

*Full Length Research Paper*

## Cancer, prevention, research and the “calendar girls”

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World Health Organization work towards the prevention, the research and control of cancer. Movies have been used, as tools in the primary prevention, to discuss important problems in Health Sciences. The aim of this work is to present the number of publications (NP) in research and prevention and cancer in a database system, as well as to discuss about a film that shows an interesting way to get money to aid the development of a social program against cancer. The searches (24/09/2012) were performed in PubMed using the word cancer alone or cancer and prevention or cancer and research and the NP was determined. The results have shown 2682867 publications about cancer, and 141115 publications about prevention and cancer and 935397 publications about cancer and research. Calendar Girls is inspired in a true story of the Yorkshire (UK) housewives who posed nude for a calendar. Julie Walters star as Annie, spurred into action when her husband (John Alderton) dies of leukaemia. To raise money for the hospital where he was treated, the woman persuades their friends to strip for a saucy and discreet charity calendar. The film shows the meaning of the interactive processes of cooperation, when it is touching the public opinion for humanitarian causes. The analysis of the NP shows the importance of the studies about prevention and research in relation with cancer. The analysis of the film shows the relevance of the simple and creative actions to obtain money.

**Keywords:** Cancer, Prevention, Research, Calendar girl, movie, PubMed.

### INTRODUCTION

Cancer can be defined, in general, as the rapid, uncontrolled and abnormal growth and spread of cells that may affect almost any tissue of the body (George et al., 2011; Seyfried and Shelton, 2010). Jemal et al (Jemal

et al., 2011) have reported that about 12.7 million cancer cases and 7.6 million cancer deaths are estimated to have occurred in 2008 worldwide, with 56% of the cases and 64% of the deaths in the economically developing world. Moreover, the World Health Organization (WHO) has published that deaths from cancer worldwide are projected to continue to rise to over 12 million in 2030 (WHO, 2011a).

Cancer control is a public health approach aimed at

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reducing causes and consequences of cancer by translating knowledge. It is now known enough about the causes of cancer to prevent at least one-third of all cancers. Cancer is largely preventable, by stopping smoking, providing healthy food and avoiding the exposure to carcinogens. Information is also available that would permit the early detection and effective treatment of a further one-third of cases. Some of the most frequent cancer types are curable by surgery, chemotherapy or radiotherapy. World Cancer Day 2011 is promoting ways to prevent cancer, particularly through being physically active. Physical inactivity is linked to breast and colon cancers. Almost 460,000 females died from breast cancer in 2008, while close to 610,000 males and females died from colorectal cancer (WHO, 2011a). The chance of cure increases substantially if cancer is detected early. Moreover, the various programs in the world to the prevention, research and control of cancer are supported by governmental and private organizations (WHO, 2011b).

Adami et al (Adami et al., 2001) have reported the importance of the primary and secondary prevention in the reduction of cancer morbidity and mortality. The main contribution to such accomplishments would be a reduction in tobacco smoking, improvements in diet, reduced alcohol intake and arrest of the obesity epidemic, in part through increased physical exercise. Rather than being granted, these goals require great effort and major commitment from all those who share responsibility for public health.

Movies have been used, as tools in the primary prevention, to discuss important problems related with the Health Sciences. Chabner (Chabner, 1997) uses the film, "Cancer: A Personal Journey. Notes from the Edge.," to accompany the physician, Peter J. Morgan, on his journey with cancer. Peter Morgan kept a diary that records his thoughts, his emotional turmoil, and his reflections on life and an untimely death. Rosenstock (Rosenstock, 2003) suggests, for psychiatric educators interested in using film to teach professional and lay audiences about schizophrenia, the 2001 release of *A Beautiful Mind* has made the process much easier. The movie shows a range of symptoms and complications, and it gives viewers-especially patients and families-hope for recovery. Gunasekera et al (Gunasekera et al., 2005) have analysed the portrayal of sex and drug use in the most popular movies of the last 20 years using the Internet Movie Database list of the top 200 movies of all time.

The scientific interest in different subjects can be evaluated using databank systems. PubMed is databank that is a service of the U.S. National Library of Medicine that includes over 20 million citations from MEDLINE and other life science journals for biomedical articles. PubMed includes links to full text articles and other related resources (<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>). Various studies have been developed for several authors

have utilizing the PubMed as tool. Brinkman et al (Brinkman et al., 2006) has also used the PubMed in a meta-analysis that was undertaken to quantitatively determine if men with low selenium levels were at increased risk of prostate cancer. Hong et al (Hong et al., 2006), have performed a systematic electronic search of articles in PubMed concerning the albinism in Africa.

The aim of this work is to present the number of publications in prevention and cancer in a database system, as well as to discuss about a film that shows an interesting way to get money to aid the development of a social program related with the cancer.

## MATERIAL AND METHODS

The searches were performed in PubMed (<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>) using the word cancer alone or cancer and prevention or cancer and research and the number of publications was determined. The data were obtained in September 24<sup>th</sup> 2012.

The number of publications in prevention or in research was divided by the number of publications in cancer and a percentage of publications were calculated.

