

Contents lists available at ScienceDirect

Journal of Ayurveda and Integrative Medicine

journal homepage: http://elsevier.com/locate/jaim



Short Communication

Telemedicine for Ayurveda consultation: Devising collateral methods during the COVID-19 lockdown impasse



Sanjeev Rastogi*, Neelendra Singh, Preeti Pandey

Gathiya Clinic, Department of Kaya Chikitsa, State Ayurvedic College and Hospital, Lucknow, 226003, India

ARTICLE INFO

Article history: Received 25 April 2020 Received in revised form 2 May 2020 Accepted 3 May 2020 Available online 8 May 2020

Keywords: Smartphone Online consultation Telemedicine WhatsApp Arthritis Ayurveda Lockdown COVID -19

ABSTRACT

COVID-19 pandemic and subsequent measures to mitigate it have presented the world with certain unprecedented situations. Lockdown with effective closure of all services including routine health care services has tested the nerves of health care providers for finding novel ways of providing services without getting into the risk of exposure. Telemedicine had been an ideal option for such situations allowing all channels of communication that leverage Information Technology platforms, including voice, audio, text and digital data exchange as a help to diagnosis, prescription and follow up evaluation. Unfortunately this versatility of Telemedicine as a patient —physician interface could not be harnessed well for its technical complexities and unpreparedness of institutions and individuals. Smartphone based video calling using whatsapp messenger has been proposed as a feasible Telemedicine application to provide outpatient services in this scenario. A pilot run of outpatient services during lockdown period through whatsapp facilitated video calling at Ayurveda Gathiya Clinic, State Ayurvedic College and Hospital, Lucknow has shown a way forward of running such services with a mass appeal, ease of operation and high interface gratification among users and service providers. Within its limitations related to the quality and quantity of information sought, this comes as a viable method of patient —physician interfacing during the phase of lockdown.

© 2020 The Authors. Published by Elsevier B.V. on behalf of Institute of Transdisciplinary Health Sciences and Technology and World Ayurveda Foundation. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Notwithstanding the havoc caused by COVID-19 across the world, there are occasional enlightening sights too embedded deep within its ugly face [1]. Besides the direct trauma and panic created by the pandemic, its aftermaths have been highly disruptive to the social order [2]. Measures adopted to mitigate the disease and to stop the cross contamination fell harsh on various segments of people. Social distancing, stoppage of conveyance and lockdowns have come as miserable measures for many for whom movement was essential either to earn the living or getting a relief from a health care problem [3,4]. The lockdown related closures of routine health services went tough for many who had been suffering with chronic ailments requiring regular monitoring of their clinical status to keep their conditions under control. Hypertension, diabetes, joint and musculoskeletal diseases, neurological diseases, ophthalmic disease, dermatological diseases and many others have

formed the bulk of patients facing unprecedented sufferings due to sans access to health care services [5].

Lack of physical activities added with imposed restriction of movements has given unforeseen swings to the clinical stability of such patients who had been doing well through a course of drug, diet and ambulation related interventions previous to lockdown. Net health related impacts of all mitigatory measures adopted to prevent COVID-19 may be noticed quantifiably only after the threat of pandemic is over. Their detrimental effects on patients are however pervasive and easy to sense [6].

Health care providers, unrelated to COVID-19 management faced some unique challenges in this scenario. There was a challenge to provide health care services to the needy people within the regulation of imposed restrictions in running outpatient clinics. Those who were connected with their patients through digital ways of communication suddenly faced a heavy influx of messages, calls and mails although at times unsolicited and untimely. At speciality care centres the challenge was faced by adopting the standard telemedicine facilities operated by a dedicated server and by designated panel. Resourceful Individual practitioners have

E-mail address: rastogisanjeev@rediffmail.com (S. Rastogi).

Peer review under responsibility of Transdisciplinary University, Bangalore.

^{*} Corresponding author.

taken the respite in internet based physician—patient interface providers [7].

In the absence of high tech communicative facilities, resuming the health care services during on-going lockdown was however a bit over demanding for AYUSH related health care facilities in the country. Since AYUSH related facilities in the public sector have neither been exposed to the distant consultation related practices nor are resource rich to take up such novel ideas, it was inevitable to keep the medical consultation at bay until the lockdown is lifted and movement restores.

