

# DO RURAL AND URBAN PEOPLE THINK DIFFERENTLY REGARDING TREATMENT AND RECOVERY FROM CANCER?

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## Abstract

**Objectives:** To access the differences in views and awareness regarding recovery from cancer and treatment options in urban and rural populations.

**Methods:** A cross-sectional survey was conducted on 307 participants including both rural and urban populations at Nishtar Hospital, Multan to know their views about recovery from cancer and different treatment modalities.

**Results:** 307 people participated in the survey; 212 males and 95 females. 33.9% were having a relationship with cancer patients. Overall, 208 (68%) people thought cancer as a curable disease; the majority of them belonged to the urban population. 193 (62.9%) people thought of medical and surgical treatment as the best option; 79 rural and 114 urban. 49 rural and 23 urban people believed in spiritual treatment as well.

**Conclusion:** Rural people as compared to urban people were less sure about the cure of cancer and relatively a greater proportion of urban people in comparison to rural people considered medical and surgical as the best treatment modalities. Spiritual treatment was relatively more preferred by rural people.

**Keywords:** Cancer, Curable, Incurable, Rural and urban population, medical and spiritual treatment.

## INTRODUCTION

Cancer is one of the most prevailing diseases these days. Myths about cancers still exist. The views and beliefs regarding the causes and treatment of cancer vary in different religious, geographical and cultural groups. The greater is the gap between views about cancer in different groups, the more difficult it becomes to make people aware and understand this ailment.

A study from Maryland, USA showed that the mortality rate of cancer is slightly more in rural countries as compared to metropolitan countries [1]. Another study from the USA showed that cancer cases with modifiable risks were more in rural populations as compared to urban [2]. This shows that awareness among rural people can prevent a large number of cases of cancer.

Another study conducted in the USA showed that rural patients were more likely to hold

unfavorable views about clinical trials than inner-city patients and also that television and commercials played a vital role in forming and shaping their views and ideas regarding clinical trials for cancer [3].

The views about cancer treatment vary worldwide. A study conducted in the USA showed that many patients with advanced cancer believe that they can be cured; most of them were pre-high school [4]. Advanced cancer patients commonly have misunderstandings about the intentions of treatment and their overall prognosis. Another study in the USA showed that a large number of patients receiving palliative radiation or chemotherapy held unrealistic hopes about recovery, which can affect their ability to make well-informed decisions about treatment options [5].

Various treatment modalities of cancer include both medical i.e. chemotherapy and radiotherapy and surgical approaches. Suitable

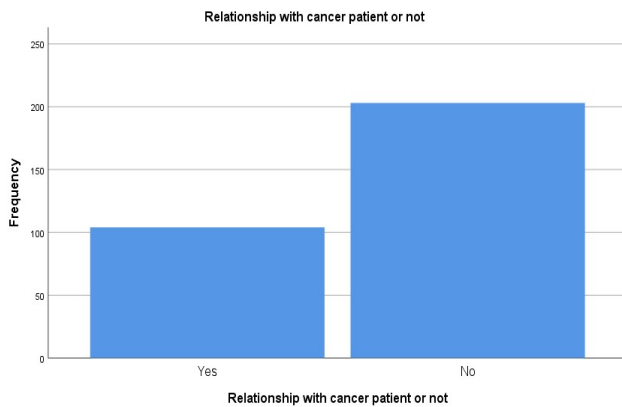
treatment varies with the type of cancer. For example, chemotherapy is the standard of care for incurable advanced gastric cancer. Whether the addition of gastrostomy to chemotherapy improves survival for patients with advanced gastric cancer with a single non-curable factor remains controversial [6]

Different groups of people have different views regarding the most suitable treatment for cancer. Rural people are expected to consider spiritual aspects more important in treatment for cancer so, different views and ideas about cancer among different groups are important in both creating awareness and adherence to the different treatment options.

### MATERIAL AND METHODOLOGY

A survey was conducted on 307 respondents, all residents of Southern Punjab to access their health beliefs regarding cancer and its treatment. These subjects included the attendants and the domestic staff at Nishtar Hospital, Multan (as this hospital receives patients and attendants from almost all regions of Southern Punjab).

This cross-sectional survey was carried out by the students of Nishtar Medical University, Multan, in February 2020. The subjects were interviewed using convenience sampling in the waiting areas and wards of the hospital. Respondents, who were residents of Southern Punjab gave informed consent and answered the questionnaire. Questionnaires containing incomplete, missing or erroneous data were discarded.



Only 208(67.8%) participants thought of cancer being a curable ailment while 99(32.2%) participants were not sure whether the recovery from cancer is possible or not.

The questionnaire was primarily designed in English but was read out and translated into Urdu by interviewers. Oral consent was taken before asking the questions. The questionnaire was discussed among interviewers and supervising faculty.

The questionnaire comprised demographic parameters, questions concerning the subject's family history of cancer, their health belief models about the treatment of cancer i.e. medical, surgical or spiritual and their residence in rural and urban areas. Finally, we asked them either cancer is curable or not.

