



The associating factors with covid-19 death admitted in a govt. tertiary care center, SMS Hospital Jaipur

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Abstract

Introduction: Covid-19 is a novel pandemic, manifests with a wide clinical spectrum ranging from asymptomatic Patients to septic, shock, and multi organ dysfunction/ failure. COVID - 19 is classified based on the severity of the presentation. The malady is probable to be unfold by droplets, shut direct or indirect contact, however the relative importance of those routes of transmission is presently unclear. The most common symptoms with pre-existing co-morbidities have a higher CFR. These Co-morbidities include - the highest number of deaths outside China were reported from Iran, Italy and South Korea. COVID-19 remains a extremely communicable disease. All the estimates of transmissibility indicate that self-sustaining human-to-human transmission is the only plausible explanation for the magnitude of the on-going outbreak ^[2].

Objectives:

- 1) Discuss the socio-demographic profile of covid-19 death reported in SMS MC, Jaipur
2. To find out the factors associated with mortality.

Methodology: This hospital based descriptive study was conducted at the largest tertiary care teaching hospital 138 covid-19 deaths were analyzed. Participants were telephonically contacted by the researchers to introduce themselves, verify identities, describe the study purpose and check convenience for interviews.

Results: Mostly death of Covid-19 occurs in male. The mostly affected people in urban populations, urban old population followed by rural, almost same in hindu and muslim religions. Most common in commodities and contact history.

Mostly death in 55_ 65 years of age group.

Conclusion: The COVID-19 outbreak has been major public health emergency of international concern that seriously endangers public health and safety. Symptomatic supportive therapy and comprehensive intervention are the main treatment methods for COVID-19.

INTRODUCTION

COVID - 19 manifests with a wide clinical spectrum ranging from asymptomatic Patients to septic, shock, and multi organ dysfunction/ failure. COVID - 19 is classed supported the severity of the presentation. Disease was transmitted in the health care setting and to close family and social contacts. The malady is probable to be unfold by droplets, shut direct or indirect contact, however the relative importance of those routes of transmission is presently unclear. The most common patients with pre-existing co-morbidities have a higher CFR. These Co-morbidities include-Dabieties, Respiratory disease, cardiovascular disease, Hypertension and Oncological complication. Patient without co-morbidities have a lower case fatality rate of patients are admitted to ICU. ^[1]

The highest number of deaths outside China were reported from Iran, Italy and South Korea.COVID-19 remains a extremely communicable disease. All the estimates of transmissibility indicate that self-sufficing human-to-human transmission is that the solely plausible rationalization for the magnitude of the on-going outbreak ^[2].

In essence, good nutrition creates an environment in which the immune system is strong.

Objectives

1. To discuss the socio-demographic profile of covid-19 death reported in SMS MC, Jaipur
2. To find out the factors associated with mortality.

Sample size: all the covid-19 deaths admitted in SMS hospital from March to June 2020.

Type of study: A hospital based, descriptive study

Methodology

Participants were telephonically contacted by the researchers to introduce themselves, verify identities, describe the study purpose and check convenience for interviews. We reached intent on the individual United Nations agency was tested for COVID-19 through the first contact. Following verbal consent, telecom interviews, that took 5-11 min, were conducted. At the shut of the interviews, participants' queries associated with COVID-19 were addressed.

Study tool

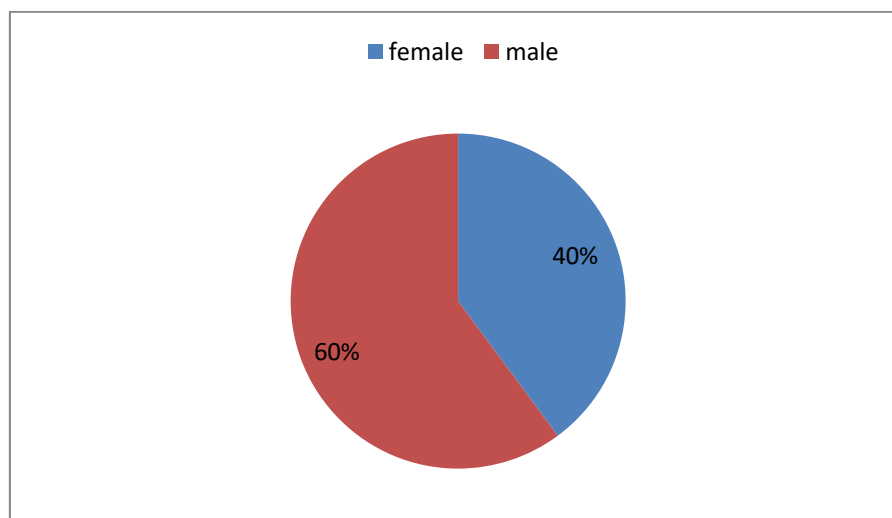
1. Semi-structured, pre-tested questionnaire and Records the death sheets of covid-19
2. Telephonic communication of close relatives of Covid death cases.

