# "Telemedicine consultation experiences of general population during national lockdown period for other than COVID-19 illness."

Dharmesh Chaturvedi<sup>1</sup>, Sanjay Nagda<sup>2</sup>, Kaushalendra Singh Yadav<sup>3</sup>

Senior Nursing Superintendent, SDRH Rana Pratap Nagar, Udaipur, Rajasthan<sup>1</sup> Associate Professor, Tirupati College of Nursing, Udaipur, Rajasthan<sup>2</sup>, Assistant Professor, Arihant College of Nursing, Indore, Madhya Pradesh<sup>3</sup>

# Abstract

**Background**: Telemedicine is an innovative solution which is helpful in reducing the exposure of Medical Staff, Doctors, and Health Workers from coming in direct contact with suspected carriers decreasing disease transmission during COVID-19 pandemic. Therefore, present study aims to assess the experiences of general population regarding telemedicine consultation in national lockdown period for other than COVID-19 illness.

*Method*: Exploratory electronic survey research design was selected to conduct the study. 334 people were included from all India level as participants in the study through random online googledoc survey.

**Results:** Result revealed that about half 49.70% participants took telemedicine consultation through Audiotelephone, mobile. Around three forth of the participants were able to explain their health issues and understood doctor's advice during telemedicine consultation. Around three forth participants not paid (73.95% participants) for telemedicine consultation. Telemedicine consultation was less expensive for 77.25% participants and 82.34% participants saved time from telemedicine consultation. Around three forth participant (75.45%) received proper and needful treatment for health problems and 83.53% participants were satisfied with telemedicine consultation process. More than half of participants 60.79% proposed registered nurse as best suitable facilitator for telemedicine consultation process while 29.34% of participants stated that they had registered nurses as facilitator during telemedicine consultation. Majority of participants 92.81% found no barriers during telemedicine consultation.

**Conclusion**: Study concluded with strong need for proper telemedicine consultation for rural and urban people with registered nurses as proper and trained facilitators for smooth telemedicine consultation process.

**Keywords:** Telemedicine consultation, COVID-19, National lockdown period, Doctor (Registered Medical Practitioner-RMP), Other than COVID-19 illness.

Date of Submission: 02-10-2020

Date of Acceptance: 16-10-2020

# I. Introduction

Telemedicine is an innovative solution which is helpful in reducing the exposure of Medical Staff, Doctors, and Health Workers from coming in direct contact with suspected carriers decreasing disease transmission during COVID-19 pandemic. Mr. Manoj Kanodia, CEO (Inspira), said on the inauguration of Manorama Infosolutions Pvt. Ltd Telemedicine & Teleconsultation that, "there is a major concern among citizens and medical associations about managing a vast population with limited govt. doctor availability and capacity. So as to be prepared for this degree of disruption, Tele-consultation can be one such answer, which can ease different risks such as reducing loads on doctors and healthcare staff, visiting patient loads, safe implementation of health measures/ self-quarantines on the basis the remote consultation of health specialist.<sup>1</sup>

According to ministry of health & family welfare guidelines, Telemedicine is 'the delivery of healthcare services, where distance is a critical factor, by all healthcare professionals using information and communication technology for the exchange of valid information for the diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of healthcare providers, all in the interests of advancing the health of individuals and their communities.' While "Tele Health" is 'The delivery and facilitation of health and health-related services including medical care, provider and patient education, health information services, and self-care via telecommunications and digital communication technologies.' A 'Registered Medical Practitioner' (RMP) is defined as a person who is enrolled in the State Medical Register or the Indian Medical Register under the IMC Act 1956.<sup>2</sup>

The term "Telemedicine" means "healing at a distance". WHO has defined it as "the delivery of health care services, where distance is a crucial factor, by all health care professionals using information and

communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities".<sup>3</sup>

Till October 5<sup>th</sup>, 2020 total confirmed COVID-19 cases in the world were 35,109,317 with total confirmed death were 1,035,341 affecting whole world globally.<sup>4</sup>

On January 30 first case was detected in Kerala state in India in a student who returned from Wuhan, China. 2<sup>nd</sup> and 3<sup>rd</sup> case also found from Kerala in students who returned from Wuhan, China. Then in March 2<sup>nd</sup> two more cases reported from Delhi with travel history from Italy and in Hyderabad with travel history from United Arab Emirates (UAE). Jointly on same day one tourist from Italy also found COVID-19 positive in Jaipur, Rajasthan.<sup>5</sup>

