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## Managing the attitudes of breast cancer patients towards physical activity in a multicultural environment

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**Key words:** breast cancer, cancer treatment, cancer prevention, cancer diagnostics, oncology, physical activity, cancer epidemiology

**Abstract:** Based on a review of literature, the article presents the main problems and barriers in the diagnostics, treatment and prevention of breast cancer among women representing various cultures, mainly those following Islam and Hinduism. Hospitals and oncology centers that serve diverse populations should consider the religious needs of female breast cancer patients which have been described in this paper. The burden of breast cancer continues to increase in low- and middle-income countries, where women present with more advanced disease and have worse outcomes compared with women from high-income countries. Moreover, lifestyle-associated factors play an important role in prevention of such malignancies as breast cancer. Physical activity before, during and after diagnosis improves outcomes for breast cancer. Unfortunately, few Muslim women have opportunities to

participate in regular exercises which are recommended by World Health Organization for breast cancer survivors.

## **Introduction**

Cancer is a global issue and an increasing number of patients live with malignancy. The number of cancer cases is expected to increase by almost 50% by 2040 (Sung et al. 2021). Breast cancer is the most common malignancy among women both in less and more developed countries and the number of cases is gradually increasing. The burden of breast cancer continues to increase in low- and middle-income countries, where women present with more advanced disease and have worse outcomes compared with women from high-income countries (Gyedu et al. 2017). In Muslim parts of the world, where neither are people much focused on the type of food they consume nor have a habit of going to doctor regularly and get routine checkups, breast cancer becomes unbeatable in most cases as by the time it is diagnosed, the situation is already out of the hands. This is exactly why is needed to aware people about the disease and how they can save themselves or their loved ones by observing certain symptoms themselves before it is too late.

Lifestyle-associated factors play an important role in prevention of such malignancies as breast cancer, prostate cancer or colon cancer. Physical activity before, during and after diagnosis improves outcomes for breast cancer (Jochem & Leitzmann 2022). People after breast cancer live with numerous side effects and physical activity has potential to reduce some of them. Unfortunately, few breast cancer survivors exercise regularly, especially in Islamic cultural circle. It is estimated that 9 in 10 cases of breast cancer are due to non-genetic factors, and approximately 25% to 30% of total breast cancer cases could be preventable only by lifestyle interventions. Obesity and weight gain are negative prognostic factors for breast cancer survival (Ortega et al. 2021). The number of breast cancer survivors increases every year and women after breast cancer live with numerous side effects. Exercises – effective and safe tool – reduce some of them, but few cancer survivors are active regularly (Casla et al. 2015, Galanti et al. 2013, Johansson et al. 2013).

Breast cancer is the second most common malignant neoplasm in the world after lung cancer. It ranks fifth in the cause of death from oncology illness in general and is the most common cause of death among women in less developed countries, and the second, after lung cancer, in women in more developed countries of the world. The growing number of cases of breast cancer and the negative consequences of the disease impair not only the physical and

social functioning of patients and their relatives, but also – due to the scale of the disease and the importance of this cancer – negatively affect the economics of the healthcare system and economic phenomena in a broader sense (Smaga et al. 2014). It is crucial to maintain, promote and improve the mental and physical conditions of women after breast cancer and their quality of life in every cultural circle of the world.

### **1. Breast cancer diagnostics**

Breast cancer screening programmes are the only adopted programme in most Arab countries. Unfortunately, studies showed a very low rates of breast cancer screening adherence among women in Saudi Arabia, a country with free health services, which indicates that social and psychological barriers to breast cancer screening exist (El Bcheraoui et al. 2015).

Muslim women in Ghana were found to be less likely to participate in breast health activities compared with Christian women, which highlights the need to consider how religious customs within subpopulations might impact a woman's engagement in breast health activities (Gyedu et al. 2017).

In U.S., 50% of Muslim-American women undergo routine mammograms, compared with 67% of the rest of the U.S. female population. A pilot program in Chicago looked at whether mosque-based education programs could improve breast cancer screening rates in the community. Muslim women often don't have access to breast cancer information – the standard public health messaging doesn't address concerns related to religious beliefs. The Koran was written ages before modern medicine, but Islamic belief still influences community perceptions about human health – there is a theological view that God controls disease and cure. During intervention programmes at mosques women held a fatalistic belief that a person's health is out of her own control and determined by God. There were other cultural challenges as well. Concerns about modesty and gender concordance played a role. Some women were unaware that many health clinics have female technicians on staff and that religious leaders agree that it is permissible to receive care from male medical professionals when there are no other options. Muslim women reported being significantly more likely to get a mammogram than they had been before participating in the pilot programme ([www.newsweek.com](http://www.newsweek.com)).

