



## Original Research Article

## Perception of patients getting teleconsultation in an e-OPD during Covid pandemic

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## ABSTRACT

**Background:** Corona Virus Disease (COVID-19) was declared as Global Pandemic by W.H.O. on 11<sup>th</sup> March 2020. As nationwide lockdown was imposed from 21<sup>st</sup> March 2020 in India, teleconsultation project known as eSanjeevani: Stay Home OPD<sup>®</sup> was launched by Honourable Union Health Minister. This facility was also started by the Department of Health & Family Welfare, Govt. of Himachal Pradesh at our center; Dr. Rajendra Prasad Govt. Medical College (Dr. RPGMC), Kangra at Tanda from 20<sup>th</sup> April 2020 onwards. **Aim & Objective:** To analyse the parameters influencing teleconsultation service from the perspective of patients during Covid-19 pandemic.

**Materials and Methods:** This cross-sectional descriptive study was conducted through a semi-structured 10-point feedback questionnaire. The feedback was collected telephonically. A total of 131 responses were noted and analysed accordingly.

**Results:** Out of 131 patients, 71 (54%) were males and 60 (46%) were females. All of them 131 (100%) accepted the legibility of e-prescription, and the majority (91%) of them were comfortable in procuring (downloading) the same. (83%) respondents preferred teleconsultation services over conventional OPD-based services and (98%) patients also recommended teleconsultation platform to others.

**Conclusion:** Mean rating score was 8.9±1.04 out of 10 which clearly shows that majority of patients were satisfied with teleconsultation services availed by them through Dr. RPGMC Tanda hub.

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## 1. Introduction

In India, till March 2020, there was no legislation or guidelines on the practice of telemedicine. The provisions under the Indian Medical Council Act, 1956, the Indian Medical Council (Professional Conduct, Etiquette and Ethics Regulation 2002), Drugs & Cosmetics Act, 1940 and Rules 1945, Clinical Establishment (Registration and Regulation) Act, 2010, Information Technology Act, 2000 primarily govern the practice of medicine and information technology only.<sup>1</sup> Corona Virus Disease (Covid19) was declared as Global Pandemic by W.H.O. on 11<sup>th</sup> March 2020.<sup>2</sup> A nationwide lockdown was imposed from 21<sup>st</sup>

March 2020 in India as preventive measure<sup>3</sup> and realizing this utmost urgency, the Board of Governors in supersession of the MCI (Medical Council of India) exercise of the powers conferred by Section 33 of the Indian Medical Council Act, 1956 (102 of 1956) released the notification dated 12<sup>th</sup> May 2020, which contains the regulations called as the “Indian Medical Council (Professional Conduct, Etiquette and Ethics) (Amendment) Regulations, 2020” effective from 25<sup>th</sup> March 2020.<sup>1</sup> These guidelines have been framed in partnership with NITI Aayog which gives the permission of consultation through Telemedicine by the Registered Medical Practitioner under the Indian Medical Council Act, 1956.<sup>1</sup>

Ministry of Health & Family welfare launched an online portal for teleconsultation known as eSanjeevani OPD –

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Stay Home OPD. This telemedicine system was developed by Centre for Development of Advanced Computing (C-DAC), Mohali and the same deployed nationally by the Ministry of Health & Family Welfare at 155,000 Health and Wellness Centres under Ayushman Bharat Scheme of Government of India.<sup>4</sup> On dated 20<sup>th</sup> April 2020, same platform was adopted by Department of Health & Family Welfare, Himachal Pradesh based on hub and spoke model at Dr. RPGMC Tanda also.

## 2. Materials and Methods

Three physicians at Dr. RPGMC hub gave consultation to 207 patients from dated 20<sup>th</sup> April to 9<sup>th</sup> July 2020. We planned to take feedback from patients and conduct this cross-sectional descriptive study. Out of 207 patients contacted, 131 responded and their responses were analysed using MS Excel Software. This study was conducted through a semi-structured 10 point feedback questionnaire.

### 2.1. Data collection

Feedback of teleconsultation service was obtained through a semi-structured questionnaire containing a total of 15 parameters. The questionnaire was designed in such a manner that considered all the important parameters regarding process of teleconsultation, post consultation patient satisfaction and perception towards teleconsultation respectively. After taking prior verbal consent, the questionnaire-based feedback was collected telephonically from patients who received teleconsultation services through eSanjeevani Dr. RPGMC hub during the months of April to July 2020.

### 2.2. Ethics approval

Prior Approval from Institute ethics committee was taken with reference number; No. HFW- H DRPGMC/ Ethics /2020/046, Dated: 02.11.2020 and the consent for conducting of study was obtained from the participants after briefing them the objectives of the study.