Till October 6<sup>th</sup>, 2020 total active cases in India from COVID-19 were 919023 (13.75%) with 5662490 (84.70%) cured or discharged and 103569 (1.55%) deaths.<sup>6</sup>

In a press release, the centers for Medicare & Medicaid Services (CMS) in United States of America (USA) explained that its new measures will allow for more than 80 additional services to be furnished via telehealth. "During the public health crisis, people can use interactive apps with audio and video capabilities to visit with their clinician for an even broader range of services. Health care providers can also evaluate beneficiaries who have audio phones only. These temporary changes will ensure that patients have access to medical practitioner and other health care providers while remaining safely at home." **Paul Webster (2020)** reports on how telemedicine is being embraced like never before.<sup>7</sup>

Hence, the investigator is interested to undertake a study to assess the experiences of general population regarding telemedicine consultation in national lockdown period for other than corona (COVID-19) illnesses. This study may help the health care professionals to gain an insight into the telemedicine process and role of facilitator with its overall benefit to the general population. The health care professionals may apply this knowledge in improvising telemedicine consultation process. More emphasis may be given on institutional telemedicine consultation program with emphasis on role of registered nurses as a facilitator for patient and Registered Medical Practitioner (RMP).

### **II.** Materials and Method

A quantitative, exploratory, electronic survey research design approach was used to assess telemedicine consultation experiences of general population during national lockdown period for other than COVID-19 illness. The present study was conducted through online googledoc survey among 334 participants from general population between May 2020 to September 2020 in India, after obtaining consent from the participants. The sample consisted of general population of India, meeting inclusion criteria and those who were willing to participate in study, as the questionnaire page opens only after willingness for participation in the study.

Study Design: Exploratory research design (Electronic survey)

**Study Location**: The present study was conducted through online googledoc survey among general population in India.

#### Study Duration: May 2020 to September 2020

**Sample Size**: 334 participants included in the study through online random sampling techniques from general population of India.

#### **Inclusion Criteria:**

- 1. People from General population who had telemedicine consultation during national lockdown period for other than Corona illnesses (COVID-19).
- 2. People from General population who are willing to participate in the study.
- 3. People from General population who can read & write English or Hindi languages.
- 4. People from General population who can understand smart-phone functions in online survey.

#### **Exclusion Criteria:**

- 1. People from General population who has not taken telemedicine consultation from Registered Medical Practitioner.
- 2. People from General population who cannot understand smart-phone function in online survey.

**Description of research tool:** The tools selected for the present study include socio-demographic scale and semi-structured questionnaire (close ended as well as open ended questionnaire) to explore telemedicine consultation experiences of general population during national lockdown period for other than COVID-19 illness. Close ended questions included reason for telemedicine consultation, medium of telemedicine consultation, whether payment made for telemedicine consultation, able to explain health problem and understand advice from doctor (RMP), taken help from facilitator to explain health problem and understand

advice from doctor (RMP), who was facilitator, whether time and money saved, whether received proper and needful treatment, satisfied with telemedicine process, barrier during telemedicine consultation, opinion on best suitable facilitator during telemedicine consultation. Open ended questions included mention reason for telemedicine consultation, mention barrier (hurdle) in your telemedicine consultation process, if satisfied with telemedicine consultation mention reason in short, suggestions to make telemedicine consultation more simple, accessible and affordable.

Test retest method was used to establish the reliability of structured close ended questionnaires. The reliability coefficient was found to be r = 0.691. Prior to tool administration all subjects were explained about the purpose, nature and outcome of study. Informed consent was taken from the participants and self explanatory tools were administered to participants. The data collected from participants was analysed using SPSS software 21 version.

#### III. Results

A total of 334 general people participated in the study, among them in majority of participants 292 (87.43%) answered questionnaire in Hindi language. Majority of participants 243 (72.75%), took telemedicine consultation for one time. According to age, 204 (61.08%) participants were in the age group of 21-40 yrs, 70 (20.96%) were in the age group of 41-60 years. According to gender majority of participants 233 (69.76%) were male and 101 (30.24%) were female. With regard to educational status majority 227 (67.97%) participants had graduation and above. In connection with occupation, 95 (28.44%) were unemployed, 85 (25.45%) in private sector job, 79 (23.65%) were in government sector jobs. Regarding monthly family income 121 (36.23%) were earning between less than 10000 rupees, 102 (30.54%) were earning more than rupees 30001.

