

Problems Faced by Cancer Patients due to COVID 19 at Tertiary Cancer Hospital, Chitwan, Nepal

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ABSTRACT

Background: The corona virus disease (COVID 19) Pandemic has had a global impact on health care. Patients with cancer have been affected by the COVID 19 Pandemic and faced various psychosocial problems.

Materials and Methods: A descriptive cross-sectional study on title “Problems Faced by Cancer Patients due to COVID 19 at Tertiary Cancer Hospital, Chitwan, Nepal” was conducted at B.P. Koirala Memorial Cancer Hospital, Chitwan to assess problems faced by cancer patients. Non- probability purposive sampling technique was used to select the sample and sample size was 50. Data was collected by using structured interview schedule and distress thermometer.

Findings: In this research 50 respondents were included for the study. Among them 72% respondents faced treatment related problems where 27.7% respondents faced unavailability of chemo medicine, nearly half of respondents (48%) faced the transportation related problems and unavailability of transportation service was the key transportation problems faced by 58.3% respondents. Similarly, nearly half of the (46%) faced the accommodation problems and more than two fifth (42%) had economic related problems during COVID 19 pandemic situation.

Conclusion: Cancer patients have faced several problems during COVID 19 pandemic such as unavailability of chemo medicine, treatment delay, lack of transportation services, accommodation problem, financial problems and psychological distress. So, cancer hospital should make strategic planning of health care services by means of alternative solutions like telemedicine, home-based palliative care services, and ensuring the availability of essential cancer drugs.

Keywords: Words: Problems, Covid -19, Cancer Patients

Introduction

Corona virus disease – 2019 (COVID – 19) is an acute febrile respiratory illness caused by a novel corona virus or Severe Acute Respiratory Syndrome Corona virus 2 (SARS – COV – 2). It was first reported to the World Health Organization (WHO) on December 31, 2019. There have been 532,201,219 confirmed cases of COVID 19, including 6,305,358 deaths, reported to WHO Globally till 10 June 2022. In Nepal there were 979,242 infections and 11,952 corona virus related deaths reported since the pandemic began till 13 June, 2022 (Qu, Kang & Cong, 2020). A wide range of clinical features of COVID 19 from asymptomatic to mild symptoms to serious illness have been reported with an incubation period of 2 – 14 days. According to the report of the Centers for Disease Control and Prevention (CDC, 2020), the WHO declared it as a public health emergency on January 30, 2020.

Initial reports suggested that patients with a history of or acute malignancy might be several complications (Li-ang et al., 2020). Additionally, patients with cancer are often older (i.e. aged ≥ 60 years) with one or more major co morbidities, putting them at increased risk for COVID 19 related morbidity and mortality (CDC, 2020). The unprecedented worldwide occurrence of the COVID – 19 pandemic is not like any other seasonal infection and is having a profound effect on the entire oncology community by impacting patients with cancer and reducing health care activities for a duration that cannot yet be accurately estimated. The unprecedented burden of COVID 19 on health systems worldwide has important implications for cancer care (Forner, 2021).

First, although the data remain limited, patients with cancer appear to be more vulnerable to worse outcomes from the infection, including greater need for ventilator support. The immunosuppressed status of some cancer patients (Whether caused by the disease itself or the treatment) increased their risk of infection compared with the general

population. Immunosuppression may also expose cancer patients to serious complications from an infection, which may result in treatment delay and unnecessary hospitalizations that could negatively affect disease prognosis (Forner, 2021). Delay in surgery for patients with cancer during the COVID 19 pandemic resulted in psychosocial distress. Several patients have been asking for help to reach the hospital. As a result of the lockdown, a lot of documentation process and financial planning of patients have been placed on hold (Hanna, Evans & Booth, 2020).

Division of Cancer Prevention and Control (2020) reported that mortality rate of cancer patients who contracted COVID 19 virus was 6% in comparison to 1% for healthy people in China. COVID 19 had severe impact on cancer control and prevention services like cancer screening (Richards et al., 2020). In addition, many patients have been fearful of exposure to COVID 19 or overburdening healthcare services and thus have been less likely to present to healthcare services for cancer screening and diagnosis (Shrestha & Mulmi, 2020).