Observations

Table-1: Socio-demographic profile of Covid-19 deaths

Socio-demographic profile	No. of deaths (n=138)	(%)
<u>Sex</u>		
Male	83	(60)
Female	55	(40)
<u>Religion</u>	68	(49)
Hindu	70	(51)
Muslim		
<u>Residence area</u>		
Rural	11	(7.9)
Urban	82	(59.1)
Urban old area	45	(33)
<u>Monthly income / capita (Rs)</u>		
70081 and above	36	
3504-7007	51	
2102-3503	26	
1051-2101	17	
<1050	8	

Graph-1: Sex wise distribution of covid-19 deaths



Graph1 most of Covid 19 deaths concern to female (60 %) followed by male cases which is less in number than female.

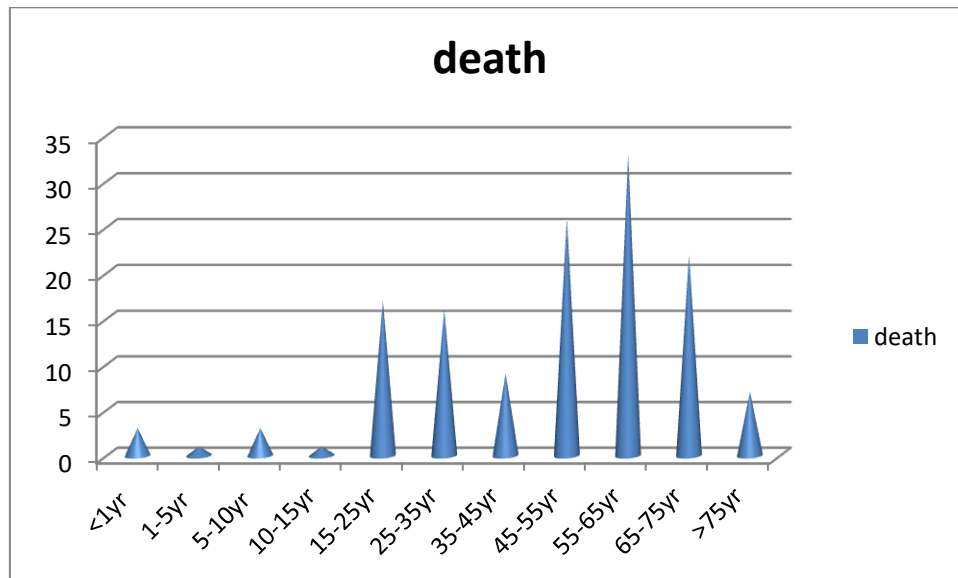
Table-2: Association of dietary habits with covid-19 deaths

Diet	No. of deaths (n=138)	%
veg	56	41
Non veg	82	59

Table-3: Admission status of covid-19 deaths in SMS hospital

Admission status	No. of deaths (n=138)	(%)
Emergency	29	21
ICU	41	30
ICU with ventilator	28	20
ward	40	29

Table 3_around 30% cases associated with ward and ICU admitted cases followed by emergency cases than ICU.

Graph-2: Age wise distribution of Covid-19 deaths

Graph 2: mostly death occurs in 55 to 65 years old persons followed by 45to 55 years of age.

Table-4: Covid-19 cases profile with contact history

Contact history	n=138	(%)
yes	83	60)
no	19	14)
Not know	36	26

Table 4: 60 % of Covid -19 death have history of contact to Covid positive case.

Table-5: Co-morbid conditions associated with Covid -19 deaths Jan-May 2020

Co-morbid conditions	No. of deaths (n=138)	%
yes	76	55
no	62	45

Table 5: mostly (55%) of covid 19 death associated with co_ morbid conditions.

RESULT

Mostly death of covid 19 occurs in male, urban populations (59%), urban old population (33%) followed by rural (8%), almost same in hindu and muslim religions. Most common in commodities (55%) and contact history (60 %). Mostly death in 55_ 65 years of age group's .mostly 30 % of cases associated with ICU and ward of hospital.

DISCUSSION

A study showed that viral aerosol generation by a patient with SARS was possible and therefore airborne droplet transmission was a possible means of transmission ^[6]. Infectious virus is detectable ^[7], and aerosolization of virus in contaminated faces is believed to be the mode of transmission of this outbreak ^[8]. Direct droplet transmission is an important route of transmission ^[9]. In spite of the Observed change towards a healthier dietary pattern, permanent dietary habits are difficult to maintain. ^[10]

The case fatality rate (CFR) of COVID-19 has been seen to be higher in China than outside. On February there was a spike in cases, ^[11]. The high mortality observed in China, at the beginning of spike outbreak. ^[12] The most common symptoms at illness onset are fever, fatigue, dry cough and dyspnoea, headache, dizziness and vomiting ^[13]. Symptoms such as pharyngeal pain, dyspnoea, dizziness are more likely to be present in patients with severe illnesses ^[14]. Patients who are elderly, have underlying co-morbidities are more likely to have adverse outcomes.

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