According to diet, 258 (77.25%) were vegetarian and, 76 (22.75%) were mixed vegetarian. Regarding area of residence 171 (51.20%) participants were residing in urban area, 124 (37.12%) were residing in rural area. Regarding personal habits contributing to illnesses, 305 (91.32%) participants had no such habits, 13 (03.90%) had habit of smoking, tobacco and gutkha chewing, 8 (02.39%) had alcoholism. Majority of participants 210(62.88%) had not taken telemedicine consultation before corona lockdown. Only 54 (16.17%) had chronic illnesses. Among chronic illnesses 33 (9.87%) had DM and HTN, 8 (02.39%) had arthritis, 8 (02.39%) had asthma and allergy, 3(0.89%) had headache and migraine, each one (0.29%) had Epilepsy and SLE.

S. No.	Demographic Variables		Samples		
		Freq.	%		
1.	Questionnaires answered in				
	Hindi language	292	87.43%		
	English language	42	12.57%		
2.	Questionnaires filled by				
	Self	132	39.52%		
	Friend	97	29.04%		
	Relative	105	31.44%		
3.	Telemedicine consultation taken				
	One time	243	72.75%		
	Two time	55	16.48%		
	Three time	11	03.29%		
	More than three time	25	7.48%		
4.	Age (in years)				
	Less than 10 years	06	01.79%		
	11-20 years	36	10.79%		
	21-40 years	204	61.08%		
	41-60 years	70	20.96%		
	More than 61 years	18	05.38%		
5.	Gender				
	Male	233	69.76%		
	Female	101	30.24%		
6.	Educational status				
	Not went to school	27	08.08%		
	Primary education	35	10.48%		
	Secondary education	45	13.47%		
	Graduation and above	227	67.97%		
7.	Occupation				
	Govt. Job	79	23.65%		
	Private Job	85	25.45%		
	Self business	59	17.17%		
	Retired	16	04.79%		
	Unemployed	95	28.44%		
8.	Monthly income				

 Table: 1. Distribution of sample according to socio demographic variables (n=334)

"Telemedicine consultation experiences of general population during national lockdown ..

	Less than 10000/monthly	121	36.23%
	10001-20000/ monthly	65	19.46%
	20001-30000/ monthly	46	13.77%
	30001 and above	102	30.54%
9.	Diet		
	Vegetarian	258	77.25%
	Mixed- Vegetarian	76	22.75%
10.	Area of residence		
	Urban	171	51.20%
	Semi -Urban	39	11.68%
	Rural	124	37.12%
11.	Personal habits		
	Smoking, Tobacco, Gutkha	13	03.90%
	Alcoholism	8	02.39%
	Both smoking and alcoholism	8	02.39%
	No such habits	305	91.32%
12.	Telemedicine consultation before COVID-19 lockdown		
	Yes	124	37.12%
	No	210	62.88%
13.	Suffering from any chronic diseases		
	Yes	54	16.17%
	No	280	83.83
	DM+HTN	33	9.87%
	Arthritis	8	2.39%
	Asthma +Allergy	8	2.39%
	Migraine/Headache	3	89%
	SLE	1	29%
	Fnilensy	1	29%
	Lpneps)	1	.27/0

# Table-2 Distribution of sample according telemedicine experiences (close ended quantitative questionnaire) (N=334)

S.	Experiences of telemedicine consultation		Samples		
No.		Freq.	%		
1.	Reason for telemedicine consultation				
	For regular follow up	65	19.46%		
	Complication in already diagnosed disease	14	04.19%		
	For new/other health problems	255	76.35%		
	L L				
2.	Medium through which telemedicine consultation taken				
	Text message, email, whatsapp	127	38.02%		
	Audio- telephone, mobile	166	49.70%		
	Video calling, video app	41	12.28%		
3.	Paid for Telemedicine consultation				
	Yes	87	26.05%		
	No	247	73.95%		
4.	Able to explain health problem to doctor (RMP)				
	Yes	253	75.75%		
	No	16	04.79%		
	To some extant	65	19.46%		
5.	Taken help of facilitator in explaining health problem to doctor (RMP)				
	Yes	102	30.54%		
	No	232	69.46%		
6.	Able to understand advice of doctor (RMP)				
	Yes	260	77.84%		
	No	22	06.59%		
	To some extant	52	15.57%		
7.	Taken help of facilitator in understanding advice of doctor (RMP)				
	Yes	132	39.52%		
	No	202	60.48%		
8.	Facilitator during telemedicine consultation process with Doctor (RMP)				
	Doctor	62	18.56%		
	Registered Nurse	98	29.34%		
	Other health care worker	15	04.50%		
	Relative or friend	25	07.48%		
	No one	134	40.12%		
9.	Time saved through telemedicine consultation				
	Yes	275	82.34%		
	No	13	03.89%		
	To some extant	46	13.77%		
10.	Telemedicine consultation was less expensive				
	Yes	258	77.25%		