*Calendar girls* is a movie produced by the Buena Vista Pictures, Touchstone Pictures and Harbour Pictures production. The Director was Nigel Cole and the screenwriters were Juliette Towhidi and Tim Firth. Among the actors of the cast, are found Helen Mirren (Chris), Julie Walters (Annie), Penelope Wilton (Ruth) and John Alderton (John). The film with 108 min was released in 12/19/2003.

## RESULTS

The results in the Table 1 shows the number of publications identified in the PubMed about (i) cancer, (ii) about prevention and cancer and (iii) about cancer and research. It is observed a strong interest in the publications about cancer.

In the Table 2, the percentages of publications to prevention related with cancer and research related with cancer are shown. It is shown that the interest in the publication in research related with cancer is higher than in prevention related with cancer.

*Calendar Girls* is a film inspired by the true story of the Yorkshire (United Kingdom) housewives who posed nude for an alternative calendar in 1999. The women in the story are members of the National Women's Institute of Knapely, a prim-and-proper organization of ladies who meet each month for self improvement and to hear lectures on bird watching and rug making and such. Helen Mirren and Julie Walters star as Chris and Annie, spurred into action when the latter's husband (John Alderton) dies of leukaemia. To raise money for the

**Table 1.** Number of Publications searched in the PubMed in cancer, and prevention and cancer, and cancer and research

<b>Subject</b>	<b>Number of Publications (NP)</b>
Cancer	1682867
Research and cancer	141115
Prevention and cancer	935397

The searches were performed in PubMed using the word cancer alone or cancer and prevention or cancer and research and the NP was determined.

**Table 2.** Percentage of Publications searched in research related to cancer and prevention related to cancer

<b>Subject</b>	<b>Percentage of Publications (%P)</b>
Research related to cancer	34.86
Prevention related to cancer	5.26

The number of publications in prevention or in research was divided by the number of publications in cancer and the %P was calculated

hospital where he was treated, the women persuade their friends to strip for a saucy and discreet charity calendar.

## DISCUSSION

The discussion about cancer in different levels is highly relevant and desirable. Rogers et al (Rogers et al., 2006) have reported that patients with limited literacy skills often have difficulty understanding medical information, are less likely to undergo cancer screening, and present with cancer at later stages than patients with better literacy skills. It is also discussed that since primary care physicians are responsible for performing or initiating the majority of cancer screening in the United States, the patients need to be able to not only identify patients who might not understand medical information but also communicate effectively with them about cancer prevention and screening.

Adami et al (Adami et al., 2001) have reported the importance of the primary and secondary prevention in the reduction of cancer morbidity and mortality due to, overall, cancer is a highly preventable disease. Tobacco smoking remains the largest contributor to the cancer landscape, whilst the contribution of poor diet and obesity may be equally important, but much more difficult to quantify. Based on estimates, age-adjusted mortality rates from cancer in year 2000 had been reduced by approximately 13% due to primary prevention and an additional 6% due to the combined effect of early diagnosis and screening (secondary prevention). According to a realistic goal for the year 2020, a further 29% reduction might be achieved by primary and 4% by secondary prevention.

Cancer treatment varies depending upon your type of cancer, stage of cancer, and overall condition. Some of the most frequent cancer types are curable by surgery, chemotherapy or radiotherapy. It is common to use several treatment modalities together (concurrently) or in sequence with the goal to aid in the prevention of the recurrence. Although the number of publication in cancer is highly elevated (Table 1), the percentage of publication in cancer related with prevention is not important when compared with the research (Table 2). This important percentage of the publications related with cancer and research could be also associated with the participation of both, private and government institutions, in the investigations. The small number of publications involving prevention and cancer could be associated with the difficulties to get money to the companies, mainly to the related with the primary prevention. This finding would be worthwhile to increase the discussions involving the divulgations of the necessity to alert the people that (i) the early detection of the cancer could aid in the cure and (ii) about the main conditions that could avoid the appearance of the cancer (WHO, 2011a; WHO, 2011b).

Several authors have used movies to discuss several subjects in Health Sciences. Zusman (Zusman, 1994) has used the films, "The piano", "The proposal", "Nine and half", "Rosemary's baby", "Fried green tomatoes", "Scent of a woman", "The purple rose of Cairo", "The war of roses" and "Groundhog day" to present and to discuss questions related with the psychoanalysis. Dixon et al (Dixon et al., 2001) have assessed public perceptions of the tobacco industry and behavioral intentions for tobacco use in response to watching the film *The Insider*. Riley (Riley, 2004) has used the film *Spiderman 2* to discuss about the importance of the nurses.

The film *Calendar girls* shows the meaning of the interactive processes of cooperation, when it is touching the public opinion for humanitarian causes. This film also detaches the importance of the information for the primary prevention of the cancer. Besides the campaigns to diffuse for the media, an "education for the prevention", accomplished daily at the schools, have fundamental importance.

In conclusion, the analysis of the number of publications shows the importance of the studies about prevention and research in relation with cancer. Furthermore, the analysis of the film *Calendar Girls* shows the relevance of the simple and creative actions to obtain money to help in the research about a disease.

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