Routine screening of patients without symptoms plays an important role in the early diagnosis of various cancers, including breast, colorectal, oral and cervical cancers. However, the COVID 19 pandemic has caused many institutions to pause their screening activities (Spychalski, Blazynska-Spychalska & Kobiela, 2020).

Materials and Methods

A descriptive cross sectional study design was used to assess the problems faced by cancer patients due to COVID 19 at BPKMCH. The study population was all the cancer patients who visited for chemotherapy cycle at BPKMCH. Fifty cancer patients who visited BPKMCH for chemotherapy at day care unit and medical oncology ward I and II were selected as sample by using non probability purposive sampling technique. The Structured Interview Schedule and Distress Thermometer were used as a research instrument.. The instrument was developed in English and translated into simple Nepali languages.

The instrument consisted of three parts: Part-I: Questions related to socio-demographic variables. Part-II: Questions related to problems faced by cancer patient due to COVID 19. Part-III: NCCN Distress Thermometer to assess level of psychological distress. Before collection of data, ethical approval for the study was obtained from the Institutional Review Committee of BPKMCH. The objectives of the study were explained and verbal/written informed consent was obtained from each respondent before data collection and ensured the confidentiality. The data was collected by using structured interview schedule through face-to-face interview method. The interview was taken for 20 to 30 minutes. Privacy was maintained by interviewing with the respondents in a separated and quite place. Patients' distress level was measured by NCCN Distress Thermometer which was first created in 1997 by psycho-oncology pioneer Jimmie C. Holland, MD. The collected data was checked for completeness then encoded and entered in Microsoft office excel and analyzed by using descriptive statistics, statistical package for social science (SPSS) version 22.

Findings of the Study

Table 1: Socio-demographic Characteristics of the Respondents: Age, Gender, Ethnicity

N=50

Variables	Frequency	Percent
Age Group		
19-39	12	24
40-59	27	54
60-80	11	22
Mean \pm (SD)	47.94 \pm (14.724)	
Gender		
Male	22	44
Female	28	56
Ethnicity		
Brahmin/Chhetri	20	40
Janjati	18	36
Dalit	2	4
Madhesi	9	18
Muslim	1	2

Table 1 reveals that, among 50 respondents, more than half of them 27 (54%) were from 40-59 years age group followed by 19-39 age group 12(24%) and 60-80 age group 11 (22 %) with mean age 47.94 and SD was 14.72. Regarding gender, majority were female 28 (56%). Likewise, regarding ethnicity Brahmin/Chhetri were 20 (40%) followed by Janjati 18 (36%), Madhesi 9 (18%) respectively and only 1 (2%) of respondent was Muslim.

Table 2: Socio-demographic Characteristics of the Respondents: Religion, Education, Occupation, Marital status, Place of residence

n-50

Variables	Frequency	Percent
Religion		
Hindu	42	84
Buddhist	5	10
Muslim	1	2
Christian	2	4
Education		
Uneducated	28	56
Primary education	16	32
Secondary education	5	10
Bachelor and above	1	2
Occupation		
Agriculture	23	46
Homemaker	13	26
Business	10	20
Service	4	8
Marital Status		
Married	49	98
Divorced/Separated	1	2
Place of Living		
Rural area	31	62
Urban area	19	38

Table 2 presents that, more than two third respondents 42(84%) were Hindu. Regarding educational status, more than half of the respondents were uneducated 28 (56%), 16 (32%) had primary education and only 5 (10%) and 1 (2%) had secondary and bachelor level education respectively. Likewise, nearly half of the respondents were engaged in agriculture 23(46%) followed by homemaker 13 (26%), business 10 (20%) and service 4 (8%) respectively. Most of the respondents were married 49 (98%) and from rural area 31 (62%).

