



RESEARCH ARTICLE

PATIENT PERCEPTION OF ONCOLOGY CARE DURING THE COVID-19 PANDEMIC: A PROSPECTIVE OBSERVATIONAL STUDY FROM MOROCCO

F. Kouhen and M. Chihabeddine

Mohammed VI University of Health Sciences (UM6SS).Casablanca, Morocco.Department of Radiotherapy,
International University Hospital Sheikh Khalifa.

Manuscript Info

Manuscript History

Received: 25 October 2020

Final Accepted: 28 November 2020

Published: December 2020

Abstract

Background:The first case of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) in Morocco was detected in Casablanca on March 2, 2020; since then, our country has implemented restrictions on population movement to slow the spread of the virus. The management of cancers must be adapted to this context.
Materials and methods:All patients who are treated At the Radio-Oncology Unit of the Sheikh Khalifa Hospital at Casablanca were included in this prospective observational study for a questionnaire-based survey to evaluate the worries and perceptions of patients about changes and delays in their treatments during covid-19 Pandemic
Results:Total of 53 cancer patients participated in this study. The majority of patients possess adequate knowledge and practice appropriate preventive actions. However, they expressed their negative emotions and worries about the impact of changing their treatment on the prognosis of the disease and they considered cancer more deadly than covid-19.

Conclusion:The present study shows the need to look for other solutions that ensure continuity of care such as telemedicine, while reducing exposure for health care workers and other patients without affecting the prognosis of their disease

Copy Right, IJAR, 2020,. All rights reserved.

Introduction:-

The coronavirus COVID-19 pandemic is the defining global health crisis of our time and the greatest challenge we have faced since World War Two. Researchers worldwide are working around the clock to find a vaccine against SARS-CoV-2, the virus causing the COVID-19 pandemic.

The entire global has been profoundly affected by the health crisis, but the pandemic has a more severe impact on people in third world countries because of limited resources and weak health system such as the low number of hospital beds especially in intensive care units, insufficient number of medical and paramedical staff as well as protective equipment against the virus[1].

The Moroccan Government has taken a number of necessary measures including shutting down schools, closing places where people gather and advising its citizens for voluntary quarantine and social distancing, when the first case was declared.

Corresponding Author:- F. Kouhen

Address:- Mohammed VI University of Health Sciences (UM6SS).Casablanca, Morocco.Department of Radiotherapy, International University Hospital Sheikh Khalifa.

Multiple recent papers have shown that patients with cancers are considered as a highly vulnerable group in the current COVID-19 pandemic with significantly increased severity outcomes, including higher rates of hospitalization and death[2], [3]. The risk increase even more if the cancer patient is elderly (>60 years of age), or has associated comorbidities like diabetes, heart or chronic lung disease.

During the pandemic period, cancer patients are faced with a serious challenges and dilemmas, since staying at home could increase the tumor progression, while going to the hospital and taking their cancer treatments witch may increase the risk of severe illness from COVID-19[4], [5].

At the Radio-Oncology Unit of the Sheikh Khalifa Hospital at Casablanca, the economic capital of Morocco, more protocol changed in our approach to the treatment of our patients. The present study aimed to address the challenges and sufferings faced by Moroccan patients with cancer during their treatment in the current COVID-19 pandemic and their perception at the protocol change.

Materials and Methods:

Study participants:

All patients age ≥ 18 years who are actively undergoing radiotherapy with or without systemic therapy for solid malignancies in the department of radio-oncology of the Sheikh Khalifa Hospital at Casablanca from April 2020 to Mai 2020 were included in this prospective monoinstitutional, observational study for a questionnaire-based survey. Were excluded from the study:

1. The patients who refused to participate to the study
2. Illiterate patients or non-French or Arabic speaking.
3. The patients with poor physical status because of cancer, or therapy- related complications.

In total, 53 participants completed the questionnaire.

Questionnaire:

It consisted of 25 multiple-choice questions, including 5 questions about the patient characteristics, 3 questions about site and current state of the disease, 5 questions about general knowledge of COVID-19 pandemic and preventive practices undertaken. The rest of the questions are specific to patients' perceptions and feeling of changes in their treatment protocol and its impact on the prognosis of their disease, level of anxiety to get the virus in the hospital.

Eligible participants were given out the questionnaire to be completed during their visit for treatment in our institution. Questionnaires were fill out in the medical consultation room.

Sufficient time was allowed for participants to read, comprehend and answer all the questions.

Ethical considerations:

The survey is voluntary and completely anonymous.

All research participants must give their permission to be part of a study.

Statistical Analysis:

Data were tabulated and analyzed using Microsoft Excel for Mac 2017. Continuous variables are presented as total number (n) and percentage (%) unless stated otherwise

Results:-

The median age of our study was 62 (30 –75) years, and 62 % of the patients were males.

The baseline demographic features are listed in Table 1.