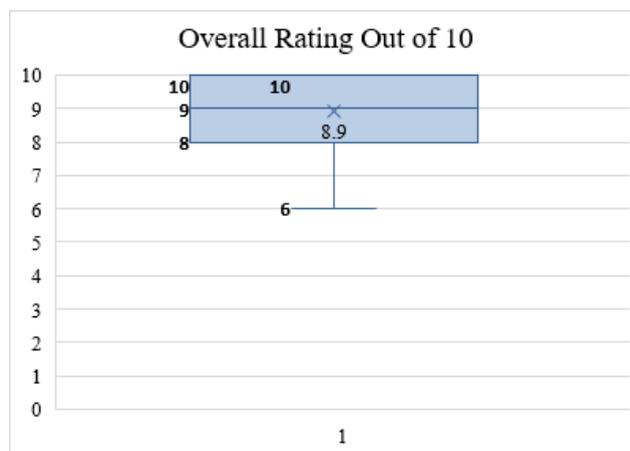
## 3. Data analysis

The data were analyzed using Microsoft Excel 2019 and the results are presented in form of mean percentage and numbers.

## 4. Observations and Results

The e-OPD feedback questionnaire was answered by 131 individuals, out of which 71 (54%) were males and 60 (46%) were females. Smartphone was used by 104 (79%), laptop by 21 (16%) & desktop by 6 (5%) for obtaining teleconsultation. 96 (73%) patients had self-operated the web portal whereas 35 (27%) patients took help from someone.<sup>5,6</sup> 42.7% patients received information

from the social media,<sup>36</sup> (27.4%) from radio, 34 (26%) from newspaper,<sup>3</sup> (2.3%) from hospital and 2 (1.5%) from television respectively. 14 (11%) were undergraduates, 71 (54%) were graduates and 46 (35%) were postgraduates respectively.



**Fig. 1:** Box and Whisker plot showing inter-quartile range with mean score

46 (39%) respondents gave 10, 4 (3%) gave 9.5, 39 (30%) gave 9, 1 (1%) gave 8.5, 27 (18%) gave 8, 1 (1%) gave 7.5, 10 (6%) gave 7 and 3 (2%) gave 6 score out of 10 respectively.

The overall mean score is  $8.92 \pm 1.04$  out of 10.