Hospitals that serve diverse populations should consider the religious needs of female patients. Hospitals and cancer centers should, for example, provide physician staff of women

as well – surgeons, diagnosticians, etc. Oncology centers should also collaborate with religious centers for educational purposes. Community-based health education programs at mosques have the potential to make a big difference in women's health. However, some mosques are lit in pink lights as a part of the breast cancer awareness campaign, but this practice offended certain segments of the society who thought that talking about breast cancer is inappropriate and use of mosque to raise awareness about a ‘taboo’ topic is offensive ([www.blog.siasat.pk](http://www.blog.siasat.pk)).

## **2. Breast cancer treatment**

In Algeria, breast cancer survivors are shunned as half-women. Hundreds of women have been abandoned by their partners after undergoing a mastectomy and suffer in secrecy. Women sometimes are without a roof over their heads so end up in shelters. Theologians insisted men rejecting their wives after they have a breast removed is un-Islamic. It has nothing to do with religion, it's education – Islam urges spouses to support each other, and an honorable man should look after his wife ([www.timesofisrael.com](http://www.timesofisrael.com))

Breast cancer is the most commonly diagnosed cancer among women in the Kingdom of Saudi Arabia and other Middle East countries. The analytical cross-sectional study assessed knowledge, attitude towards breast cancer, and barriers to mammogram screening among 414 randomly selected female healthcare workers from multiple healthcare facilities in northern Saudi Arabia. Of the studied population, 48.6% had low knowledge, and 16.1% had a low attitude towards breast cancer risk factors and symptoms. The common barriers to mammogram screening were fear to discover cancer (57.2%) and apprehension regarding radiation exposure (57%) (Alenezi et al. 2022).

Problems with effective breast cancer treatment exist also in other cultures, not only Islamic. Women in rural India delay seeking treatment for breast cancer mostly due to high costs of care and many of them have not even heard of the fatal disease. As many as 90% of women were unaware of the possibility of self-examination of their own breasts. The delay in diagnosis and treatment for more than twelve weeks was seen for 23% of patients. The most common reason why women had not sought care earlier was that they had not felt any pain in the breast lump ([www.deccanherald.com](http://www.deccanherald.com)).

Moreover, there are many cultural (not necessarily religious) barriers in India for women who are not allowed to be active, e.g., practice outdoor sport. Among other things,

parents of girls are afraid that their daughter's skin from the sun will get even darker – skin color is a big problem, because dark shade is not considered beautiful in this culture. In western countries, tan is admired, but in India it may suddenly turn out that a woman is too tanned to be an attractive wife candidate (Malchrowicz-Moško et al. 2021). Ishita Malaviya is a famous surfer in India who acts now for feminization of this sport.

In Indian culture, serious diagnoses like cancer are often kept secret. Some of that shame comes from the fact that in Hinduism, people believe in *karma*. People choose to not share cancer news because they feel like they're paying for their sins, and they must have done something horrible. So it's extremely complex ([www.breastcancer.org](http://www.breastcancer.org)).

Pakistan has the highest rate of breast cancer in Asia, and trends suggest that this is likely to increase unless more is done to remove barriers to early screening. According to the World Health Organization (WHO), nearly 26,000 women in Pakistan were diagnosed with breast cancer, and over 13,500 women died of the disease, in 2020. In Pakistan, some women do not share their health issues with others and are too shy to go for any kind of breast examination. Pakistan's patriarchal culture and taboos over women's bodies were primary factors behind late breast cancer diagnosis. A patient was driven to tears explaining how her husband said she had "become a man" after her breasts were removed in life-saving surgery. The unmarried believe just going to seek diagnosis could scupper their chance of finding a man ([www.hindustiantimes.com](http://www.hindustiantimes.com)).

The study conducted by Banning et al. emphasizes the issue of psychological isolation and loneliness during chemotherapy among women in Pakistan ([bura.brunel.ac.uk](http://bura.brunel.ac.uk)).

The excess risk of breast cancer among Jewish women has been attributed to the effects of difference in lifestyle and reproductive patterns, but there is now evidence that Jewish women may be more likely than other women to inherit mutations in breast-cancer genes (Egan et al. 1996).

There is also a big problem with feminization of medical staffs in Islamic countries. Some Muslim women claim they are being denied the chance of pursuing their dream of a career in surgery as they are torn between their religious beliefs and dress code policies – some are experiencing bullying and harassment as a result of their religious observance. Some women have abandoned their dream of working in surgery or a hospital setting as a result of a lack of clarity and feeling uncomfortable by dress codes. Muslim women were discouraged from pursuing acute medical and surgical careers and instead opting for primary care roles as a result of the pressures in complying with hospital dress codes ([www.huffingtonpost.co.uk](http://www.huffingtonpost.co.uk)).