The most common sites of primary cancer were lung in 17 patients (32.07%), breast in 13 (24.52%), prostate in 11 patients (20.75%), Head and neck in 7 patients (13.20%), colo-rectal in 5 patients (9.43%).

While the majority of patients had advanced disease, most of them (78%) were receiving curative treatment.

Table 1:- Baseline demographic features of patients.

N=53		Number	Percentage
Median age	62 years (30-75 years)		
Genre	- Male - Female	33 20	62% 38%
Education level	- Less than high school degree - High school - degree University degree	13 17 23	24% 33% 43%
Site of cancer	- Lung - Breast - Prostate - Head and neck - Colo-rectal	17 13 11 7 5	32,07% 24,52% 20,75% 13,20% 9,43%
Type of treatment	- Radiotherapy - Chemotherapy - Both of them	17 14 22	32% 27% 41%
Purpose of treatment	- Curative - Palliative	41 12	78% 22%
Number of person sharing the patient's living space	<3 person 3-5 person >5 person	36 12 5	68% 22,64% 9,46%
means of transport taken to come to the hospital	- Public transport - Personal transport	6 47	12% 88%

Most patients acquired their knowledge about COVID-19 from social media and television (90%).The rest of the patients have the information of their families and friends.

76,92 % of patients confused flu symptoms with COVID symptoms and only 15% of patients stated their knowledge about the COVID-19 as adequate.

All patients questioned considered themselves to be more at risk of contracting the virus and developing a severe form than other people due to the immunosuppression caused by the anti-cancer treatments that they are receiving(**Table 2**).

More than three quarters of patients (83%) patientsare afraid to visit the hospital during the pandemic. Contrariwise, they considered cancer more deadly than covid-19, and delaying surgery or any other therapeutic intervention made them more anxious about their diseaseoutcome.

A higher percentage of patients (83%) considered the protective measures applied by the hospital as sufficient, while some patients need for furtherprecautions to feel safe asdistribution of masks, further limit the number of patients treated per day, initiate telehealth services.

Table 2:- Responses to Survey Questions.

Question	Response	Number	Percentage
Do you know enough about covid19?	Yes No	8 45	15,10% 84,90%
Do you know the difference between	Yes No	17 36	32,08% 67,92%

COVID-19 and seasonal flu?			
Where did you get information about COVID-19?	Social media Television Radio Family other	46 42 12 8 4	90,56% 79,24% 22,64% 15,09% 7,54%
what precautions are you taken to protect yourself from covid 19?	Wearing a mask Washing your hands often Social distancing Cleaning and disinfecting surfaces Avoiding eating or drinking in public places All of this	50 46 51 34 38 15	94,33% 86,8% 96,22% 64,15% 71,69% 28,30%
Do you use immunity-boosting supplements to protect yourself from covid 19?	Yes No	27 26	50,95% 49,05%
Are you satisfied with the hospital's preventive measures?	very satisfied satisfied partially satisfied dissatisfied	7 15 21 10	13,20 % 28,30 % 39,62 % 18,86 %
If you are dissatisfied. What else can the hospital do to help fight COVID19?			
Are you scared about catching coronavirus?	Yes No	53 0	100% 0%
Does having cancer raise your risk than others for getting COVID 19 coronavirus?	Yes No I don't know	53 0 0	100% 0% 0%
Does having cancer raise your risk for developing serious health complications from this virus ?	Yes No I don't know	51 0 2	96,22% 0% 3,78%
Do you think that covid 19 is more deadly than cancer?	Yes No I don't know	13 35 5	24,53% 66,03% 9,44%
Do you want to continue or defer your treatment?	Continue Defer	46 7	86,98% 13,02%
Is your treatment regimen	Yes	43	81,13%

changed because of the coronavirus?	No	10	18,87%
If yes, what kind of change?			
Has delaying surgery or any other therapeutic intervention made you more anxious about your disease outcome?	Yes No I don't know	53 0 0	100% 0% 0%
Do you need more information on the association of COVID-19 and cancer?	Yes No I don't know	53 0 0	100% 0% 0%

Discussion:-

The COVID-19 pandemic led to major changes in the structure of oncologic care for the patients.

Hence, several expert groups have outlined recommendations for treating patients with cancer during the COVID-19 pandemic such as the American college of surgeons, the European Society for Medical Oncology (ESMO)[6], National Comprehensive Cancer Network (NCCN)[7], the European and American Society for Radiotherapy and Oncology (ESTRO-ASTRO) [8] and others national groups.

The main modifications proposed were:

1. Systematic use of granulocyte colony-stimulating factors (GCSF) to prevent severe neutropenia
2. favor oral therapies as much as possible.
3. Prioritize hypo-fractionated radiotherapy protocols, in particular for breast, prostate, and rectum cancers.
4. Limit unnecessary hospitalizations.
5. Favor telemedicine consultations for routine follow up.