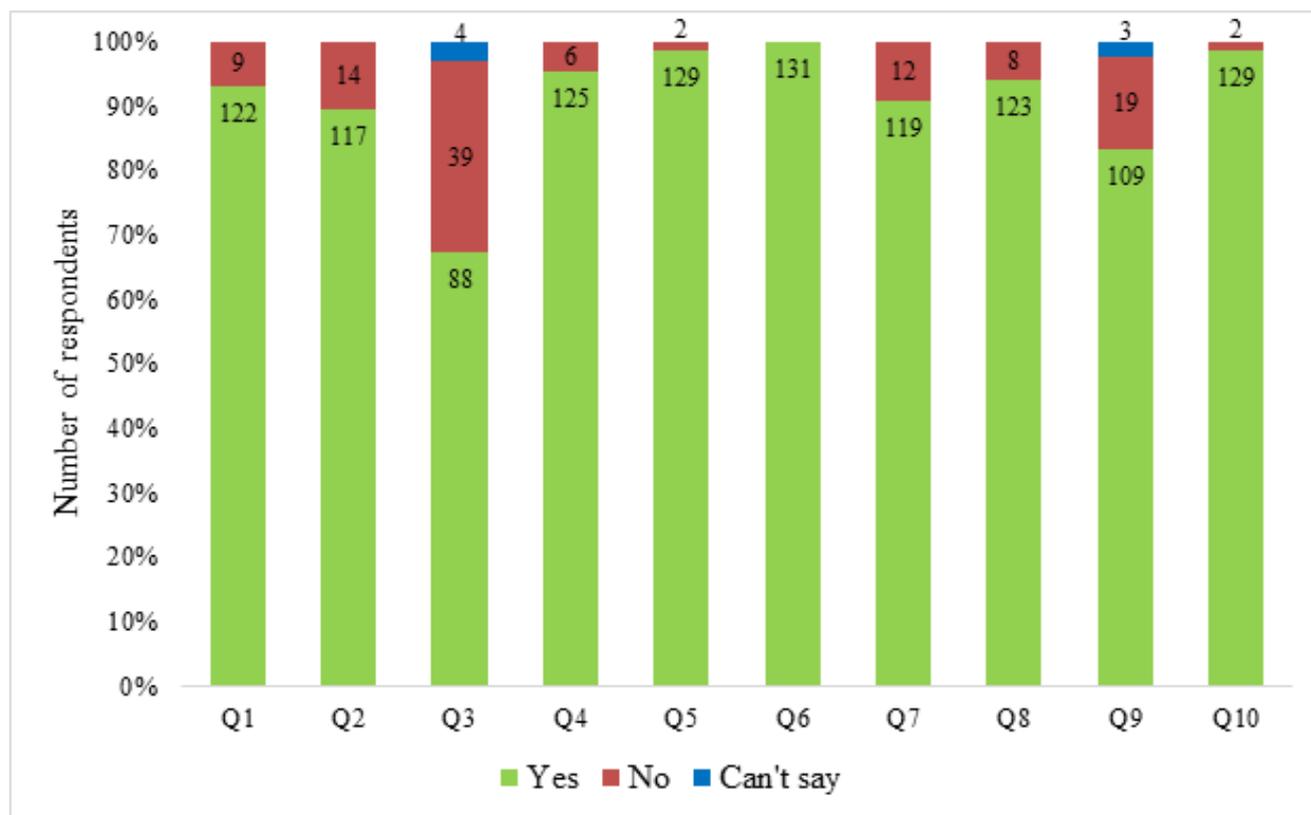
## 5. Discussion

COVID-19 has completely changed the paradigm of health care systems. The current dilemma is how to provide service not only for those afflicted with COVID-19 but also for patients suffering from other chronic diseases while protecting medical staff.<sup>5,6</sup> In this regard, telemedicine must be one of game changers during the COVID-19 pandemic. To decrease the OPD workload in such critical situation, Ministry of Health & Family welfare launched an online portal for teleconsultation known as eSanjeevani OPD for providing healthcare services using digital online platform.<sup>4</sup> This study was designated to evaluate the advantages and disadvantages of telephone based telemedicine and suggest a supplementation for better application of telemedicine based on feedback received from patients through feedback questionnaire.

Majority of patients (83%) were conclusive in superiority of teleconsultation services over conventional opd based services and they also recommended this platform to others. Moreover, patients' higher satisfaction with telemedicine might be associated with the emergent situation due to COVID-19. As per Lewis et al.,<sup>7</sup> patients great appreciation and satisfaction are due to improved efficiency and cost-effectiveness without the risk of direct person-to

**Table 1:** Feedback questionnaire and responses obtained

| Question/response  | Yes        | No       | Can't say |
|--|------------|----------|-----------|
| Q1. Were you able to understand & easily operate the telemedicine user interface?                  | 122 (93%)  | 9 (7%)   | 0         |
| Q2. Was it easy to connect to the doctor?  | 117 (89%)  | 14 (11%) | 0         |
| Q3. Were you satisfied with the audio and video quality of consultation?                           | 88 (67%)   | 39 (30%) | 4 (3%)    |
| Q4. Were you able to fully convey your health complaints to the doctor?                            | 125 (95%)  | 6 (5%)   | 0         |
| Q5. Was the doctor able to understand your complaints?   | 129 (98%)  | 2 (2%)   | 0         |
| Q6. Was the prescription slip easily understandable?   | 131 (100%) | 0        | 0         |
| Q7. Were you able to Download the e-prescription & procure medicine easily after the consultation? | 119 (91%)  | 12 (9%)  | 0         |
| Q8. Was your health issue resolved/relieved by the consultation?                                   | 123 (94%)  | 8 (6%)   | 0         |
| Q9. Is telemedicine consultation better than conventional hospital-based consultation?             | 109 (83%)  | 19 (15%) | 3 (2%)    |
| Q10. Will you recommend this mode of consultation to others?                                       | 129 (98%)  | 2 (2%)   | 0         |

**Fig. 2:** Distribution of feedback of questionnaire administered

person transmission. During feedback call, some patients mentioned different type of concerns which were not a part of our questionnaire. One patient pointed out regarding reimbursement facility under telemedicine; they faced difficulty in getting back the money spent on medicine purchase, whereas another patient enquired regarding getting medical rest advice through E-opd consultation. Fifteen percent patients were of the opinion of lack of physical examination as one of the drawback in teleconsultation. Regarding this, Jayawardena et al.,<sup>8</sup> have demonstrated that physical examination is a critical tool in any physician diagnostic armamentarium and social distancing guidelines have eliminated the option of in-person evaluation for the majority of patients for the immediate future.

## 6. Conclusion

Telemedicine cannot be the answer to all problems, but it can be very important in addressing a vast range of outdoor patient related problems and decreasing a substantial OPD workload. Our study is successful in identifying the frequency of each barrier for patient satisfaction. Telemedicine shows promise in its ability to increase access and efficiency, ease and acceptance of this treatment modality in covid-19 worsening situation. Patient's convenience was strength of telemedicine, whereas incomplete assessment of patient conditions was its weakness.

## 7. Limitations

This study has some limitations. First, patients' satisfaction with teleconsultation might have been overestimated because in-person visits were not allowed during temporary hospital closing due to in-hospital COVID-19 transmission. Satisfaction by patients may be different when both in-person visits and telemedicine are available. Second, the possibility of medical complications should be considered because telephone-based telemedicine was limited to stable patients to assure safety and most patients wanted repeat prescriptions. Finally, satisfaction survey of telemedicine was only done in a single e-Sanjeevni hub at Dr. Rajendra Prasad Govt. Medical College Kangra at Tanda.

## 8. Source of Funding

None.

## 9. Conflict of Interest

The authors declared that they have no conflict and any competing interests.

## 10. Acknowledgement

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