

Characteristics of selected social campaigns in the prevention of testicular cancer

Charakterystyka wybranych kampanii społecznych w profilaktyce nowotworu jądra

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Słowa kluczowe: kampania społeczna, nowotwór jądra, profilaktyka, jądra.

Abstract

Testicular cancer is a serious health problem for men, especially young men. Diagnosing the cancer and starting treatment at an early stage is associated with a high probability of cure. Therefore, from an individual and public health point of view, prompt diagnosis is important. This can be achieved, among other things, through testicular self-examination as a basis for secondary prevention. Social campaigns, i.e. targeted communication activities aimed at solving or reducing social problems by modifying the attitudes or behaviour of specific audiences, can be a tool to encourage men to self-examine. Social campaigns on testicular cancer prevention carried out in Poland include “Odważni wygrywają”, “Mosznowladcy”, “Łap jaja!” and “BadajAJKA”. These issues have been present in the public space over the past few years. All campaigns had specific slogans, reach, partners, audiences, purpose and used specific tools. Only for some of them could evaluation data be found on their progress and results.

Streszczenie

Nowotwór jądra jest poważnym problemem zdrowotnym wśród mężczyzn, zwłaszcza młodych. Rozpoznanie nowotworu i rozpoczęcie leczenia we wczesnym stadium wiąże się z wysokim prawdopodobieństwem wyleczenia. Dlatego z punktu widzenia jednostki i zdrowia publicznego ważne jest wczesne wykrycie zmian. Można to osiągnąć m.in. poprzez samobadanie jąder, będącym podstawą profilaktyki wtórnej. Narzędziem zachęcającym mężczyzn do samobadania mogą być kampanie społeczne, czyli ukierunkowane działania komunikacyjne mające na celu rozwiązanie lub ograniczenie problemów społecznych poprzez modyfikację postaw lub zachowań określonych grup odbiorców. Do kampanii społecznych dotyczących profilaktyki nowotworu jądra realizowanych w Polsce należą „Odważni wygrywają”, „Mosznowladcy”, „Łap jaja!” oraz „BadajAJKA”. Ich obecność wskazuje, że problematyka ta była obecna w przestrzeni publicznej w ostatnich kilku latach. Wszystkie kampanie miały określone hasła, zasięg, partnerów, konkretne grupy docelowe, cel i wykorzystywały konkretne narzędzia. Tylko w przypadku niektórych z nich można było znaleźć dane ewaluacyjne dotyczące ich przebiegu i rezultatów.

Introduction

Testicular cancer is a significant health problem among men, especially young men. They often visit the doctor too late because they are afraid to see a specialist. Diagnosis of cancer and early treatment are associated with a high probability of recovery. Given these circumstances, prevention is of great importance from an individual and public health perspective. One tool for this can be social campaigns with messages targeted at men of different ages and their relatives.

Characteristics of testicular cancer

The testis is the male reproductive organ, which is responsible for the production, nutrition and also

storage of sperm. In men, there are two testes, which are located in the scrotum, the origin of which is in the abdominal integuments. The testes in man are located outside the body, due to the fact that they are suspended in the scrotum by structures such as the spermatic cord [1]. Due to the very large number of cells that make up the testis, it is possible to diagnose many different types of testicular tumours by pathomorphological examination. The simplest classification of testicular tumours is to distinguish between tumours of germinal origin, which account for up to 90% of all testicular tumours, and tumours of other origin:

- Of the tumours of germinal origin, 40% are seminomas; in these tumours, the abnormal proliferation of tumour cells originates from cells affecting sperm

Table 1. Risk factors for testicular cancer

Testicular cancer in father or brother	Positive family history [4].
Caucasian race	Men of this race are four times more likely to develop testicular germ cell carcinoma than Black men [4].
Cryptorchidism	This 20- to 40-fold increase in risk due to a malformation of the testes not descending into the scrotum should not be underestimated. Spontaneous descent of the testes into the scrotum is not uncommon, but surgical treatment is sometimes necessary [3].
Previous testicular cancer	As much as a 500-fold increase in the risk of recurrence [3].
Klinefelter's syndrome (47, XXY)	In addition to an increased risk of testicular malignancies, there is also an increased risk of mediastinal germ cell tumours [2].
Environmental pollution	This has not been proven, but the impact of environmental changes is being considered, as there has been a significant increase in the incidence of this cancer in young men over recent years [4].