Gathiya Clinic at State Ayurvedic College and Hospital, Lucknow [8] however choose a different path to help the patients in the lockdown phase. Empowered with almost 2000 patient's registry inclusive of their contact details, the clinic decided to launch its online consultation facility through a popular video calling app (WhatsApp) on its regular Out Patient (OP) days and timings. The idea was to give the enrolled patients an access to the follow-up care so that their issues related to joint health may be addressed. After an initial in-house discussion with team members to determine the modus operandi of interfacing, team members were assigned with specific jobs like coordinating the calls (NS), record keeping (PP), explaining the components of advice (NS, PP) and consultation (SR). Local media was informed of this initiative and the whatsApp number of the clinic coordinator was shared with press.

The online OP services of Gathiya Clinic through whatsApp based video calling were finally flagged off in mid-april after the initiation of the 2nd phase of national lockdown and are running continuously on two scheduled days of the week already designated as Gathiya Clinic days. Six of such app based OP consultation sittings have been observed so far keeping a variable range of 5–8 patients in one OP sitting. The individual video calls spanned between 3 and 10 min excluding the time spend for connecting and coordinating the calls and prescription generation.

Although not supported with adequate data, this initiative of smartphone app based consultation through video calling had been highly gratifying for patients and physician for two reasons. From the perspectives of patients this is the ease of operation and live connectivity with the treating physician which build much of the gratification. This echoed the observations earlier reported as the factors signifying the patient's satisfaction during teleconsultation [9]. From the perspectives of physician, this was the patient's recognition and possibility of indirect examination of joints and their mobility by focusing the camera on particular joints which formed larger part of the gratification. Once the consultation was over, one team member who was engaged with record keeping (PP) was handed over to explain the treatment to the individual patients. All patients were handed over with a snapshot of a written prescription send to their phones. For the purpose of better record keeping, a feedback record is also generated now for recording the feedbacks during the follow-up calls. The exercise was also gratifying for the team members who were assisting the whole process. For their actual involvement in the process and their availability during the interrogation and examination of the patient as well as during prescription generation, the process simulated a real OP clinic operated in a distant mode having all essentials of learning except direct clinical examination.

Although gratifying from the perspectives of providing instant connectivity between the patient and the treating physician, during the periods when physical consultation is not possible, this novel intervention should be viewed essentially within the context of its inherent limitations. There are several limitations of this distant consultation process and approach. These limitations may be categorised in three major categories-1) limitation related to quality and quantity of information available during such interaction. This implies to the inability of having a physical examination which is

one most crucial component of medical consultation process 2) Limitation related to technicality involved in interfacing. This pertains to the availability of smartphone, internet connectivity and availability of desired application in the smartphone of the end user. 3) Limitation related to legality of the prescription generated through such consolations. Legality raised against such nonphysical consultations largely relates to the consent of the patient and legal standing of prescriptions generated.

Seeing the urgency and immediate need of such novel approaches to resume the health care services in AYUSH, Central Council of Indian Medicine has recently issued a detailed guideline about telemedicine practice for Ayurveda, Siddha and Unani Practitioners [10]. This guideline provides answers to many legal issues and suggests the practitioners to follow the standard guidelines to avoid any subsequent legal hassle. The guideline clearly suggests that if it is a patient initiated call to seek consultation, as it was in our case, the consent is implied and is not required to be taken separately.

What more important is to keep the record of all such consultations in the form of call logs, chat records or images. In our pilot experiment we generated a hand written prescription after every consultation by one of our team member (PP) for sending its image through whatsapp to the caller once the call is over. The prescriptions were subsequently kept preserved for the record purpose.

This would have been interesting to see how much effective this intervention technique was comparing to the conventional physical OP based consultation process. This was however impractical to be attempted now owing to the absence of conventional OP based consultations.

Mobile applications as a convenient form of telemedicine are already a common utility at many speciality health care settings across the world. Studies reveal the patient's compliance and satisfaction through such interventions lesser or comparable to the conventional consultative process although it largely varies within medical and surgical specialities [11]. Such comparisons nevertheless are possible only when conventional OP based consultations are also available. This pilot experiment of running video call based OP clinic through smartphone in an Ayurveda setting has a mass appeal for its ease of application and has enormous potential of its replication in resource and technology deficient public health setting including those of modern medicine [12].

