



Awareness and Attitude of the Population of Karachi towards Stigma Associated with Cancer

Burhanuddin Tahir¹, Akhtar Ali^{2*}, Anshahrah Riaz¹, Zuleikha Yousuf¹, Sara Qadir¹ and Nehal Waseem¹

¹Ziauddin University, Pakistan.

²Department of Pharmacology, Ziauddin University, Karachi, Pakistan.

Authors' contributions

This work was carried out in collaboration among all authors. The concept of study, data analysis, drafting, and finalizing of the results were done by authors BT, ZY, AR. The article was critically reviewed, finally drafted and approved by author AA. Data collection and entry on SPSS was facilitated by authors SQ and NW. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JAMMR/2020/v32i1930668

Editor(s):

(1) Rosaria Meccariello, Università di Napoli Parthenope, Italy.

Reviewers:

(1) J. Madhusudhanan, Aarupadai Veedu Institute of Technology and Vinayaka Mission's Research Foundation, India.

(2) Nikolaos Nikiteas, National and Kapodistrian University of Athens, Greece.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/61892>

Original Research Article

Received 14 September 2020

Accepted 15 October 2020

Published 21 October 2020

ABSTRACT

Background: Cancer related stigma arises due to an amalgamation of certain myths, lack of understanding and religious and social beliefs that vary across different cultures. Despite the widespread availability of information regarding the characteristics of this disease and the ever-growing technological advances, cancer still remains a taboo with the cultural stereotype of its diagnosis being equivalent to a death warrant or penalty for unethical conduct.

Objectives: This research aims to assess the prevalence of cancer stigma in the general population of Karachi and explores the different perceptions and misunderstandings of people regarding cancer patients.

Methodology: It was a cross sectional study conducted at Ziauddin University from July to August 2020. The calculated sample size at 50% proportion was 385 and convenient sampling technique was used to recruit the required sample. Data regarding demographics was collected by a self-administered questionnaire and cancer stigma scale was used to identify the awareness and attitudes.

Results: n= 174 (60.8%) responded as yes. n=126 (44.1%) participants mentioned that their close relatives have suffered from cancer. When asked about cancer awareness most of the study participants seemed to be aware of diseases. However n= 115 (40.2%) responded that cancer ruins the life of the sufferer. When the participants were asked about cancer stigma, they disagreed and showed that they do not have any fear from cancer patients.

Conclusion: The population of Karachi was not having any stigma related to cancer and their attitude towards cancer patients according to the questionnaire seemed to be very positive and humanitarian.

Keywords: Cancer; stigma; awareness; attitude; Karachi population.

1. INTRODUCTION

Cancer is one of the main causes of ill-health and fatality across the globe [1]. Apart from the debilitating effects it has on the afflicted person, it also involves psychosocial concerns, one of which is the stigma faced by the victims, their family members and friends [2]. This health-associated stigma can be defined as “a social process or related personal experience characterized by exclusion, rejection, blame or devaluation that results from experience or reasonable anticipation of an adverse social judgment about a person or group identified with a particular health problem” [3]. It is believed to be a multifaceted concept that involves different types such as physical, characteristic and communal stigma [4,5]. Cancer related stigma arises due to an amalgamation of certain myths, lack of understanding and religious and social beliefs that vary across different cultures [6]. Despite the widespread availability of information regarding the characteristics of this disease and the ever-growing technological advances, cancer still remains a taboo with the cultural stereotype of its diagnosis being equivalent to a death warrant or penalty for unethical conduct [7-9].

Undoubtedly, the intricate outcomes of a cancer diagnosis affect the patient as well as their family caregivers who experience immense emotional and psychological distress as they try to cope with the shocking news of their loved one [10]. With a change in cancer treatment from a hospital-based setting to outpatient care, the attitudes and behavior of caregivers towards the cancer patients plays a pivotal role in determining their health outcomes [11]. Studies regarding the behavioral prospect of stigma have highlighted that people deliberately distance themselves from cancer victims due to inevitable embarrassment and self-consciousness over the fear of the illness being contagious [12]. Often in response to feelings of vulnerability and hopelessness, family caregivers hide how they

really feel and this hampers communication between them and the cancer patient, subsequently damaging family relations and overall dynamics [13,14]. Many also report more concern over cancer relapse than the survivor and admit to facing difficulties while talking about disease prognosis and death in terminally ill patients [15,16]. In the instance of lung cancer, the relationship between the disease and smoking gives rise to the health-associated stigma, with the common notion of the illness being “self-induced” thus, making the individual liable to suffer the consequences of their shameful disease [17].