production. The remaining 60% of tumours of this origin are non-seminomas, which include trophoblastic tumours, germ cell carcinomas, monoepitheliomas and mixed tumours, which consist of several histological types in terms of structure [2]. Such a general subdivision of germline tumours is important, due to the fact that seminomas and non-seminomas differ markedly in their therapeutic management and prognosis. Non-seminomas are a group of neoplasms that may have a variety of locations, with the primary neoplasm being outside the testis, for example in the mediastinum [3].

- Non-germinal tumours of the testis include carcinomas, chaperones, tumours arising from perinuclear structures and tumours originating from the haematopoietic system, i.e. lymphomas and myelomas [2–4] (Table 1).

The most common symptom of testicular cancer is a non-painful enlargement of the testicle, sometimes accompanied by redness of the scrotal skin, but only 25% of patients show signs of inflammation at the time of diagnosis. Many times, the first worrying symptom is a non-painful mass that cannot be isolated from the testicle. This lack of pain makes it possible to distinguish a testicular tumour from inflammation of the epididymis, an organ responsible, among other things, for the accumulation of sperm. A possible symptom of the disease may be a feeling of heaviness in the scrotum and a rapidly increasing enlargement of the scrotum due to fluid retention. Note that pain and discomfort in the scrotum should also be seen as a legitimate cause for concern (Table 2).

Prevention of testicular cancer

Testicular cancer is classified as a rare cancer in men and accounts for approximately 1% of all malignant tumours. However, its incidence is increasing. Over the past 40 years, the incidence of this cancer has doubled [5]. According to the latest National Cancer Registry data for 2019, there were 1174 cases of testicu-

lar malignant neoplasm and 153 deaths from this cause during that time. It is noteworthy, however, that this type of cancer is most common in young men (20–44 years), as in 2019 it accounted for 23% of all cases and was the cause of 8% of cancer deaths among this age category (the most common being brain tumour – 14%) [6]. In order to achieve a significant improvement in the health status of modern societies, multidirectional action is needed, which will not only concern the development of innovative treatment methods. Great hopes are placed on health education, health promotion and prevention activities. The not inconsiderable costs of carrying out these activities, which fall on local governments or the state, represent a certain investment that will bring real savings in the near future by reducing expenditure on treatment, care and rehabilitation of people with health problems [7]. Preventive health care is a set of activities and strategies aimed at preventing disease and maintaining health. It focuses on preventing disease through lifestyle changes and increasing awareness of health risks. The main goals of health prevention are [8]:

- maintaining a healthy lifestyle,
- prevention of diseases,
- recognition of diseases at an early stage,
- timely implementation of treatment,
- prevention of possible consequences of diseases,
- slowing down the progression of diseases,
- increasing public awareness of specific diseases.

The cornerstones of early testicular cancer prevention are adequate nutrition and undertaking physical activity. These behaviours have a decisive impact on a person's health and well-being. Regular exercise and a proper diet have a positive impact on the functioning of the body and protect against the development of testicular cancer and other types of cancer [9]. In terms of diet, it is important to limit the consumption of meat and animal fats and to enrich the menu with foods rich in dry legumes (pumpkin seeds, sunflower seeds, etc.), vegetables and fruit, whole grains or

Table 2. The most common symptoms of testicular cancer [2]

Symptoms of cancer without metastases	
	Swelling or lump within the testicle
	Pain and discomfort within the testicle
	Increased size of the testicle
	A feeling of heaviness in the scrotum
	Change in the shape or texture of the testicle
	Excessive sensitivity of the testicle to touch
Symptoms of metastatic testicular cancer	
Back pain	Cancer metastases from the testicle often spread to the spine, causing back pain.
Enlarged lymph nodes	Cancer metastases can affect the lymphatic system and cause enlarged lymph nodes.
Haemoptysis, shortness of breath, coughing	When metastases spread to the lungs.
Headaches, visual and neurological examination disturbances	When the metastases are located in the central nervous system.
Bone pains	Resulting from metastases to the skeletal system.
Weight loss, fatigue, weakness	General symptoms of metastatic cancer.
High levels of alpha-fetoprotein and chorionic gonadotropin	Increased levels of tumour markers, as sometimes testicular tumours secrete these substances.