Table 3: Treatment Related Problems

n-50

Variables	Frequency	Percent
Treatment related problems		
Yes	36	72
No	14	28
Problems (n- 36)		
Unavailability of chemo medicine	10	27.7
Treatment delay	8	22.2

Self-COVID positive	5	13.8
Family got COVID positive	8	22.2
Not meeting doctor in time	5	13.8

Table 3 depicts that, out of 50 respondents, 36 (72%) respondents faced treatment related problems because of various reasons. Regarding treatment related problems out of 36 respondents, 10 (27.7%) had problems of unavailability of chemo medicine, 8 (22.2%) respondents faced treatment delay and 8 (22.2%) respondents had problem of family COVID positive. Likewise, five (13.8%) respondents had self-COVID positive and same percent of them complained about not meeting doctor in time at OPD

Table 4: Transportation Related Problems

n=50

Variables	Frequency	Percent
Transportation related problems		
Yes	24	48
No	26	52
Problems (n-24)		
Unavailability of transport services	14	58.3
Cost of transportation	10	41.6

Table 4 presents that, out of 50 respondents nearly half of the respondents 24 (48%) had transportation related problems during COVID 19 situation. Among 24 respondents who faced the transportation problems, nearly two-third faced unavailability of transportation services during COVID pandemic 14 (58.3%) because most of the respondents were from rural areas and 10 (41.6%) respondents faced the problem of high cost of transportation.

Table 5: Accommodation related Problems

n=50

Variables	Frequency	Percent
Accommodation related problems		
Yes	23	46
No	27	54
Problems (n-23)		
Problem while searching accommodation	8	34.78
Unavailability of accommodation near hospital	6	26.08
Cost of accommodation	9	39.13

Table 5 depicts that, out of 50 respondents, nearly half of respondents 23 (46%) faced accommodation related problems during COVID-19 pandemic situation. Out of twenty-three respondents 9(39.13%) respondents faced the problem of cost of accommodation and 8 (34.7%) respondents found difficulty in searching accommodation and more than one fourth respondents 6 (26.08%) complained that they didn't get accommodation near hospital during COVID 19 situation.

Table 6: Economic Related Problems

n=50

Variables	Frequency	Percent
Economic related problems		
Yes	21	42
No	29	58
Problems (n-21)		
Lack of financial support	11	52.3
Loss of own job	4	19.04
Loss of family member's job	6	28.5

Table 6 reveals that, among fifty respondents, more than two fifth of respondents 21 (42%) faced transportation related problems during COVID 19 situation. Out of twenty-one respondents who faced the transportation related problems more than half of them 11 (52.3%) didn't get any financial support for treatment. Similarly, 6 (28.5%) respondents' family member lost their job due to COVID 19 and nearly one fifth of respondents 4 (19.04%) lost their own job due to COVID 19.

Table 7: NCCN Distress Thermometer Tool

n-50

Distress level	Frequency	Percent
3	4	8
4	11	22
5	12	24
6	16	32
7	5	10
8	2	4
Mean \pm (SD)	5.26 \pm (1.259)	

Table 7 shows that, the distress level of respondents from 0-10 where 0 indicates no distress and 10 indicates extreme distress. In distress level assessment, range of distress level was assessed from 3-8 with mean 5.26 and standard deviation of 1.25. Regarding distress level of respondents most of them had distress level 6 (32%) followed by 5 (24%), 4 (22%), 7 (10%), 3 (8%) and 8 (4%) respectively.

Discussion

The demographic findings of the study revealed that, among 50 respondents, more than half of them were from 40-59 years age group (54%) followed by 19-39 age group (24%) and 60-80 age group (22%), whereas mean age was 47.94 and SD was 14.72. Regarding gender, female was (56%) and regarding ethnicity Brahmin/Chhetri were (40%), followed by Janjati and Madhesi (36%, 18%) respectively and only 2% of respondents were Muslim and 84% respondents were Hindu. Regarding educational status, more than half of the respondents were uneducated (56%), 32% had primary education and only 10% and 2% had secondary and bachelor level education respectively. Likewise, nearly half of the respondents were engaged in agriculture (46%) followed by homemaker (26%), business (20%) and service (8%) respectively. Most of the respondents were married (98%) and from rural area (62%).