A qualitative research carried out in India observed that the social stigma of assuming that breast health concerns were due to disgraceful conduct lead to individuals concealing their breast cancer symptoms [18]. Therefore, stigma is gradually becoming a very crucial obstacle and essential determining factor of health [19]. It does not only affect the cancer victims but also harms national and global measures to decrease the burden of cancer in the community [20]. Most researches have emphasized on the stigma felt by cancer patients but only few studies have focused on the non-patient population [21]. This research aims to assess the prevalence of cancer stigma in the general population of Karachi and explores the different perceptions and misunderstandings of people regarding cancer patients.

2. METHODOLOGY

It was a cross sectional study conducted at Ziauddin University from July to August 2020. The calculated sample size at 50% proportion was 385 and convenient sampling technique was used to recruit the required sample. Data regarding demographics was collected by a self-administered questionnaire and cancer stigma scale was used to identify the awareness and attitudes. General population, mostly attendants

of patients who visited the Ziauddin university hospital were approached by the team of authors to fill the proforma, prior to that objectives of study were described. Data was analyzed by using SPSS v.20 chi square test was applied as test of significance.

3. RESULTS

The received responses which were duly filled were 285 on which we analyze the data. There were n = 130 (45.5%) males and n = 156 (54.5%) females who participated in the study. The predominant age group was 18-25 year n = 232 (81.1%). Most of the participants were students n = 205 (71.7%) studying in different professions, followed by elders belonging to different professions n= 54 (18%) and health care workers 16 (5.6%). On asking the question “Have any of your close relatives or close friends suffered or are suffering from a chronic illness?” n= 174 (60.8%) responded as yes. n=126 (44.1%) participants mentioned that their close relatives have suffered from cancer. When asked about cancer awareness most of the study participants seemed to be aware of diseases however n= 115 (40.2%) responded that cancer ruins the life of sufferer. Further results are highlighted in Table 1.

The response regarding cancer stigma showed that participants know that it is not a communicable disease, they can talk about cancer with the sufferers easily, they feel comfortable around a person with cancer and they disagreed to avoid a person with cancer. Table 2 shows the frequency and percentages of responses on cancer stigma scale.

4. DISCUSSION

Stigma related to communicable diseases is common among people. However, stigma related to life threatening non communicable diseases such as cancer seemed to be very usual not only in sufferers but it seems to be prevalent among the family members of the patients as well. Our study identifies that the stigma associated with cancer in Karachi is substantially low. This was supported by a pattern of disagreement observed in the majority of the population (42-59%) on statements regarding the severity of cancer i.e. if one cannot be normal again once diagnosed, a cancer patient should mentally prepare oneself for death and that the patient is to be blamed for their condition. According to surveys conducted in the United Kingdom, significant prevalence of stigma amongst lung cancer patients was reported with far reaching consequences [22]. Furthermore, women of all ages were likely to feel stigmatized due to noticeably changed appearance [23]. A population based study in England revealed that the stigma is generally low but still exists with some aspects more prevalent than others is higher in men and those from ethnic minority backgrounds and is negatively associated with cancer screening. In addition, the current study highlighted that stigma varied by subdomain, with lowest agreements on statements regarding avoidance, awkwardness, and personal responsibility, but higher agreements on statements about policy opposition, acceptability of financial discrimination and severity of a cancer diagnosis [24]. In contrast, statements mentioning that cancer ruins one’s career and devastates lives attracted highest levels of

Table. 1 Depicts the awareness regarding cancer in general population

Question	Strongly Agree F (P)	Agree	Not Sure	Disagree	Strongly Disagree
Once you have had cancer you can never be 'normal' again.	13 (4.5%)	72 (25.2%)	27 (9.4%)	133 (46.5%)	41 (14.3%)
Getting cancer means having to mentally prepare oneself for death.	19 (6.5%)	78 (27.3%)	21 (7.3%)	125 (43.7%)	43 (15%)
A person with cancer is to be blamed for their condition.	4 (1.4%)	18 (6.3%)	24 (8.4%)	71 (24.8%)	169 (59.1%)
Having cancer usually ruins a person's career.	18 (6.3%)	115 (40.2%)	36 (12.6%)	86 (30.1%)	31 (10.8%)
Cancer usually ruins close personal relationships.	8 (2.8%)	49 (17.1%)	34 (11.9%)	122 (42.7%)	73 (25.5%)
Cancer devastates the lives of those it touches.	44 (15.4%)	123 (43.0%)	31 (10.8%)	60 (21.0%)	28 (9.8%)