COVID-19 and its aftermath has come with many inevitable eventualities. By all means, it however also came as a great learning to the human society clearly demonstrating the human ability to keep well with bare minimum needs. It also has given us a great opportunity to devise the collaterals by utilising the less utilised resources. This pilot testing of distant consultation through smartphone based video calling had a great meaning for Ayurveda and has a potential of playing significantly in promotion of accessible health care through Ayurveda during the time of peace also if it is adopted and practiced suitably as per the actual needs. This should however be clearly understood that such distant consultation approaches have their limitations and can never be considered as a substitution to the normal OP based physical consultation. Technology should came as a helping hand at the time of need and to the needy but should not be served as a bypass to some ordinary yet crucial components determining a social order [13]. Generating a clear idea about who can be served better with such tools and where a conventional OP based consultation is essential may be most crucial in this regard.

Conflict of interest

None.

References

- [1] Webster P. Virtual health care in the era of COVID-19. Lancet 2020;395: 1180-1. https://doi.org/10.1016/S0140-6736(20)30818-7.
- [2] Horesh D, Brown AD. Traumatic stress in the age of COVID-19: a call to close critical gaps and adapt to new realities. Psychol Trauma 2020;12(4):331–5. https://doi.org/10.1037/tra0000592.
- [3] Singh P. India under COVID 19 lockdown. Lancet 2020;395(10233):P1315. https://doi.org/10.1016/S0140-6736(20)30938-7.
- [4] Bhagat RB, Reshmi RS, Sahoo H, Roy AK, Govil D. The COVID-19, migration and livelihood in India. 2020.
- [5] Nair AG, Gandhi RA, Natarajan S. Effect of COVID-19 related lockdown on ophthalmic practice and patient care in India: results of a survey. Indian J Ophthalmol 2020;68(5):725.
- [6] Gupta L, Misra DP, Agarwal V, Balan S, Agrawal V. Management of rheumatic diseases in the time of covid-19 pandemic: perspectives of rheumatology practitioners from India. Annals Rheum Dis 16 April 2020. https://doi.org/ 10.1136/annrheumdis-2020-217509.
- [7] Jakhar D, Kaul S, Kaur I. WhatsApp messenger as a teledermatology tool during coronavirus disease (COVID-19): from Bedside to Phone-side. Clin Exp Dermatol 03 April 2020. https://doi.org/10.1111/ced.14227.
- [8] Rastogi S. Emanating the specialty clinical practices in Ayurveda: preliminary observations from the Arthritis clinic and its implications [published online

- ahead of print, 2020 Apr 1] J Ayurveda Integr Med 2020;S0975—9476(19): 30335—43. https://doi.org/10.1016/j.jaim.2019.09.009.
- [9] Kruse CS, Krowski N, Rodriguez B, Tran L, Vela J, Brooks M. Telehealth and patient satisfaction: a systematic review and narrative analysis. BMJ Open 2017;7(8):e016242. https://doi.org/10.1136/bmjopen-2017-016242. Published 2017 Aug 3.
- [10] Telemedicine practice guidelines for Ayurveda, Siddha and Unani practitioners. Central Council of Indian Medicine; 7 April 2020. Available at: https://www.ccimindia.org/pdf/CCIM_Telemedicine_Guidelines_08-04-2020.pdf. [Accessed 3 May 2020].
- [11] Helsel BC, Williams JE, Lawson K, Liang J, Markowitz J. Telemedicine and mobile health technology are effective in the management of digestive diseases: a systematic review. Dig Dis Sci 2018;63(6):1392–408. https://doi.org/ 10.1007/s10620-018-5054-z.
- [12] Giordano V, Koch H, Godoy-Santos A, Dias Belangero W, Esteves Santos Pires R, Labronici P. WhatsApp messenger as an adjunctive tool for telemedicine: an overview. Interact J Med Res 2017;6(2):e11.
- [13] Block P, Hoffman M, Raabe IJ, Dowd JB, Rahal C, Kashyap R, et al. Social network-based distancing strategies to flatten the COVID 19 curve in a post-lockdown world. 2020. arXiv preprint arXiv: 2004.07052.