Out of 50 respondents, 72% respondents faced treatment related problems because of various reasons. Regarding treatment related problems, out of 36 respondents, 27.7% respondents had faced the problems of unavailability of chemo medicine, 22.2% respondents faced treatment delay and 22.2% respondents had problem of family COVID positive. Likewise, 13.8% respondents had self-COVID positive and same percent of them complained about not meeting doctor in time at OPD. This finding of the study is similar to the research study conducted by Kumar and Dey (2020) at Chandigarh, India concluded that treatment delay has the key problem faced by cancer patients due to COVID 19.

Among 50 respondents, nearly half of the respondents (48%) faced problem of transportation during COVID 19 situation. Among the respondents who had faced the problem of transportation, nearly two third faced unavailability of transportation services during COVID pandemic (58.3%) because most of the respondents were from rural areas and 41.6% respondents faced the problem of high cost of transportation. This finding of the study is similar to the study done by Singh, Rai and Ishan (2021) at North Bihar, India which showed transportation problem was one of the causes for missed chemotherapy during the pandemic.

In relation to accommodation related problems, out of 50 respondents, nearly half of respondents (46%) faced accommodation related problems during COVID-19 pandemic situation where out of 23 respondents 39.13% faced the problem of cost of accommodation and 34.7% respondents found difficulty in searching accommodation and more than one fourth respondents (26.08%) didn't get accommodation near hospital during COVID 19 situation. This study revealed that respondents found more difficulty while searching accommodation and to get vacant room at affordable price near hospital during COVID 19 situation. This finding of the study is supported by the study done by Rosenthal (2020) at UK which revealed that patient faced accommodation related problems where patients rarely had ability to self-isolate and adhere to social distancing.

Concerning economic related problems, nearly two fifth of respondents (42%) faced transportation related problems during COVID 19 situation. Out of 21 respondents more than half of them (52.3%) didn't get any financial support for treatment, nearly one third (28.5%) respondents' family member lost their job due to COVID 19 and nearly one fifth of respondents (19.04%) lost own job due to COVID 19. This study revealed that respondents didn't get any financial support from others like relatives, friends etc. for treatment so it also created more psychological distress. This finding of the study is consistent with the finding of the study of Dalal (2020) conducted at Tata Memorial Hospital, Mumbai which revealed that many financial planning of patient have been placed on hold and not getting access to timely treatment due to COVID 19.

During assessment of NCCN distress thermometer tool, range of distress level was assessed from 3-8 with mean 5.26 and standard deviation of 1.25. Regarding distress level of respondents, most of them had distress level of 6 (32%) followed by 5 (24%), 4 (22%), 7 (10%), 3 (8%) and 8 (4%) respectively. This finding is closely consistent with the result of cohort study conducted in gynecological cancer patients at the University of Minnesota which showed 30% respondents had a distress thermometer score of 4 or more than 4, indicating clinically meaningful distress (Jewett, 2020).

Conclusion

Most of the cancer patients had treatment related problems comparison to other problems during COVID 19. They found more problems to get chemo medicine because of unavailability in hospital pharmacy and there was also shortage of chemo medicines in others pharmacy due to COVID 19 situation. Majority of respondents found difficulty to get transportation services to reach hospital. Regarding accommodation, respondents found more difficulty while searching accommodation and to get vacant room at affordable price near hospital and they were unknown about accommodation facility provided by hospital. During assessment by NCCN distress thermometer tool, majority of respondents had distress level 6 so it clearly shows that cancer patients had moderate level of distress and there was no one without feeling of distress.

Recommendation

It would be better to provide access to detail information about hospital and its facilities for treatment. Hospital should make strategic planning of health care services for patients with cancer during the current pandemic situation by means of alternative solutions such as telemedicine consultation, home-based palliative care services, and ensuring the availability of essential cancer drugs.

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