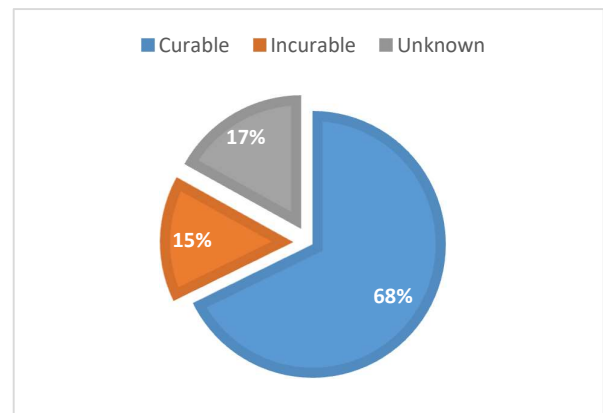
The data were entered using Epi Data version 4.6.0.2 and analyzed using SPSS version 27.0.0.0. Finally, it was compiled using Microsoft Word version 2013.

### RESULTS

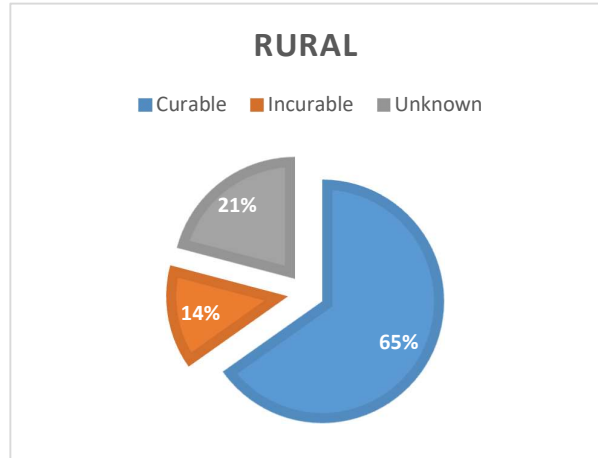
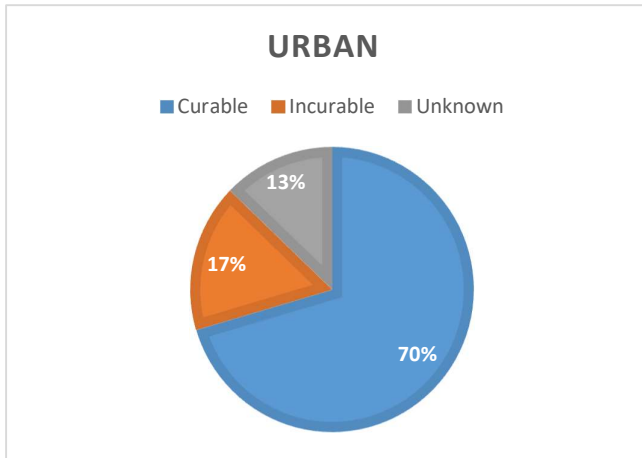
The sample size consisted of 307 participants with 212 males and 95 females. 158 people belonged to rural areas as compared to 149 having an urban or semi-urban residence. Grouping based on literacy showed that 174 participants were illiterate compared to 133 literate participants (with matriculation level education being the standard for literacy).

The mean age of the participants was  $34.02 \pm 12.675$  which ranged from 15-78 years. The mean age of males was  $33.19 \pm 12.541$ ; compared to  $35.86 \pm 12.844$  for females.

104(33.9%) participants had known a cancer patient in their family or friends while 203(66.1%) respondents showed no such relationship



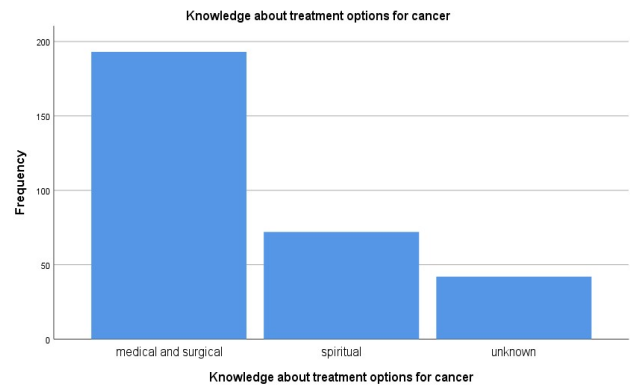
	Total	Curable	Incurable	Unknown
<b>Rural</b>	158	103(65.2%)	22(13.9%)	33(20.9%)
<b>Urban</b>	149	105(70.5%)	25(16.8%)	19(12.8%)