fish. According to the latest WHO recommendations, adults between the ages of 18 and 64 should undertake 150 to 300 min of moderate physical activity per week or 75 to 150 min of vigorous physical activity per week. Children and adolescents, on the other hand, should undertake moderate to vigorous physical activity for about 60 min a day [10]. Primary prevention (phase I) of testicular cancer involves the prevention of testicular cancer in individuals at risk, e.g. men with a history of testicular cancer or cryptorchidism in childhood. In these patients, it is necessary to perform an ultrasound examination and testicular palpation at least once a year to exclude the possibility of testicular cancer [11]. Testicular self-examination is the cornerstone of secondary (phase II) prevention, and experts recommend that boys should perform systematic testicular self-examination as early as 15 years of age. This examination takes just a few minutes and allows for early detection of possible conditions within the testicle. A study conducted in 2020 among 296 students at the University of Warmia and Mazury in Olsztyn found that young men are not sufficiently aware of testicular cancer and do not frequently perform testicular self-examinations. It is therefore important to increase their awareness of the disease and to motivate them to perform testicular self-examination [12]. This is a very easy procedure, but some details should be kept in mind. It is important to remember to choose a convenient time for such an examination. It is best to perform it dur-

ing or immediately after a warm shower or bath. At that time, the scrotal sac is maximally relaxed, so it is easier to feel changes in the testicular structure. This is of great importance because nodules can even be the size of a grain of rice, making it very difficult to locate them when palpation is performed [13]. Self-examination is a useful tool for detecting testicular cancer at an early stage, which offers the chance of a relatively high cure rate. It is estimated that around 90% of benign and malignant testicular conditions are diagnosed by men who perform self-examination regularly. It is therefore important that young men know about the possibility of early detection of testicular cancer and know how to perform the examination themselves [14]. Testicular self-examination consists of the following steps [15]:

1. Inspect the skin of the external genitalia for changes that may indicate cancer as well as other conditions.
2. Gently elevate the scrotal sac and check if any of the testicles have an increased mass or fluid in them.
3. Examine each testicle separately: gently roll the testicle through the fingers of both hands to check for any thickening, swelling or nodular structures. If the testicle is healthy, it should be smooth and the examination should not cause pain.
4. If any changes are noted, visit a specialist immediately for further diagnosis.

Psychological support is an extremely important part of phase III prevention. There are many facili-

ties and non-governmental organisations where men with testicular cancer can seek help during this difficult time for them and their families. It is certainly worth considering talking to a psycho-oncologist who deals with cancer patients on a daily basis. It is also worth turning to the Cancer Academy centres, which are spread throughout the country. There, it is possible to receive psychological help either through individual counselling or through participation in support groups [16].

Selected public awareness campaigns in the prevention of testicular cancer

In order to present and describe in an understandable way selected social campaigns aimed at testicular cancer prevention, it is necessary to first understand what a campaign actually is. As defined by the Foundation for Social Communication, a social campaign is a series of different activities which are [17]:

- implemented over a strictly defined period of time,
- aimed at a specific audience,
- designed to increase the level of knowledge, induce changes in thinking and behaviour relating to a specific social problem, or activities aimed at effectively solving a social problem that stands in the way of achieving the common good, which is referred to as a marketing objective.

Public awareness campaigns address various areas of society, including health and healthy lifestyles. The aim of campaigns in this area is to raise people's awareness of the existence of a number of diseases, to prevent them, to disseminate health-promoting attitudes, to support disease control activities and to improve the wellbeing of patients. This is achieved by creating messages based on a predetermined action. Communication relies on the ability to choose appropriate forms of communication, the effectiveness of which depends on the study of the target environment and the use of imaginative and creative methods [18].