"Te	elemedicine	consultation	experiences	of	general	popul	lation	during	national	lockdown	
			1	•	0			0			

	No	30	08.98%
	To some extant	46	13.77%
11.	Received proper and needful treatment for your health problem through		
	Telemedicine consultation		
	Yes	252	75.45%
	No	19	05.69%
	To some extant	63	18.86%
12.	Best suitable Facilitator for telemedicine consultation process with Doctor		
	(RMP)		
	Doctor	93	27.84%
	Registered Nurse	203	60.79%
	Other health care worker	17	05.09%
	Relative or friend	21	06.28%
13.	Barrier during telemedicine consultation process with Doctor (RMP)		
	Yes	24	07.19
	No	310	92.81%
14	Satisfied with telemedicine consultation process with Doctor (RMP)		
	Yes	279	83.53%
	No	39	11.68%
	To some extant	16	04.79%

Among 334 participants, 255(76.35%), took telemedicine consultation for new and other health problems and about half 166(49.70%) participants took telemedicine consultation through Audio- telephone, mobile. About three forth 247 (73.95%) participants not paid for telemedicine consultation. As per ability to explain health problem to doctor (RMP), 253 (75.75%) participants were able to explain health problem to doctor (RMP), 260 (77.84%) participants were able to understand advice of doctor (RMP), and 202 (60.48%) participants not taken help of facilitator in understanding advice of doctor (RMP).

As per Facilitator during telemedicine consultation process with Doctor (RMP), 98 (29.34%) participants stated that they had registered nurses as facilitator during telemedicine consultation. Majority of participants 275 (82.34%) saved their time through telemedicine consultation. In view of expensiveness, telemedicine consultation was less expensive for majority of participants 258(77.25%). About one third participants 252 (75.45%) received proper and needful treatment for health problems through Telemedicine consultation. More than half of participants 203 (60.79%) stated Registered Nurse as best suitable Facilitator for telemedicine consultation process.

In connection with barrier during telemedicine consultation process with Doctor (RMP), majority of participants 310 (92.81%) found no barriers during telemedicine consultation process. Majority of participants 279 (83.53%) participants were satisfied with telemedicine consultation process.

Freq.	Percentage	Open ended qualitative questionnaires
		1. Reason for telemedicine consultation
124	37.12%	Participants not mentioned reason for telemedicine consultation during corona lockdown.
35	(10.47%)	Participants took telemedicine consultation for complain of fever
34	(10.17%)	Participants took telemedicine consultation for various pain complaints, which were pain in joint, back,
		tooth, eye, ear and body ache.
31	(9.21%)	Participants took telemedicine consultation for GIT system complaints, which were pain abdomen,
		Nausea, vomiting, gastric pain, typhoid fever, oral ulcer, loose motion.
31	(9.21%)	Participants took telemedicine consultation for Respiratory system complaints, which were Cough, cold,
		breathing difficulty, tonsillitis, TB
17	(5.08%)	Participants took telemedicine consultation for CVS complaints, which were HTN, heart diseases,
		angioplasty
17	(5.08%)	Participants took telemedicine consultation for Endocrine system complaints, in which 12 participants
		took telemedicine consultation for DM and rest (5) for thyroid disorders.
16	(4.79%)	Participants took telemedicine consultation for CNS system complaints, which were severe headache,
		paralytic attack, epilepsy, neuralgia
12	(3.59%)	Participants took telemedicine consultation for skin and allergy complaints
6	(1.79%)	Participants took telemedicine consultation for wound infection and parasitic (malaria) infection
4	(1.19%)	Participants took telemedicine consultation for pregnancy related health problems
4	(1.19%)	Participants took telemedicine consultation for complaints of Cancer, SLE, dog Bite
3	(.89%)	Participants took telemedicine consultation for renal system complaints including BPH and UTI
		2. Barrier during telemedicine consultation process with Doctor (RMP)
24	(7.18%)	Participants stated about barriers
		• Internet problems, network speed, picture, storage

 Table -3 Description of samples according to open ended (qualitative) questionnaires regarding telemedicine consultation (n=334)