Table 2. Frequency and percentages of Cancer Stigma Responses among Karachi population

Question	Agree F (P)	Disagree	Not sure
I would feel at ease around someone with cancer.	193 (67.5%)	39 (13.6%)	54 (18.9%)
I would feel comfortable around someone with cancer.	211 (73.8%)	36 (12.6%)	39 (13.6%)
I would try to avoid a person with cancer	12 (4.2%)	248 (86.7%)	26 (9.1%)
I would feel angered by someone with cancer.	3 (1.0%)	279 (97.6%)	4 (1.4%)
I would find it hard to talk to someone with cancer.	26 (9.1%)	235 (82.2%)	25 (8.7%)
I would feel embarrassed discussing cancer with someone who had it.	65 (22.7%)	181 (63.3%)	40 (14.0%)
I would physically distance myself from someone with cancer.	11 (3.8%)	254 (88.8%)	21 (7.3%)
If a colleague had cancer, I would try to avoid them.	9 (3.1%)	265 (92.7%)	12 (4.2%)
The needs of people with cancer should be given top priority.	248 (86.7%)	11 (3.8%)	27 (9.4%)
We have a responsibility to provide the best possible care for people with cancer.	278 (97.2%)	5 (1.7%)	3 (1.0%)
More government funding should be spent on the care and treatment of those with cancer.	262 (91.6%)	7 (2.4%)	17 (5.9%)
It is acceptable for banks to refuse to give loans to people with cancer.	39 (13.6%)	197 (68.9%)	50 (17.5%)
Banks should be allowed to refuse mortgage applications for cancer related reasons.	41 (14.3%)	165 (57.7%)	80 (28.0%)
It is acceptable for insurance companies to reconsider a policy if someone has cancer.	106 (37.1%)	108 (37.8%)	72 (25.2%)

agreement (40-43%). Another similarity between studies conducted in England and Karachi is that the feelings of awkwardness and the desire to avoid cancer patients are remarkably low. According to our survey, only 3–4% of the general populations anticipate avoiding someone with cancer, although feelings of awkwardness were slightly higher and endorsed by 9–12%, however these were still lower than that of England.

About 6.3% of the population endorsed statements about personal responsibility for cancer. An estimated 40% of the cancers are due to lifestyle choices [25] and public health campaigns are increasingly raising awareness of the association between changeable elements of risk and cancer to enhance the cancer prevention effort. However, an inadvertent result of this may be that over a period of time cancer could be perceived as self-inflicted. This form of “victim blaming” may be evident in lung cancer patients because of the conventional association with smoking [26,27], but may become apparent for other cancers as well once other modifiable cancer risk factors, such as obesity, poor diet, and alcohol consumption, become understandable to the general masses. A study conducted earlier revealed that some cancers

prompt more stigma than others [28]. Different cancers also have different etiologies, and the extent to which the masses are aware of this varies, so studies to be conducted in the future should identify associations between knowledge, stigma and behavior for particular cancer types.

5. CONCLUSION

The population of Karachi seemed to be aware regarding cancer that it is not a communicable disease which can be transmitted via direct contact. They did not show any stigma related to cancer and their attitude towards cancer patients according to the questionnaire seemed to be very positive and humanitarian.

6. LIMITATIONS

Most of the participants of this study were well educated and it was a single center study.

CONSENT

Written informed consent was taken from participants.