Before describing the campaign, it is worth being aware that in Poland, as in the vast majority of countries around the world, November is the month when the topic of men's periodic check-ups is raised. The origins of the campaign can be traced back to Australia, where in 2003 Luke Slattery and Travis Garone decided to spread the fashion for growing a moustache. They ran a campaign to find out who among their friends could grow the biggest moustache. The condition for participation was to pay \$10 and encourage others to join in the fun. All proceeds went to a foundation supporting prostate cancer research. This led to the creation of the Movember Foundation – Movember being a portmanteau of Australian English 'mo' for moustache and November [19]. The foundation was created because it recognises that men are facing a health crisis that is not being talked about. It aims to

contribute to men living longer, healthier and happier lives. This objective lies at the heart of all its activities. It guides the campaign, the funding policy and the vision for the future. The ideas of the Movember foundation have been adopted in numerous countries around the world, including Poland [19–23] (Table 3).

Summary

Public campaigns on this issue have only recently become visible in the public space. It is noteworthy that three of these campaigns, with the exception of the "Łap jaja!" campaign (there was one edition in 2016), have successive editions taking place at regular intervals, with the most activity taking place in November, the month known as Men's Cancer Awareness Month [24]. These are nationwide campaigns. The objectives of the campaigns presented are consistent. The campaigns aim to increase men's awareness of testicular cancer prevention, education on self-examination and to break the taboo and stereotype of men not performing self-examination and not intending to take care of their health. Compared to the other campaigns, one of them, "Mosznowiądacy", stands out because, in addition to education, it also carries out testicular ultrasound examinations in numerous locations in Poland. Each campaign addresses two groups. These are both young men and their relatives, who can influence their attitude towards testicular cancer prevention. It is important to focus not only on those who may develop testicular cancer, but also on those who can raise awareness of the symptoms of concern. The name of each campaign mentioned is structured in such a way that it is directly or indirectly related to this important issue. "Łap jaja!" and "BadajAJKA" directly exhort men to "take matters into their own hands" and carry out a testicular self-examination. The name "Mosznowiądacy" indicates that men have power over their reproductive organs, while 'Brave wins' draws attention to the fact that only those who have the courage to examine themselves are able to gain health and ensure their continued life. It is noteworthy that the slogans of each of the presented campaigns are persuasive messages. They do not use scare tactics. It is worth noting that, while fear can get people to act, if it is too intense, it can have a demotivating effect and even lead to negative attitudes [25]. The campaigns presented here carry a positive message that encourages people to examine themselves and not to underestimate even the most trivial symptoms. This type of communication, where the persuader tries to persuade others to make certain behavioural modifications, create appropriate attitudes or change existing ones, as well as encouraging them to act, is extremely popular in health education [26]. According to A. Wójciuk, persuasive language makes the campaign message more attractive, interesting and original, and persuasive 'language tricks'

Table 3. Summary of selected testicular cancer campaigns

Type of information		Information	
Name	“ Odwazni wygrywają ” [20]	“ Mosznowladcy ” [21], until 2021 known as “ Movember Poland ”.	“ Łap jaja ” [22]
Slogan	<ul style="list-style-type: none"> – “Have the courage to be a man, check yourself!” – “The issue is an oval. It’s important that you look at it from the right side”. – “Reject stereotypes” – “He feels no shame, he wins when you neglect yourself” 	<ul style="list-style-type: none"> – “we do it for the eggs” – “#doItForEGGS” – “Your health is also what goes on in your head” 	“Examine the balls!”
Website	http://odwazni.com/	https://mosznowladcy.pl/	https://www.kochasz-dopilnuj.org/
Date of creation and subsequent editions	– 2009 The campaign is still ongoing, with the 13 th edition taking place in 2022.	– 2014 The campaign is still ongoing, with the 9 th edition taking place in 2022.	– 2016 The campaign had its beginning on 26 April 2016 and officially ended at the end of May of the same year. – 2019 The campaign is still active, with the 4 th edition taking place in 2022.
Scope	2009–2013 (in the tricity area) Since 2013 nationwide coverage	Nationwide	Nationwide
Implementer	Foundation “Gdynski Most Nadziei”	Foundation “Kapitan Świątekko”	Foundation “Kochasz dopilnuj”
Partners and partner organisations	<ul style="list-style-type: none"> – City of Gdynia – Lower Silesia Centre for Psychooncology and Rehabilitation – NGOs: Foundation “Światło” – Rossmann 	<ul style="list-style-type: none"> – Pharmaceutical company: Bayer – Insurance company: Nationale-Nederlanden – Bank: BNP Paribas – Shopping malls and shops: Atrium Promenada, Galeria Dominikańska 	<ul style="list-style-type: none"> – Online magazine about marketing and advertising: nowymarketing.pl – Social media monitoring and market analysis companies: Brand24, Sotrender – NGOs: Foundation “OnkoRejs”
Target audience	Mainly young men between the ages of 20 and 39, their relatives, partners, family members and friends.	All men, both young men at risk of testicular cancer and older men with poorer health and their relatives.	Men and their loved ones who can persuade them to get tested.