		Lack of facilitator		
		Limited time		
		Doctor was not able to understand health problems		
		Doctor was not able to diagnose health problem		
		Not able to understand medical terms		
		3. Satisfied with telemedicine consultation process with Doctor (RMP)		
279	(83.53%)	Participants were satisfied but only 20 (5.98%) of participants provided reasons of their satisfaction		
		Save time, money and energy		
		• Simple		
		Helpful in acute problems		
		Avoid hospital environment and infection		
		Good in COVID-19 like situation		
		Important in healthcare staff cases and communication		
16	(4.79%)	Participants were partially satisfied in which 10 (2.99%) participants provided reason		
		Facilitator needed		
		Good in acute minor problems but not helpful in serious and emergency cases		
		Net work (Internet) should be improved		
		No relief sought , next day visited to hospital		
39	(11.68%)	Participants were not satisfied and among them 14 (4.19%) participants provided reason		
		Less technical knowledge		
		Difficult for people as not in practice		
		No proper assessment		
		More money demanded by doctor after a period of time.		
		4. Suggestion to make telemedicine better		
85	(25.44%)	Participants suggested making awareness and advertisement through mass media and electronic media		
		and making it simple in local language, less expensive and easily accessible with fixed timing		
46	(13.77%)	Participants suggested to augment role of RN as facilitator in remote areas and on each primary health		
		care centre, provide proper training to facilitators, special place in rural area with proper internet facilities		
		should be used for telemedicine consultation		
37	(11.07%)	Participants suggested for separate mobile app or software, speedy internet, Smartphone availability,		
		separate login		
21	(6.28%)	Participants suggested that Doctor should be available, concerned, explain well, coordination with		
		pharmacy and investigation lab with flexibility for old age people.		
		Some important suggestions were		
		1. Option to listen respiratory and cardiac activity		
		2. Three digit calling number for telemedicine provider		
		3. Compulsory in rural and remote health care centres		
		4. Regular follow up for old age people with chronic diseases		

Among 334 participants, 124 (37.12%) participants not mentioned reason for telemedicine consultation during corona lockdown. 35 (10.47%) participants took telemedicine consultation for fever complaint, 34 (10.17%) participants took telemedicine consultation for various pain complaints, which were pain in joint, back, tooth, eye, ear and body ache, 31 (9.21%) participants took telemedicine consultation for GIT system complaints, which were pain abdomen, Nausea, vomiting, gastric pain, typhoid fever, oral ulcer, loose motion., 31 (9.21%) participants took telemedicine consultation for Respiratory system complaints, which were Cough, cold, breathing difficulty, tonsillitis, TB.

Only 24 (7.18%) Participants stated about barriers during telemedicine consultation process with Doctor (RMP). The barriers were Internet problems, network speed, picture, lack of facilitator, limited time; doctor was not able to understand health problems.

279 (83.53%) participants were satisfied with telemedicine consultation process but among them reason provided by 20 (5.98) participants. Reasons were save time, money and energy, helpful in acute problems; avoid hospital environment and infection, well in COVID-19 like situation. 16 (4.79%) participants were partially satisfied in which 10 (2.99%) participants provided reason which were facilitator needed, not helpful in serious and emergency cases, improper network. 39 (11.68%) participants were not satisfied and among them 14 (4.19%) participants provided reason which were less technical knowledge, difficult for people as not in practice, no proper assessment.

Many participants provided suggestion to make telemedicine better, among them 85 (25.44%) participants suggested making awareness and advertisement through mass media and electronic media and making it simple in local language, less expensive and easily accessible with fixed timing. 46 (13.77%) participants suggested to augment role of RN as facilitator in remote areas and on each primary health care centre, provide proper training to facilitators, special place in rural area with proper internet facilities should be used for telemedicine consultation. 37 (11.07%) participants suggested for separate mobile app or software, speedy internet, Smartphone availability, separate login.

## **IV. Discussion**

Around half of the participants took telemedicine consultation through Audio- telephone, mobile. Around three forth of the participants were able to explain their health issues and understood doctor's advice during telemedicine consultation. Around half of the participants stated that they had no facilitator during telemedicine consultation. Around three forth participants (72.75%) took telemedicine consultation for one time only and not paid (73.95% participants) for consultation. Majority of participants 92.81% found no barriers during telemedicine consultation. The similar findings revealed by study conducted by **Ghosh A et al** (2020)<sup>10</sup> the feasibility of telemedicine in the COVID-19 scenario and **Mathur P** (2017)<sup>11</sup> on role of telemedicine in health care delivery in India.

