



KNOWLEDGE, ATTITUDES, AND PRACTICES (KAP) OF CANCER PATIENTS TOWARDS COVID-19 IN TRIPURA: A HOSPITAL-BASED CROSS-SECTIONAL STUDY.

Oncology

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ABSTRACT

INTRODUCTION: Coronavirus is a contagious disease. Patients with cancer are at great risk to contract the disease as the majority of patients are immune deficit patients. Therefore, it is important to know the knowledge, attitude, and practice of cancer patients to minimize the risk of infections. A cross-sectional study was planned to explore the level of knowledge, attitude, and practices of cancer patients towards COVID-19 at ABV-RCC, Tripura, India. **PATIENTS AND METHODS:** A cross-sectional KAP study towards COVID-19 was conducted from August 2020 to October 2020 at Atal Bihari Vajpayee Regional Cancer Centre, Agartala, Tripura. Data were collected by a pre-formed questionnaire developed from a review of previous studies consisting of sociodemographic profile, cancer-related information, 14 knowledge related questions, 4 attitude related questions, and 6 practice-related questions. A total of 175 patients were included to identify the factors associated with knowledge, attitudes, and practices toward COVID-19. Data analysis was done by using descriptive statistics. **RESULTS:** A total of 175 patients, 91/175 (52%) male, and 84/175 (48%) female participated. The majority of the participants were aware of the clinical features of COVID-19, 78.54% had positive knowledge of COVID-19. Almost 82.56% of participants had a positive attitude towards its control. The Majority of participants (88.98%) maintained positive practice towards the COVID-19 pandemic. **CONCLUSION:** The knowledge, attitude, and practice (KAP) related to COVID-19 infections in cancer patients were found that the majority were aware of the general clinical features of COVID-19, and had optimistic knowledge, attitudes towards the COVID-19 preventive practices.

KEYWORDS

Cancer patients, Covid-19, KAP, Tripura.

INTRODUCTION:

The coronavirus disease 19 (COVID-19) is an acute respiratory disease, caused by a novel coronavirus that was first discovered in December 2019, in Wuhan city, Hubei Province, China spreading rapidly to other countries on a global scale and can occur by close contact with an infected person [1]. As of November 8th, 2020, over 49.7 million confirmed cases and over 1.2 million deaths have been reported globally [2]. Kerala was the first state to report its first SARS-CoV-2 positive case in India on January 30th, 2020 and subsequently, the disease burden drastically increased [3]. Among the top-ranking countries, India was reported to be in the second position with over 8,636,011 confirmed cases of COVID-19 with 127,571 deaths to date (November 11, 2020) [4].

India is the second-largest population in the world, with a population of more than 1.34 billion the ability to counter a global pandemic seems to be much lower compared to China because the country has only 49,000 ventilators [3]. Due to immunocompromising conditions cancer patients are at risk of contracting COVID-19 infection and have a higher risk of severe disease, mortality and show deteriorating conditions and poor outcomes principally driven by age, gender, comorbidities, cancer treatment, etc. A previous study from Italy reported that 20% of 355 patients who died of COVID-19, had active cancer [5,6]. Therefore, adequate knowledge and awareness of the mode of disease transmission, the practice of personal hygiene, and measures in public health crisis plays a vital role in developing effective public health control and prevention measures during this pandemic spike [7].

To date, there is no report from Tripura to investigate KAP regarding COVID-19 amongst the cancer patients. This study focuses on the knowledge, attitude, and practice (KAP) regarding COVID-19 among patients with cancer diseases in Tripura, India.

PATIENTS AND METHODS:

Study Design: This cross-sectional study was conducted at the Atal Bihari Vajpayee Regional Cancer Centre (ABV-RCC), Agartala, Tripura, amongst the cancer patient of Tripura, from August 2020 to October 2020.

Ethical Approval and Technical Information: The procedure followed for the present study was in accordance with ethical standards. An informed consent (approved by the Institutional Review Committee) was taken from each participant before data collection. Adequate precautions were taken (such as physical distancing, wearing proper PPE kit, etc.) by the research team to ensure self-protection. Question pattern was followed as per Sah et al. to record the data [6]. To ensure that the questionnaire was accurate and unambiguous for the study, all the questions were reviewed by a panel of healthcare professionals (two physicians, and one oncologist).

KAP towards COVID 19:

The questionnaire had 14 questions Knowledge related to COVID 19 (Table 2), 4 questions Attitude related to COVID 19 (Table 3), 6 questions Practice related to COVID 19 (Table 4). Participants had to answer a Yes/No basis with an additional do not know the option to confirm their willingness to participate voluntarily. Each response from participants documented in an individual form to analyze the data.