However, the patient's perception of these changes are rarely evaluated by their treating physicians.

This study is the first of its kind in Morocco to evaluate the perspectives, knowledge sources of cancer patients about COVID-19.

In this study, we found that almost all of our patients are afraid of contracting the virus and consider themselves more vulnerable than others to have serious or even fatal complications from the coronavirus.

However, they consider that they risk dying from cancer more than from the coronavirus by risk of progression of their disease and that the evolution of their cancer will not wait for the arrival of the vaccine against the coronavirus. Furthermore, the patients preferred to continue their treatment than to defer it, despite the pandemic, and proposed to improve the hospital's preventive measures such as introduce telemedicine for routine follow up.

Our results agree perfectly with the literature. In a Indonesian study by Prajoko and al , [9], the authors explore the knowledge of 221 cancer patients on COVID-19, their perceptions towards the changes in oncology service.

The majority of patients possess adequate knowledge and practice appropriate preventive actions. however, treatment interruption contributes to improve level of anxiety or comfort for cancer patients.

In another Indian study conducted by Ghosh and al[10], a total of 302 patients were included for a questionnaire-based survey to evaluate the willingness to continue chemotherapy during this pandemic and factors influencing the decisions.

Treatment was curative in 150 patients and palliative in 152. A total of 203 patients wanted to continue chemotherapy, 40 wanted to defer, and 56 wanted the physician to decide. The worry about catching SARS-CoV-2 was high in those with controlled disease. Worry about disease progression was more with palliative intent (P, .001).

Conclusion:-

In conclusion, this study shows that our patients consider themselves to be more at risk of contracting the virus and developing a severe form than other people due to the immunosuppression caused by the anti-cancer treatments. However, they are more worried about cancer progression than SARS-CoV-2 infection.

Our hospital has made every effort to continue the care of all our patients while ensuring all the means of protection necessary to reduce the risk of contracting the coronavirus while waiting for the hope of stopping the pandemic by the long-awaited COVID -19 vaccine.

References:-

1. Karima Oualla, Lamiae Nouiakh, Nisrine Acharfi, lamiae Amaadour et al . How Is Morocco Reacting to COVID-19 Crisis in Anticancer Centers? Cancer Control Volume 27: 1-4
2. Jing Yu, Wen Ouyang, Melvin L. K. Chua, MBBS, Conghua Xie . SARS-CoV-2 Transmission in Patients with Cancer at a Tertiary Care Hospital in Wuhan, China. JAMA Oncology · March 2020. doi:10.1001/jamaoncol.2020.0980
3. Liang W, Guan W, Chen R, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. Lancet Oncol 2020;21:335-7.
4. Deniz Can Guven, Taha Koray Sahin, Oktay Halit Aktepe, Hasan Cagri Yildirim et al., Perspectives, Knowledge, and Fears of Cancer Patients About COVID-19. Front. Oncol., 28 August 2020 | <https://doi.org/10.3389/fonc.2020.01553>
5. Magdalena Ciążyńska, Marta Pabianek, Katarzyna Szczepaniak, Małgorzata Ułańska et al. Quality of life of cancer patients during coronavirus disease (COVID-19) pandemic . Psycho-Oncology. 2020;1–3. <https://doi.org/10.1002/pon.5434>
6. G. Curigliano, S. Banerjee, A. Cervantes, M. Garassino, P. Garrido, et al. Managing cancer patients during the COVID-19 pandemic: An ESMO Interdisciplinary Expert Consensus. Annals of oncology . VOLUME 31, ISSUE 10, P1320-1335, OCTOBER 01, 2020. DOI: <https://doi.org/10.1016/j.annonc.2020.07.010>
7. National Comprehensive Cancer Network (NCCN). NCCN coronavirus disease 2019 (COVID-19) resources for the cancer care community. <http://www.nccn.org/covid-19/default.aspx> (Accessed on June 10, 2020)
8. Guckenberger M, Belka C, Bezjak A, Bradley J, Daly ME and al. Practice recommendations for lung cancer radiotherapy during the COVID-19 pandemic: An ESTRO-ASTRO consensus statement. Radiother Oncol. 2020 ;146 :223. Epub 2020 Apr 6.
9. **Yan Wisnu Prajoko¹, Tommy Supit** . Cancer Patient Satisfaction and Perception of Chemotherapy Services during COVID-19 Pandemic in Central Java, Indonesia . Asian Pac J Cancer Care, 5 (Suppl 1), 43-50 . DOI :10.31557/APJCC.2020.5.S1.43
10. Joydeep Ghosh, Sandip Ganguly, Debapriya Mondal, Prashant Pandey, et al. Perspective of Oncology Patients During COVID-19 Pandemic: A Prospective Observational Study From India. JCO Global Oncology. DOI <https://doi.org/10.1200/GO.20.00172>.