Our study revealed that around three forth participant (75.45%) received proper and needful treatment for health problems through Telemedicine consultation and 83.53% participants were satisfied with telemedicine consultation process. Telemedicine consultation was less expensive for 77.25% participants and 82.34 % participants saved time from telemedicine Our findings supported by study conducted by **Acharya RV and Raj JJ. (2016)**<sup>8</sup> on patient and doctor perception towards telemedicine in Apollo Tele Health Services, India. They found about 80% reported their satisfaction and 90% of the participants found telemedicine cost-effective.

Our revealed regarding suggestion s to make telemedicine better which were mainly awareness, role enhancement of facilitator, coordination among health care personnel during telemedicine. Our findings supported through an exploratory study conducted by **Bhatia**, **J.S. & Singh C.** (2014)<sup>12</sup> on Adoption of Telemedicine in India. Their findings were that  $\cdot$  a collective, comprehensive, positive, sincere and dedicated approach, on the part of multidisciplinary Healthcare role players, is the prime most essentiality for enhancing Telemedicine.

More than half of participants 60.79% stated Registered Nurse as best suitable Facilitator for telemedicine consultation process while 29.34% of total participants and half of the participants who had facilitator during telemedicine, stated that they had registered nurses as facilitator during telemedicine consultation. Our findings supported through a qualitative analysis by **Toroppa MA et al (2006)** <sup>9</sup> on 30 primary care teleconsultations in northeastern Finland. His analysis found nurse as an active role in facilitator of the communication, an advocate for the patient, and a mediator of the doctor's therapeutic influence

#### V. Conclusion

Study revealed that telemedicine consultation is in infantile stage in our country. People are less aware about it. There is need of proper training for telemedicine consultation process. Study concluded with strong need for proper telemedicine consultation system for rural and urban people with registered nurses as proper and trained facilitators for smooth telemedicine consultation process.

#### References

- Teleconsultation enables medical authorities to remotely examine Covid-19 suspects; curbing disease transmission. ETHealthWorld. April 15, 2020, 18:23 IST. Available fromhttps://health.economictimes.indiatimes.com/news/health-it/manoramainfosolutions-launches-telemedicine-teleconsultation-to-fight-covid-19-pandemic/75161427
- [2]. Telemedicine Practice Guidelines by BOARD OF GOVERNORS In supersession of the Medical Council of India & NITI Aayog. 25 March 2020
- [3]. Telemedicine-Opportunities and developments in member states [Internet] 2nd ed. Geneva, Switzerland: WHO press; 2010. Available from: https://www.who.int/goe/publications/goe\_telemedicine\_2010.pdf.
- [4]. WHO Corona virus (COVID-19) dashboard. Data last updated: 2020/10/5, 3:54pm CEST. Available from https://covid19.who.int/
- [5]. Available from https://en.wikipedia.org/wiki/Timeline\_of\_the\_COVID-19\_pandemic\_in\_India
- [6]. COVID-19 Dashboard India. COVID-19 INDIA as on: 06 October 2020, 08:00 IST (GMT+5:30). Available from https://www.mohfw.gov.in/
- [7]. Paul Webster. World report on Virtual health care in the era of covid 19. www.thelancet.com Vol 395 April 11, 2020. Available from. https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2930818
- [8]. Acharya RV, Rai JJ. Evaluation of patient and doctor perception toward the use of telemedicine in Apollo Tele Health Services, India. Journal of Family Medicine and Primary Care. 2016 Oct-Dec;5(4):798-803. DOI: 10.4103/2249-4863.201174.
- [9]. Toroppa MA et al Patient-nurse-doctor interaction in general practice teleconsultations A qualitative analysis. Journal of

telemedicine and telecare 2006:12;306-10. Available from. https://www.researchgate.net/publication/6771892\_

- [10]. Ghosh A, Gupta R, Misra A, Telemedicine for Diabetes Care in India during COVID19 Pandemic and National Lockdown Period: Guidelines for Physicians, Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 2020. https://doi.org/10.1016/j.dsx.2020.04.001
- [11]. Mathur P, Srivastava S, Lalchandani A, Mehta JL (2017) Evolving Role of Telemedicine in Health Care Delivery in India. Prim Health Care 7: 260. doi: 10.4172/2167-1079.1000260
- [12]. Bhatia, J.S., & Singh, C. (2014). Adoption of Telemedicine in India An Exploratory Study. Available from https://www.semanticscholar.org/paper/Adoption-of-Telemedicine-in-India-%E2%80%93