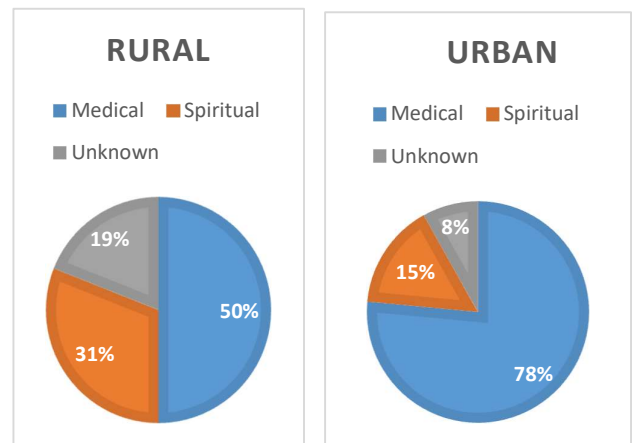
Participants were asked about the suitable type of cancer treatment according to their knowledge. The results of this study were mixed and are illustrated in the table given below

**Knowledge about treatment options for cancer**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	medical and surgical	193	62.9	62.9	62.9
	Spiritual	72	23.5	23.5	86.3
	unknown	42	13.7	13.7	100.0
Total		307	100.0	100.0	



	Total	Medical	Spiritual	Unknown
<b>Rural</b>	158	79(50%)	49(31%)	30(19%)
<b>Urban</b>	149	114(76.5%)	23(15.4%)	12(8.1%)



## DISCUSSION

The findings of this study suggest that a large proportion of people still believe cancer as curable. However, another significant number still believe cancer as an incurable disease. These differences are bound to exist between different geographical and cultural groups and they should always be considered while providing informational care to the patient or spreading awareness among the general public.

A study conducted in Boston Children's Hospital, USA showed that among parents of children with advanced cancer, only 28% were hopeful about a remote chance of cure while almost half of them did not give any statement [7]. Our studies also showed that almost 30% were not sure about the recovery from cancer. A journal published in the American Cancer Society showed that among 524 old patients with advanced cancer, only 5.3% were hopeful about a 100% chance of recovery [8]. Our studies showed that rural people were having fewer expectations and hopes about recovery from cancer as compared to the urban group.

While some people consider cancer as an incurable illness, there are others with advanced cancer having unrealistic expectations about the cure. An international collaborative study including 11 countries all over the world stated that 55% of patients receiving palliative care reported that their cancer is curable [9]. Our results also showed that a marked variation exists in expectations about recovery from cancer. In our study, people living in urban populations were more hopeful about the cure and recovery from cancer.

Views about the best treatment options for cancer also varied among the two groups. Another journal published in the American Cancer Society showed that the majority of patients with lung and colorectal cancers believed that surgery would provide the cure for their ailment and some of them

were even having stage IV lung and colorectal cancers [10]. In our study, 193 out of 307 participants also responded as medical and surgical being the best treatment option for cancer. The majority of people considered medical and surgical options as the best treatment regarding cancer. In the urban group, this proportion was even bigger. While in the rural group, an increased proportion of people who believed spiritual treatment as the best cure as compared to urban group, was present.

A Study on spirituality in a health care context in the USA showed that how people make meaning of suffering and illness varied with their cultural background and heterogeneity, and patients with stronger spiritual beliefs showed more endurance to the therapeutic process. [11]. A study in Italy also showed that patients with a strong faith showed an improved response to chemotherapy [12].

In our study, Out of 307 participants, 72 (23.5%) participants considered the spiritual treatment of cancer as the best treatment modality. So, it shows the importance of a positive spiritual attitude during the treatment process. Positive psychological behavior and hope prepares our body both to endure the therapy and also adds to the benefits of the therapy.

A study from Cancer Institute of Imam Khomeini Hospital in Tehran, Iran showed that most patients needed some time to spend alone to pray to God and this served as a means to serve their emotional requirements during the treatment process [13]. Undoubtedly faith and spiritual beliefs can add to the benefits during the therapy but rigid faiths can sometimes obstruct the contact between the patient and medical care. Relying solely on spiritual treatment at the hands of religiously influential people can not only delay the access to medical treatment but can also lead to increased complications associated with the disease.

## CONCLUSION

The study showed that almost one-third of the participants knew cancer patients in their friends or family. Most of the people believed that cancer was curable; people believing so were more in the urban population. The proportion of people

believing in medical treatment was high in the overall population; while the people believing in spiritual treatment were relatively more common in the rural population as compared to the urban population.

### LIMITATIONS

- Considering that the Pakistan population has around 22 Crore people, we can't generalize the results based on 307 respondents, so sample size concerning population was limited.
- Hesitation and difficulty was faced by the interviewers in explaining the questions.
- The respondents answered some of the questions in a very vague and unclear manner.
- Limited resources

### RECOMMENDATIONS

- Seminars should be arranged to spread awareness among the general public.
- Health beliefs of cancer patients should be assessed; if they believe in the spiritual treatment they should be educated and encouraged to take medical and surgical treatment along with spiritual treatment.
- Advertisements about cancer treatment by spiritualistic centers should be discouraged across the country.
- Common misconceptions regarding the progression and treatment of cancer must be addressed in awareness campaigns.
- The myth about cancer being an incurable and deadly illness should be rectified.

### ACKNOWLEDGEMENT

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