ETHICAL APPROVAL

Study was approved by ERC of Ziauddin University. Ethical approval was taken from Ziauddin University.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, et al. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *Int J Cancer*. 2015;136(5):E359-86.
2. Hasan Shiri F, Mohtashami J, Nasiri M, Manoochehri H, Rohani C. Stigma and Related Factors in Iranian People with Cancer. *Asian Pac J Cancer Prev*. 2018 Aug 24;19(8):2285-90.
3. Weiss MG, Ramakrishna J. Stigma interventions and research for international health. *Lancet*. 2006;367(9509):536-8.
4. Marlow LA, Wardle J. Development of a scale to assess cancer stigma in the non-patient population. *BMC Cancer*. 2014;14:285.
5. Ahmad MM, Musallam R, Habeeb Allah A, Al-Daken L, Abu-Snieneh H, Al-Dweik G. Maturity Level of the Stigma Concept Associated with Cancer Diagnosis in the Nursing Literature. *Asian Pac J Cancer Prev*. 2018;19(2):479-85.
6. Ahmad MM, Musallam R, Habeeb Allah A, Al-Daken L, Abu-Snieneh H, Al-Dweik G. Maturity Level of the Stigma Concept Associated with Cancer Diagnosis in the Nursing Literature. *Asian Pac J Cancer Prev*. 2018;19(2):479-85.
7. Vrinten C, Gallagher A, Waller J, Marlow LAV. Cancer stigma and cancer screening attendance: a population based survey in England. *BMC Cancer*. 2019 Jun 11;19(1):566.
8. Ahmad MM, Al-Gamal E. Predictors of cancer awareness among older adult individuals in Jordan. *Asian Pac J Cancer Prev*. 2014;15(24):10927-32.
9. Oystacher T, Blasco D, He E, Huang D, Schear R, McGoldrick D, et al. Understanding stigma as a barrier to accessing cancer treatment in South Africa: implications for public health campaigns. *Pan Afr Med J*. 2018;29:73.
10. Lipsman N, Skanda A, Kimmelman J, Bernstein M. The attitudes of brain cancer patients and their caregivers towards death and dying: a qualitative study. *BMC Palliat Care*. 2007;6:7.
11. Given CW, Stommel M, Given B, Osuch J, Kurtz ME, Kurtz JC. The influence of cancer patients' symptoms and functional states on patients' depression and family caregivers' reaction and depression. *Health Psychol*. 1993;12(4):277-85.
12. Marlow LA, Wardle J. Development of a scale to assess cancer stigma in the non-patient population. *BMC Cancer*. 2014;14:285.
13. Lee J, Bell K. The impact of cancer on family relationships among Chinese patients. *J Transcult Nurs*. 2011;22(3):225-34.
14. Zhang AY, Siminoff LA. Silence and cancer: why do families and patients fail to communicate. *Health Commun*. 2003;15(4):415-29.
15. Northouse LL, Katapodi MC, Schafenacker AM, Weiss D. The impact of caregiving on the psychological well-being of family caregivers and cancer patients. *Semin Oncol Nurs*. 2012;28(4):236-45.
16. Zhang AY, Siminoff LA. Silence and cancer: why do families and patients fail to communicate. *Health Commun*. 2003;15(4):415-29.
17. Chambers SK, Dunn J, Occhipinti S, Hughes S, Baade P, Sinclair S, et al. A systematic review of the impact of stigma and nihilism on lung cancer outcomes. *BMC Cancer*. 2012;12:184.
18. Dey S, Sharma S, Mishra A, Krishnan S, Govil J, Dhillon PK. Breast Cancer Awareness and Prevention Behavior Among Women of Delhi, India: Identifying Barriers to Early Detection. *Breast Cancer (Auckl)*. 2016;10:147-56.
19. Nyblade L, Stockton M, Travasso S, Krishnan S. A qualitative exploration of cervical and breast cancer stigma in Karnataka, India. *BMC Womens Health*. 2017;17(1):58.
20. Vrinten C, Gallagher A, Waller J, Marlow LAV. Cancer stigma and cancer screening attendance: a population based survey in England. *BMC Cancer*. 2019;19(1):566.
21. Knapp S, Marziliano A, Moyer A. Identity threat and stigma in cancer patients. *Health Psychol Open*. 2014;1(1).
22. Journal of Epidemiology and Community Health, Stigma in patients with rectal

- cancer: a community study L D MACDONALD AND H R ANDERSON From the Department of Clinical Epidemiology and Social Medicine, St George's Hospital Medical School, Cranmer Terrace, London SWJ 7 ORE. 1984;38:284-290.
23. Stigma, shame, and blame experienced by patients with lung cancer: qualitative study BMJ 2004;328.
 24. Vrinten C, Gallagher A, Waller J, Marlow LA. Cancer stigma and cancer screening attendance: a population based survey in England. BMC cancer. 2019;19(1):566.
 25. Parkin DM, Boyd L, Walker LC. 16. The fraction of cancer attributable to lifestyle and environmental factors in the UK in 2010. Br J Cancer. 2011;105(Suppl 2):S77-81.
 26. Lebel S, Devins GM. Stigma in cancer patients whose behavior may have contributed to their disease. Future Oncol. 2008;4:717-33.
 27. Riley KE, Ulrich MR, Hamann HA, Ostroff JS. Decreasing smoking but increasing stigma? Anti-tobacco campaigns, public health, and cancer care. AMA J Ethics. 2017;19:475-85.
 28. Marlow LA, Waller J, Wardle J. Does lung cancer attract greater stigma than other cancer types? Lung Cancer. 2015;88:104-7.

© 2020 Tahir et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

*The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/61892>*