Table 3. Cont.

Information	
Type of information	Information
Purpose	<p>Enabling as many men as possible across the country to have free testicular and prostate examinations, which are carried out in November. Information on the ultrasound result is available immediately, while the PSA result, which can indicate prostate disorders, is available within 10 min.</p> <p>Raising awareness of cancer, breaking taboos, educating men about self-examination and, above all, increasing knowledge of the possibilities of early detection, preventing the disease and thus saving lives.</p> <p>Breaking the taboo of testicular cancer and persuading young men to undergo life-saving health and life-saving screening and getting them to learn the skills of testicular self-examination.</p> <p>Breaking the taboo that still exists in Poland, which is testicular screening, and educating Poles about health problems that men may face, such as testicular and prostate cancer.</p>
Tools used in the campaign	<p>Enabling as many men as possible across the country to have free testicular and prostate examinations, which are carried out in November. Information on the ultrasound result is available immediately, while the PSA result, which can indicate prostate disorders, is available within 10 min.</p> <ul style="list-style-type: none"> - Posters - Songs - Training courses - Lectures - Happenings <ul style="list-style-type: none"> - Posters - Testicular examination instructions available at website - Footage of internet celebrities, e.g. Yuri Drabent and Cyber Marian, encouraging testicular self-examination - Radio reports - Photoviews - Instructions on self-examination
Additional information	<p>The campaign also directs attention to mental health issues.</p> <p>The campaign has many ambassadors including singers and youtubers.</p> <p>The campaign also has ambassadors, including the Mayor of Gdynia, Wojciech Szczurek, and many other people with a connection to Gdynia.</p> <p>The catchy slogan "Catch balls!" led to countless memes using the slogan on the internet. Photos, videos etc. were posted online with the hashtag #catchballs, as well as a link to the campaign website, which made many people hear about the campaign.</p> <p>Many well-known personalities have joined the campaign, including actors, journalists and athletes. Campaign ambassadors include Jakub Kosecki, Maciej Zakościelny, Michat Zewlakow and Jakub Wiczorek.</p>
Evaluation data	<p>Since the start of the campaign, 18,000 men have been screened. Testicular cancer has been detected in 130, thus offering the possibility of a cure and saving lives.</p> <p>30 000 people have opened a testicular self-examination manual</p> <p>700 000 social media reach, including 5 000 shares</p> <p>The overall reach of this campaign is estimated at 2 million Poles</p> <p>numerous thanks from men who have had an ultrasound scan or started treatment</p> <p>Not found</p> <p>Not found</p>