RESULTS:

Sociodemographic characteristics of the participants

The study participants' characteristics are summarized in Table 1. The average age of those who participated was 53 years. Out of 175 patients, 91/175 (52%) were male and 84/175 (48%) were female. The majority of the patients were above 50 years of age compared to other age groups. The age group distribution revealed that 5.80% (10/175) patients were below 30 years; 16.50% (29/175) between 31–40 years,

20.10% (35/175) between 41–50 years, 35.05% (61/175) between 51–60 years, and 23% (40/175) were older than 60 years.

Table 1: Demographic Characteristics of Cancer Patients (n=175)

Variables	Categories	n(%)
Age in years	< 30	10 (5.80%)
	31–40	29 (16.50%)
	41–50	35 (20.10%)
	51–60	61 (35.05%)
	>60	40 (23%)
Gender	Male	91 (52%)
	Female	84 (48%)

Source/ period of information on COVID 19: The source of information about COVID-19 from each individual was documented and noted that 51.12% of the respondents knew when the disease began (December 2019) and only 53.41% knew in January 2020 when the first case was reported in India. The majority of participants (70.56%) gathered the source of information about COVID-19 from social media and the internet, the television (news channels), newspaper, friends and family, healthcare providers (doctors, nurses), etc.

Knowledge related to COVID 19: About the mode of transmission, 81.10% knew that the disease could be transmitted through exposure to respiratory droplets from an infected person, 7.30% of the participants did not understand the cause of COVID-19 transmission. Approximately 76% of the participants believed that wearing surgical masks can prevent the infection whereas the rest (10.85%) were not sure. Most of the participants 72.57% knew that avoiding social gatherings can reduce the risk of transmission (Table 2).

Table 2: Knowledge Regarding COVID-19 of Cancer Patients (n=175)

Knowledge *	Yes n(%)	No n(%)	Do not Know n (%)
1. COVID-19 is a virus (microorganism) infection (yes)	120 (68.57)	-	55 (31.42)
2. COVID-19 is transmitted by close contact with the infected person (yes)	142 (81.10)	20 (11.42)	13 (7.30)
3. Fever, cough, sore throats and shortness breath are possible symptoms of COVID-19 (yes)	130 (74.28)	20 (11.42)	25 (14.28)
4. COVID-19 vaccine is available in markets (no)	5 (2.85)	107 (61.10)	64 (36.39)
5. There currently is no effective cure for COVID-2019 (yes)	134 (76.57)	21 (12.00)	20 (11.42)
6. Early symptomatic and supportive treatment can help most patients recover from the infection (yes)	155 (88.57)	-	20 (11.42)
7. Washing hands with soap and water, and using face masks can help in the prevention of disease transmission (yes)	133 (76.00)	23(13.14)	19 (10.85)
8. Patients with underlying chronic diseases are at a higher risk of infection and death (yes)	154 (88.00)	6 (3.42)	15 (8.57)
9. COVID-19 could be fatal (yes)	158 (90.28)	2 (1.14)	15 (8.57)
10. Healthcare workers are at a higher risk of infection (yes)	160 (91.42)	-	15 (8.57)
11. Not all persons with COVID-19 will develop to severe cases. Only those who are elderly, have chronic illnesses, and are obese are more likely to be severe cases. (yes)	138 (78.87)	-	37 (21.2)
12. Persons with COVID-19 cannot infect the virus to others when a fever is not present. (no)	5 (2.85)	126 (72.25)	44 (25.28)
13. It is not necessary for care givers to take measures to prevent the infection by the COVID-19 virus. (no)	2 (1.14)	158 (90.28)	15 (8.57)
14. To prevent the infection by COVID-19, individuals should avoid going to crowded places such as party and avoid taking public transportations. (yes)	127 (72.57)	10 (5.71)	38(21.71)

Attitudes towards COVID 19 pandemic:

The level of attitude of cancer patients of Tripura towards the COVID-19 pandemic is shown in Table 3. The majority of patients showed a positive attitude towards the control of COVID-19 (82.56 %). Of all participants, 82.85% thought that they are at high risk of getting the disease because of their co-morbidity (Cancer disease) and 74.85% admitted their caretakers might get an infection. Regarding the apprehension there 81.14% were worried if their health professional themselves get infections which will hamper the treatment. The majority of them (91.42%), believed that home isolation is better than the state referral hospital as they feel comfortable at home, and also their families can take good care of them.

