Clinical Communication

COVID-19 and its impact on pain management practices: A nation-wide survey of Indian pain physicians

INTRODUCTION

Novel coronavirus disease (COVID-19) has created a global health crisis. Health agencies across the globe are engaged in containing the disease and limiting the spread of infection by following "social distancing" norms. This has led to the cancellation of elective surgeries and elective consultations. This has also affected pain clinics, including interventional pain management (IPM) procedures. This can not only have an adverse impact on chronic pain (CP) patients (pain >6 months) but can also affect pain physicians who care for the patients. The Indian Society of Anaesthesiologists recently published guidelines on anaesthesia and intensive care practices, but guidelines on the management aspect of CP patients were missing at the beginning of the pandemic.[1,2] Thus, we decided to conduct a survey among Indian pain physicians to get an insight into the impact of COVID-19 pandemic on various aspects of pain practices.

METHODS

A survey questionnaire was developed and approved by the Indian Society for Study of Pain (ISSP) secretariat. The questionnaire involved various aspects related to COVID-19 and its impact on pain practice: continuation or closing pain clinics, the scope of interventional pain practice, steroid use, safety precautions, and alternative consultation modality [Appendix 1]. The survey was sent to pain physicians who had an active email in the ISSP database. Members were reminded four times to participate in the survey with repeat emails at an interval of seven days. The survey was conducted between June 13, 2020 and July 12, 2020 (when lockdown measures were relaxed). This survey was sent in 'Google forms' which was used for data collection and analysis. Voluntary participation and informed consent were obtained from our survey respondents. The cover letter to introduce the survey provided all information regarding the procedures of the survey including its purpose, potential use of data, methods of collecting it, and any potential risks. Our survey did not contain any sensitive questions and we maintained the confidentiality and anonymity of our survey subjects.

The data were analysed using Statistical Package for the Social Sciences (SPSS, Version 16, Armonk, NY) and has been presented as percentages.

RESULTS

The survey questionnaire was sent to a total of 1040 member physicians having an active email in the database and the response rate was 20% (n = 209).

Irrespective of place of pain practice, 95.2% of physicians reported that their pain practice was affected. Physicians reported that not only less number patients visited the pain clinic but also fewer number interventions were performed [Table 1].

All the physicians who responded to the survey mentioned that they were taking precautionary measures like frequent hand washing, maintaining physical distance, and using protective gear (N95 mask, face shield/goggles) during consultations. Even during IPM procedures, 32.5% of physicians used personal protective equipment (PPE). The majority of the physicians (61.7%) used N95 mask and face shield during IPM. Seventy-eight percent of physicians used

Table 1: Impact of COVID-19 on pain practice

Question and its response	Number of respondents (%) (n= 209)
Pain practice affected	
Yes	95.2
No	4.8
Stopped OP consultation	
Yes	63.6
No	36.4
Percentage decrease in patient volume in OP	
<25%	66.5
26-50%	22.0
51-75%	10.5
76-100%	1.0
Mode of pain consultation	
Face to face	17.7
Telehealth	22.5
Both	59.8
Percentage decrease in IPM	
25%	20.6
26-50%	15.8
51-75%	28.2
76-100%	35.4

OP- Outpatient; IPM- Interventional pain management

a COVID-19 checklist before giving an appointment for IPM. However, only 39.2% of physicians tested the patients for COVID-19 using nasal swab before proceeding for planned IPM procedure.

Virtual consultation in the form of TH played a significant role during the COVID-19 pandemic [Table 2]. COVID-19 pandemic did have an impact on the health of pain physicians: 63.16% pain physicians had the fear of contracting or spreading the disease to their family members, 8.14% had feelings of anxiety, 26.79% had impaired sleep, 1.43% physicians were feeling depressed and 26.79% had all the health problems mentioned above.

There were changes in the patterns of steroid use by physicians during the pandemic; 24.4% physicians reduced the steroid dosage for IPM procedures, 18.66% physicians preferred dexamethasone over methylprednisolone acetate (depomedrol), 16.27% physicians avoided steroid use and the rest (40.67%) did not make any changes in steroid use. More than half of the respondents (54.1%) felt that patients faced difficulty in getting their regular opioid medications. As many as 58.4% physicians expressed that they are better prepared to deal with future pandemics.

DISCUSSION

COVID-19 has challenged healthcare providers, hospitals, and our ability to care for patients who are not affected by COVID. Our survey revealed that pain practice in India was also affected to a great extent as many physicians stopped providing routine consultations following the central government's advisory to prevent further spread of the virus [Table 1].