People working with patients of different faiths, especially social workers, nurses, doctors and therapists, should have at least a basic set of information on the canons of dealing with representatives of other faiths and cultures. The word "Islam" in Arabic means full surrender, submission and obedience to God (Arabic: Allah) and full and unconditional acceptance of what God revealed to His prophet Muhammad. A Muslim is a person who believes in God and submits himself to Him – both in health and in sickness. Muslim women expect that they will also be examined by women, and if this is impossible, she should be accompanied by her husband or another member of her family (preferably also women). In Islam, it is forbidden to eat food with the left hand, so if the right is not activated, help the patient to eat food during her hospital stay. Halal kitchen is a pork-free kitchen. Fasting while in hospital is an important issue. A Muslim woman in the hospital will want to pray five times a day, each time washing herself first. They will need a place to put up a rug, where they will point their head towards Mecca. They also need contact with and visits from their spiritual leader. Also at the time of imminent death, Muslims are trying to turn their face towards Mecca (Pruszyński et al. 2013).

A medical worker should know about some behaviors of Muslims that do not indicate a lack of culture on their part or that they are only reluctant: downcast, not shaking hands to say hello or goodbye. Muslim women cannot be alone in a room with another man - e.g. a doctor - except for their own husband. It is also worth remembering not to "touch" the head of the sick "with tenderness", as Muslims do not tolerate it. Christian icons (cross, pictures with saints) should be taken from the room where the patient is. Muslims are required to visit the sick in the hospital. Muslims do not take alcohol-based medications. If the patient fastes, eats food and drinks only before sunrise and after sunset, the patient may refuse to take medication during the day (Kostka et al. 2017).

### **3. Physical activity – breast cancer prevention**

Scientific literature has analyzed the impact of Islam on women's participation in sports, but researchers do not agree on the nature of this impact. Old traditions say that Muhammad raced with his wife Aisha and encouraged parents to teach their children swimming, horseback riding and archery so in early Islam there was a positive attitude towards sports (Walseth and Fasting 2003). Nasr added that Persian miniatures show Muslim women playing polo together with men in the same field (Nasr 2004). Muslims highly value strength, fitness, beauty, and body hygiene. In the 21st century, some sociologists and

anthropologists even claim that Muslim women should be obliged to participate in some sports (Pfister 2006).

Physical activity and sport can also be seen as important because Islam emphasizes the importance of being in good physical condition in case of war. Today, Islam does not prohibit women to practicing sport directly, but it imposes huge restrictions on their clothing and behavior. Scientific literature has analyzed the impact of Islam on women's participation in sports, but researchers disagree on this impact's nature. The sources have been analyzed differently, depending on the interpretation. The problem is that Muslims themselves interpret religious messages differently, which translates into the formal participation of women in sports. Despite the fact that Islam encourages Muslims to practice sport, there are low participation rates among Muslim women and girls in Muslim countries. The main problem is the use of the uncomfortable veil or the necessity of gender segregation. The consequences are that Muslim women have to do physical activities at home, or in gender-segregated training studios. The next problem is that according to Islam teachings, women should not do sport movements which could be sexually exciting for men who watched them. Women can create *fitna* (which means temptation) by participating in sport activities where men can watch them.

If sport is allowed, it should not distract a Muslim from matters such as religion. Sports should go hand in hand with spiritual and moral exercises. According to some theologians, Islam sees sports as a means of cooperation, so competition should be very fair, and one should not be overly happy about winning (Pachniak 2016).

To date, two dominant trends can be seen in the research on the relationship between women's sport in Islam. The first tendency is works that show the Islamic religion's positive attitude to physical activity and sport. Such articles recall how the Prophet Muhammad recommended that Muslims be physically active and play sports. As an example, scientists give Hadith, in which Muhammad calls his wife to run. In this Hadith, Muhammad runs with his wife, races with her, enjoys it, and sets a positive example for their companions. This is an important Hadith for Muslim women because it shows that the Prophet accepted a running woman. Other hadiths also indicate that Muslims should also have some free time to maintain balance. Being physically fit can also be good because Islam appreciates good physical condition (in war). In the Quran, Allah wished to have strong Muslims and claimed that a strong Muslim is a better and more beloved by God than a weak, but both are good (Qaradawy 1992; Walseth and Fasting 2003).