Table 3: Attitudes Regarding COVID-19 of Cancer Patients (n=175)

Attitudes	Yes n(%)	No n(%)	Do not Know n(%)
1. You think you will probably get illness	145 (82.85)	25 (14.28)	5 (2.85)
2. You are worried one of your caretakers may get an infection	131 (74.85)	34 (19.42)	10 (5.71)
3. You are worried one of your health professionals may get an infection	142 (81.14)	10 (5.71)	23 (13.14)
4. If you get COVID-19, you will accept isolation in health facilities	160 (91.42)	11 (6.28)	4 (2.28)

Practices towards COVID 19 pandemic: Regarding the cancer patients' practice and approach towards the disease, 6 questions were asked (Table 4). All participants (100%) used masks as preventive measures against COVID-19. Most of the patients more than 87% agreed that they avoid crowded places and maintain social distancing. More than 70% of patients agreed that only triple-layer surgical masks, N95 masks, early screening, quarantine/isolation, and symptomatic treatment can effectively prevent the spread of the coronavirus. When asked what they take as preventive measures 87.42% of patients admitted they have avoided touching your eyes, mouth, and nose without washing hands. Also, most of the patients accepted to eat citrus fruits and take vitamin C tablets and/or other medications to improve immunity.

Table 4: Practice Regarding COVID-19 of Cancer Patients (n=175)

Practices	Yes n(%)	No n(%)	Do not Know n(%)
1. In recent days, have you gone to any crowded place?	23 (13.25)	152 (87.10)	-
2. In recent days, have you been wearing face masks?	170 (97.14)	5 (2.85)	-
3. Have you avoided touching your eyes, mouth and nose without washing hands?	153 (87.42)	22 (12.57)	-
4. Have you avoided meeting with relatives in recent days?	149 (85.13)	26 (15.12)	-
5. Do you avoid going near with other patients and patient party who are not using mask?	160 (91.42)	15 (8.57)	-
6. Does your caretaker wash hand after going outside each time?	150 (85.71)	7 (4.00)	18 (10.28)

DISCUSSION:

COVID-19 virus has had devastating consequences such as chaos to lives and greater economic effect across the world within a short period of time. KAP is the first stepping stone to stop COVID-19 and its rapid spread. Immunocompromised cancer patients should take additional preventive measures due to the susceptibility of morbidity and mortality from COVID-19. The knowledge, attitude, and practices (KAP) are essential to identify the knowledge-behavior gap that may impact their perceptions for controlling the spread of COVID-19 during an outbreak of an epidemic. Thus, the present study aimed to evaluate the level of KAP amongst the cancer patients of Tripura, for COVID-19. This is the first study in Tripura investigating the KAP towards COVID-19.

Knowledge of all participants towards COVID-19 was measured

through fourteen questions. Our study found that a good level of knowledge, attitude, and practice regarding COVID-19 and its control was documented in the studied population. Most of the participants (>75%) had adequate knowledge to stop the infection through preventive measures like washing hands with soap and water, using face masks, and avoiding going to crowded places to prevent disease transmission. More than 80% of participants admitted COVID-19 is transmitted by close contact with the infected person although this result is lower compared to an earlier study from India [8]. Most of the participants (88.57%) had sufficient knowledge on COVID-19 symptoms and an almost similar finding was reported by an earlier study [9].

Attitudes of all participants towards COVID-19 were measured through four questions. The results further revealed that 82.56% of participants had a positive attitude towards COVID-19 which indicates the virus can be successfully controlled. The attitude related positive responses clearly indicated that a good perception of the government's readiness and ability to manage COVID-19.

The level of practices of all participants towards COVID-19 was measured through six questions. More than 85% were practicing appropriate preventive measures to protect from COVID-19 infection while going out. Most of them agreed that they maintain social distancing and refrained from crowded places along with wearing face masks, avoiding touching their eyes, mouth, and nose without washing hands. Nevertheless, our results show that the high knowledge of participants during the COVID-19 pandemic, in turn, translates into good and safe practices, which suggests that the practices of the studied population are very cautious.

Limitations of the study: This study has some limitations 1. The present study was conducted among a comparatively smaller sample size because most of the patient does not cooperate to answer so many questions due to the limited time available for them. 2. Bias in Questionnaires was an important issue 3. This study was conducted only in admitted cancer patients; therefore, it cannot be generalized to a wider population. As more data emerges through more multicenter, larger sample sizes and high-quality studies the KAP regarding COVID-19 will be understood in cancer patients of Tripura.

CONCLUSION:

To conclude, adequate knowledge, positive attitudes, and reasonable practice can minimize the spread of this communicable disease which in turn will help policymakers to identify the target populations, for COVID-19 prevention and health education. Our findings suggest that cancer patients of Tripura are aware of the general clinical features, mode of transmission, and adopted general preventive measures for protecting themselves against COVID-19.

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