CP patients are at a high risk of psychiatric problems including suicide and depression which ultimately leads to poor quality of life.[3] Hence, continuity of care must be maintained even during the pandemic. Early reports from China and other authors suggested that TH is an important cost-effective alternative.[4,5] Studies have demonstrated high levels of patient satisfaction, convenience, and acceptance for TH.[6] Recent international and Indian guidelines and consensus statements on pain management during COVID-19 strongly encourage TH services for providing continuity in pain care.[7-9] In countries like the United States, and the United Kingdom, the governments had made urgent changes in the provisions of Telemedicine so that barriers were eliminated to help in effective TH care. Similarly, the Ministry of Health and Family Welfare,

Table 2: Utilisation of Telehealth services during the COVID-19 pandemic

Question and its response	Number of respondents (%) (*n* = 209)
Did you provide TH services as an alternative to needy patients?	
Yes	79.4
No	20.6
What percentage of your practice was on TH?	
0-25%	64.6
26-50%	20.1
51-75%	9.6
76-100%	5.7
Did you like the TH consultation concept?	
Yes	43.1
No	29.2
Not sure	27.7
Which TH consultation modality did you follow?	
Email	16.3
WhatsApp	21.2
Video conference	17.1
Voice call	40.2
Others	5.2
Were the patients satisfied with TH consultation?	
Yes	30.1
No	11
Not sure	58.9
Did the patients pay for TH consults (either to the hospital or physician)?	
Yes	39.2
No	60.8
Do you think TH consultations can be an alternative modality compared to in-person consults in future public health emergencies?	
Yes, good alternative in pandemics	39.2
No, in-person consultation is the best modality any time	36.4
Not sure	9.6
At least not bad	14.8

TH- Telehealth

Government of India announced Telemedicine guidelines on 25th March, 2020 for the widespread use of TH services towards patient care during the nation-wide lockdown.[10] Our survey found that 79.4% of physicians utilised TH for providing pain consultations. A vast majority of the physicians (79.4%) provided TH services to the needy patients, but 39.2% of physicians felt that TH is a good alternative to provide continuity in care during the current pandemic [Table 2].

Specific guidelines on chronic pain management during pandemics were lacking until early April when

the international consensus statement followed by the multi-organisational practice statement from the USA came into force.[7,8] These guidelines strongly emphasise adopting TH services, and provide recommendations for steroid use, opioids therapy, anti-inflammatory use, and selective utilisation of IPM procedures based on the urgency. Our survey revealed that 59.3% of physicians felt the lack of guidelines while caring for CP patients during the pandemic. Many IPM procedures include perineural or epidural or intraarticular steroid injection for the management of CP despite a lack of strong evidence. Steroids have the potential to cause adrenal insufficiency, immune suppression, and may aggravate virus spread. Though the depot form of methylprednisolone acetate (depomedrol) is commonly used by physicians for IPM, non-depot steroids like dexamethasone and betamethasone have been shown to produce a lesser duration of immune suppression.[11,12] Keeping the above potential side effects in view, recent guidelines suggest using the lowest effective steroid dose for pain management and the use of dexamethasone instead of depomedrol.[8]

A major limitation of our study was that we did not collect any information from the patients suffering from CP. This would have helped us understand their perspectives on accessibility to TH and other basic and urgent aspects of pain management. Another drawback is the low response rate (20%) from the physicians despite making efforts to improve the response rate in the form of repeat e-mails. However, this survey is the first-of-its-kind and provides some useful insights into the various aspects of pain management practices in our country during the ongoing COVID-19 pandemic.

CONCLUSION

COVID-19 has caused a significant impact on CP patients as health resources are diverted in treating the virus-infected patients and containing the spread of the virus. Our survey revealed that against all odds, Indian pain physicians adopted TH modality and provided continued care and followed best practices during the pandemic.

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Conflicts of interest

There are no conflicts of interest.

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REFERENCES

1. Malhotra N, Joshi M, Datta R, Bajwa SJ, Mehdiratta L. Indian society of anaesthesiologists (ISA national) advisory and position statement regarding COVID-19. Indian J Anaesth 2020;64:259-63.
2. Bajwa SJ, Sarna R, Bawa C, Mehdiratta L. Peri-operative and critical care concerns in coronavirus pandemic. Indian J Anaesth 2020;64:267-74.
3. Choiniere M, Dion D, Peng P, Banner R, Barton P, Boulanger A, *et al*. The Canadian STOP-PAIN project-part 1: Who are the patients on the waitlists of multidisciplinary pain treatment facilities? Can J Anesth 2010;57:539-48.
4. Eccleston C, Blyth F, Blake D, Fisher E, Keefe F, Me L, *et al*. Managing patients with chronic pain during the COVID-19 outbreak: considerations for the rapid introduction of remotely supported (eHealth) pain management services. Pain 2020;161:889-93.
5. Song XJ, Xiong DL, Wang ZY, Yang D, Zhou L, Li RC. Pain management during the COVID-19 pandemic in China: Lessons learned. Pain Med 2020;21:1319-23.
6. Soegaard Ballester JM, Scott MF, Owei L, Neylan C, Hanson CW, Morris JB. Patient preference for time-saving telehealth postoperative visits after routine surgery in an urban setting. Surgery 2018;163:672-9.
7. Cohen SP, Baber ZB, Buvanendran A, McLean BC, Chen Y, Hooten WM, *et al*. Pain management best practices from multispecialty organizations during the COVID-19 pandemic and public health crises. Pain Med 2020;21:1331-46.
8. Shanthanna H, Strand NH, Provenzano DA, Lobo CA, Eldabe S, Bhatia A, *et al*. Caring for patients with pain during the COVID-19 pandemic: consensus recommendations from an international expert panel. Anaesthesia 2020;75:935-44.
9. Verma S, Surange P, Kothari K, Malhotra N, Ghai B, Jain A, *et al*. Indian society for study of pain position statement for pain medicine practice during the COVID pandemic. Indian J Pain 2020;34:71-84.
10. Telemedicine Practice Guidelines: Enabling Registered Medical Practitioners to Provide Healthcare Using Telemedicine.