affect the emotions of the addressees and increase the chance of achieving the campaign goal [27]. An extremely important feature of campaign slogans is a simple vocabulary. This is because recipients are more likely to make a decision, e.g. change their behaviour, if the text of a social campaign message is clear to them. Therefore, it is the simple, not very specialised vocabulary that appears most often in social campaign slogans [27]. Slogans from other campaigns can serve as examples: “Let’s kick racism out of stadiums” [28], “I love. I don’t beat” [29] and “Fag. Lesbian. Hate hurts” [30]. Of the four campaigns described, only two included information on the evaluation of their processes and results. Process evaluation is concerned with overseeing the implementation of activities, while outcome evaluation examines the extent to which objectives were achieved [31]. The fact that evaluation data for the other two campaigns were not included does not necessarily mean that such an evaluation was not carried out. It may be that these data are not publicly available or have been removed from the campaign website. It is also possible that such data are not available, due to the difficulty of obtaining them. According to Woynarowska, the evaluation of the results (outcomes) of health education as well as prevention programmes and health promotion projects is a difficult task. This may be due, among other things, to the fact that their goals are usually complex and many indicators, often difficult to measure, must be used to evaluate their implementation; the effects of these undertakings are influenced by many factors concerning the individual (internal) and the environment (external), the effects may be distant in time (changing attitudes and behaviours is a process that takes longer) [31]. According to Jacennik, a properly conducted evaluation should show cause-effect relationships between specific elements of a campaign and the achievement of particular goals, while the conclusions drawn from this analysis should be used in developing strategies for subsequent social campaigns so that the project can achieve long-term results. Properly executed evaluation is the essence of a properly conducted social campaign [32]. Public health campaigns are targeted communication activities that aim to solve or reduce social problems by changing the attitudes or behaviours of specific target groups. Public health campaigns can be seen as one form of health communication, being an essential part of most public health interventions [33, 34]. Some people consider them as a form of education. According to Duplaga, it is sometimes difficult to distinguish between health education and health communication interventions. This author considers the inclusion of planned forms of learning and teaching in interventions as a distinguishing feature between health education and health communication [35]. According to the definition provided by Schiavo, health com-

munication is a multidisciplinary and multifaceted approach that aims to reach and communicate health information to multiple audiences (individuals and communities, health professionals, groups of people with special needs, decision-makers (policy-makers) and the general public) in order to influence, involve and support them to improve, adopt or continue behaviours, procedures or policies that ultimately lead to better health outcomes [36].

A study of men’s ($N = 379$) attitudes towards their health, presented in the Siemens report “Health – A Male Thing”, found that men [36]:

- attached less importance to their health than women, were less likely to eat healthily, pay attention to sleep and rest, and were less likely to go to the doctor for check-ups,
- they were less likely to undergo medical examinations, especially preventive ones, and their level of knowledge was low,
- rarely initiated discussions about their health, did not perceive much public interest in their difficulties, and pointed out the scarcity of information campaigns and prevention activities undertaken (the opposite of what is done for women),
- strongly emphasised the desire and, at the same time, the need to use medical professionals. When talking about their relationship with doctors, they particularly emphasised the importance of commitment, fair treatment, feeling safe, and not being blamed for their current condition. They expected an explanation of their situation and further treatment methods. Nevertheless, the emotional aspect proved to be important – the impression of being treated mechanically, of the doctor dominating and taking control of the situation, did not allow for a good doctor-patient relationship.

The report points out that illness is a traumatic experience for men in many aspects, i.e. personal, family and social. For a significant proportion of men, it results in lowered self-esteem, loneliness and sometimes outright exclusion. Men most often try to hide their condition from those around them; it is a very private issue that they feel embarrassed about. For both groups of men, young and old, male cancer (testicular cancer, prostate cancer) and impotence are among the illnesses associated with the strongest emotions. The men who took part in the study recognised that these conditions can make them feel incomplete, which significantly affects their psychological sphere. Therefore, support from a variety of sources, including those closest to the patient, plays an extremely important role [29, 37]. The study presented above was seen as interesting as it shows that men are a specific group of patients and need a specific approach. In order to reach them, it is necessary to know and understand them thoroughly and only on this basis develop health interventions that take their specific attributes

into account. The social campaigns targeting men discussed in this article are evidence that interest in their health has increased over the past decade and that preventive interventions have been tailored to their needs and specificities. It would be interesting to explore whether men are currently aware of this.

Conclusions

Testicular cancer is a difficult experience for a man personally, familiarly and socially. If diagnosed and treated at an early stage, there is a good chance of a cure. There is therefore a need to educate men and their relatives about the condition and encourage them to carry out a testicular self-examination. Social campaigns implemented in the public space may be useful for this purpose. In Poland, there have been at least four campaigns on this subject in the last decade or so. Effective health communication and effective men's health education require learning about and understanding men as patients and adapting interventions to their specific characteristics. It is necessary to prepare and improve the staff dealing with these issues (e.g. doctors, public health workers) and to cooperate in interdisciplinary teams.

Conflict of interest

The authors declare no conflict of interest.

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