–16.

3   Petti S, Scully C. Oral cancer knowledge and awareness: primary and secondary effects of an information leaflet. *Oral Oncol* 2007; **43**: 408–15.

4   Mouth Cancer Foundation. http://www.mouthcancerfoundation.org/ (accessed 23 Mar2016).

5   Home - Mouth Cancer Action Month. http://www.mouthcancer.org/ (accessed 23 Mar2016).

6   Rogers SN, Vedpathak S V, Lowe D. Reasons for delayed presentation in oral and oropharyngeal cancer: the patients perspective. *Br J Oral Maxillofac Surg* 2011; **49**: 349–53.

7   News consumption in the UK - 2014 report | Ofcom. http://stakeholders.ofcom.org.uk/market-data-research/other/tv-research/news-2014/ (accessed 23 Mar2016).

8   Elder RW, Shults RA, Sleet DA, Nichols JL, Thompson RS, Rajab W. Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes: a systematic review. *Am J Prev Med* 2004; **27**: 57–65.

9   Konfortion J, Jack RH, Davies EA. Coverage of common cancer types in UK national newspapers: a content analysis. *BMJ Open* 2014; **4**: e004677.

10   ABCs: National daily newspaper circulation January 2014 | Media | theguardian.com. http://www.theguardian.com/media/table/2014/mar/14/abcs-national-newspapers (accessed 23 Mar2016).

11   Burnard P, Gill P, Stewart K, Treasure E, Chadwick B. Analysing and presenting qualitative data. *Br Dent J* 2008; **204**: 429–32.

12   Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; **3**: 77–101.

13   Clarke JN, Everest MM. Cancer in the mass print media: fear, uncertainty and the medical model. *Soc Sci Med* 2006; **62**: 2591–600.

14   Adelman RC, Verbrugge LM. Death makes news: the social impact of disease on newspaper coverage. *J Health Soc Behav* 2000; **41**: 347–67.

15   Hilton S, Hunt K. Coverage of Jade Goody's cervical cancer in UK newspapers: a missed opportunity for health promotion? *BMC Public Health* 2010; **10**: 368.

16   Casey GM, Morris B, Burnell M, Parberry A, Singh N, Rosenthal AN. Celebrities and screening: a measurable impact on high-grade cervical neoplasia diagnosis from the 'Jade Goody effect' in the UK. *Br J Cancer* 2013; **109**: 1192–7.

17   Marlow LA V, Sangha A, Patnick J, Waller J. The Jade Goody Effect: whose cervical screening decisions were influenced by her story? *J Med Screen* 2012; **19**: 184–8.

18   Chapman S, McLeod K, Wakefield M, Holding S. Impact of news of celebrity illness on breast cancer screening: Kylie Minogue's breast cancer diagnosis. *Med J Aust* 2005; **183**: 247–50.

19   Fishman J, Ten Have T, Casarett D. Cancer and the media: how does the news report on treatment and outcomes? *Arch Intern Med* 2010; **170**: 515–8.

20   Kiousis S. Public Trust or Mistrust? Perceptions of Media Credibility in the Information Age. *Mass Commun Soc* 2001; **4**: 381–403.

21   Flanagin AJ, Metzger MJ. Perceptions of Internet Information Credibility. *Journal Mass Commun Q* 2000; **77**: 515–540.

22   Science Media Centre. Science Media Centime 10 best practice guidelines for reporting science & health stories. London, 2012 http://webarchive.nationalarchives.gov.uk/20140122145147/http:/www.levesoninquiry.org.uk/wp-content/uploads/2012/07/Second-submission-to-Inquiry-from-Guidelines-for-science-and-health-reporting-31.05.12.pdf   (accessed 13 Jul2016).