Ministry of Health and Family Welfare, Government of India; 2020. Available from: https://www.mohfw.gov.in/pdf/Telemedicine.pdf. [Last accessed on 2020 Jul 22].
11. Friedly JL, Comstock BA, Heagerty PJ, Bauer Z, Rothman MS, Suri P, *et al*. Systemic effects of epidural steroid injections for spinal stenosis. Pain 2018;159:876-83.
12. Sytsma TT, Greenlund LK, Greenlund LS. Joint corticosteroid injection associated with increased influenza risk. Mayo Clin Proc 2018;2:194-8.

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COVID-19 AND ITS IMPACT ON PAIN MANAGEMENT PRACTICES: A NATION-WIDE SURVEY OF INDIAN PAIN PHYSICIANS.

Questionnaire:

1. How would you describe your pain practice?
   - Based in a Hospital
   - Clinic
2. Is your pain practice affected by Covid-19 pandemic?
   - Yes
   - No
3. Did you deliberately stop providing out-patient pain consultation of elective, non-emergent patients in your clinic during Covid-19 pandemic?
   - Yes
   - No
4. What was the reason for stopping out-patient pain consultation during Covid-19 pandemic?
   - Fear of contracting or spreading the infection
   - Based on Government advisory
   - Both
5. Compared to pre-COVID, what is the volume of patients you were seeing in Covid-19 time?
   - Less than 25%
   - Between 26-50%
   - Between 51-75%
   - Between 76-100%
6. As a physician, do you consider yourself to be at “high-risk” of developing serious illness from Covid-19?
   - Yes
   - No
   - Unsure
7. Were you taking any precautions to avoid contracting or spreading Covid-19 infection?
   - Yes
   - No
8. What type of precautions did you take to prevent contracting or spreading Covid-19 infection?
   - N95 mask only
   - Frequent hand washing
   - Gown
   - Goggle/Face shield
   - All of the above
9. What kind of impact did Covid-19 had on your health?
   - Stress/Anxiety
   - Depression
   - Impaired sleep
   - Fear of contracting or spreading the disease to your family members
   - All of the above
10. What was your top concern during Covid-19 pandemic?
    - Contracting and spreading the disease
    - Financial loss/Interruption of practice
11. Did you experience financial hardship because of Covid-19?
    - Yes
    - No
12. How did you provide consult to patients during Covid-19 pandemic?
    - Regular face-to-face
    - Virtual/TeleHealth
    - Both

13. Did you provide e-consult or TeleHealth services as an alternative to needy patients?
    - Yes
    - No
14. During Covid-19 practice, what percentage of your practice was e-consult or TeleHealth?
    - 0-25%
    - 26-50%
    - 51-75%
    - 76-100%
15. Did you like the TeleHealth consultation concept?
    - Yes
    - No
    - Not sure
16. Were the patients satisfied with TeleHealth consultation?
    - Yes
    - No
    - Not sure
17. What TeleHealth consultation modality did you follow?
    - Email
    - WhatsApp
    - Video conference
    - Voice call
    - Others
18. In your opinion, do you think TeleHealth consultation can be an effective and alternative modality compared to in-person consult in future public health emergencies?
    - Yes, good alternative in pandemics
    - No, in-person consultation is the best modality any time
    - Not sure
    - At least not bad
19. Did the patients pay for TeleHealth consults (either to the hospital or physician)?
    - Yes
    - No
20. During COVID-19 pandemic, by what percentage did your interventional procedures decrease?
    - 25%
    - 26-50%
    - 51-75%
    - 76-100%
21. Did your patients (both cancer and non-cancer pain) on opioid medications face difficulty in getting their opioid medications refilled during Covid-19 pandemic?
    - Yes
    - No
    - Not sure
22. What was your strategy for steroid use for interventional pain procedures? (perineural/epidural/intra-articular)
    - Totally avoided using steroid
    - Reduced the dose of steroid
    - Preferred dexamethasone over depomedrol
    - No change in steroid practice
23. Did you feel lack of guidelines or consensus statement towards pain management from Pain societies?
    - Yes
    - No

24. What additional protective gears did you use for Interventional procedures?
    - N95 mask only
    - N95 mask, goggle/face shield
    - Full PPE
25. For patients needing interventional procedure for pain relief, did you get Covid test done before doing the procedure?
    - Yes
    - No
26. Did you screen patients using a COVID-19 checklist before giving them an appointment to come for a procedure?
    - Yes
    - No
27. Are you better prepared to deal with similar health crisis in future?
    - Yes
    - No
    - Not sure