In Muslim cultural circles, the percentage of societies' participation in physical activity is still low. Such trends are shown in the second category studies, which describe the low proportion of Muslims in the sport with a particular focus on women and try to explain why the percentage of active men is higher. Different sports conditions that Muslim women must face about the Western cultural circle representatives are also described (Toffoletti and Palmer 2017). An example of such analysis is an insufficient physical activity among young Muslim women in the United Arab Emirates (Berger and Peerson 2009).

In literature review we may find that Muslim women usually think that some sports like basketball are OK in front of men if the woman's body is covered but during dancing or aerobics you have to be segregated from men. Aerobics demands that you have to lift your legs high and so that can be exciting for men. Muslim women often add: Also running is not OK in front of men because your body shakes when you run, and men can be attracted. Various Islamic religious interpretations create numerous social barriers in sport. According to Islam, "women have a strong sexuality and compared to men, women are more often viewed as less moral, because they are believed to have less control over their sexuality". Women in Islam are considered people who like to arouse lust more than men, affecting social chaos. The debate about womens' participation in sport has proved controversial, and Islam has undoubtedly a large impact on women's physical activity (and health) (Astad 1993, Walseth and Fasting 2003).

Some Muslim families see sports as an unnecessary waste of time. They consider education more important than sport. Family influence has a major impact on young women's participation in sports in non-Muslim countries as well. Research shows that Arabic women are strongly influenced by the process of cultural maintenance and identity with their parent's ethnic group (Abdul-Razak and Omar-Fauzee, Abd-Latif 2010). Women spend most of their free time with family at home. Due to a small number of physical activity programs, participation in sports is limited in some communities. Sport team managers may find it difficult to convince parents to allow their children to participate in physical activity. However, outstanding athletes are more likely to get a better education, and this argument convinces some Muslim families to agree to their daughters' physical activity.

For Muslim women which prefer swimming the burkini was designed. Burkini combines a bikini with a hijab. Nike designed "Pro Hijab" for safety and comfort during intensive exercise and sports competition. The clothing was tested by elite athletes and the advertising campaign included the Olympic athletes.



Muslims are not allowed to practice yoga. The reason is that yoga contains elements of the Hindu religion that can ruin the faith of Muslims. In our culture, yoga is considered a modern form of fitness which helps us in improving our well-being. However, it can be said that Muslims have been practicing yoga for over 1,400 years – yoga poses are performed by Muslims during their daily prayer.

The situation of women and women's sport is different depending on countries, cultures, social backgrounds and religious orientations. Usually not Islam per se, but traditions, environments and socio-economic conditions may prevent girls and women to participate in competitive sport, and sport for all. It is crucial to maintain, promote and improve the physical condition of women after breast cancer and their quality of life in every cultural circle of the world.

### **Summary**

Everyone, regardless of their age, sex, social status, religion and the environment they come from, has the right to medical care and, above all, to equal treatment. The tasks of the medical staff include ensuring the patient's safety, proper conditions for prayer and keeping clean, as well as taking care of the diet, excluding prohibited products. Intercultural education training for doctors, oncologists, surgeons, physiotherapists, nurses, etc. is needed (Kostka et al. 2017).

Population migrations and globalization have made the followers of different worldviews meet more often than ever in history. Religious issues are linked to the deepest human experiences and feelings. Let us try to express not only professional concern in medical procedures, but also respect for other attitudes and values (Pruszyński et al. 2013).

In Muslim parts of the world, where neither are people much focused on the type of food they consume nor have a habit of going to doctor regularly and get routine checkups, breast cancer becomes unbeatable in most cases as by the time it is diagnosed. Unfortunately, the situation is already out of the hands.

Physical exercise is recommended in every phase of cancer treatment and may reduce undesirable symptoms related to the circulatory, respiratory, nervous and digestive systems. Physical exercise also has a beneficial effect on reducing the level of fatigue in cancer fatigue syndrome, which is one of the most common undesirable symptoms of oncological treatment. In this difficult situation the gradual introduction of regular physical activity may be the only way to break the vicious cycle in which fatigue, being a symptom of low performance, also

becomes a reason for avoiding movement. In 2020, World Health Organization (WHO) issued official recommendations that adult cancer patients should perform the same weekly dose of PA as fully healthy people (*WHO* 2020). Unfortunately, few Muslim women participate in regular physical activity before and after cancer.

Exist many opportunities of Muslim women to participate in sport and physical activities and the barriers they face in competitive sport as well as in sport for all. Although there has been an increase of female athletes from Islamic countries in the last decades, Muslim women are still a small minority also among the athletes in international sport events such as the Olympic Games. In 2021, Mahjabneen Hakimi – Afghanistan's volleyball player was murdered by the Taliban – they don't accept female sport at all.

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