International Journal of Community Medicine and Public Health
Jain A et al. Int J Community Med Public Health. 2020 Jun;7(6):2352-2356
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20202498

Original Research Article

Handshake habit amongst medical practitioners, need to abandon and embrace an alternative: analytical study in view of COVID-19 pandemic

Abhinav Jain[1]*, Aqsa Shaikh[2], Kriti Malhotra[1]

[1]Department of Radiodiagnosis, Hamdard Institute of Medical Sciences and Research, New Delhi, India
[2]Department of Community Medicine, Hamdard Institute of Medical Sciences and Research, New Delhi, India

Received: 02 April 2020
Revised: 06 May 2020
Accepted: 07 May 2020

***Correspondence:**
Dr. Abhinav Jain,
E-mail: drabhinavjain@gmail.com

ABSTRACT

Background: Doctors are often ignorant of safeguarding their own health. The present COVID-19 pandemic has necessitated maintenance of social distancing. Handshake is one of the forms of greeting and physical contact to show empathy to patient, however it carries risk of transfer of microbes. The need of the hour is to find a suitable alternative to handshake. Aims was to study the knowledge, attitude and practice of medical doctors in an Indian tertiary care hospital towards hand shake.
Methods: Study targeted 500 medical practitioners in a tertiary care hospital by presenting them with a google based questionnaire form. The questions were based on the practice of handshake amongst medical practitioners and the preferred alternatives. Statistical analysis used: Descriptive and analytic statistics.
Results: Despite 100% respondents being aware about guidelines to avoid non-essential physical contact, 37.3% respondents shook hands. Out of the 85 respondents who had a handshake only 57.6% (n=49) washed hands after handshake. Namaste or Aadab followed by wave gesture are the most acceptable alternatives to handshake for medical practitioners.
Conclusions: According to the study a large number of medical practitioners find it difficult to completely quit handshakes, mostly because of habit even in this pandemic emergency. Namaste or Aadab or hand waving are the best alternatives to handshake. A long term change of habit to a universally acceptable "wave" gesture needs to be developed to prevent possible community transmission of infectious diseases.

Keywords: Handshake, COVID-19 pandemic, Social distancing, Microbe transfer

INTRODUCTION

Handshake has evolved as a quintessential form of greeting and showing warmth, bonding and peace. This has been a part of human civilization from historical times. The historical records of handshake date back to as early as 5th century BC from ancient Greece showing two soldiers shaking hands is displayed at Pergamon Museum, Berlin.[1] Handshake has a cross cultural acceptance and is a standard norm for greeting internationally. In hospital set up doctors often shake hands with each other as an interdisciplinary confidence building measure apart from social bonding. Other than handshakes amongst fellow doctors, handshake with patients before and after consultation is also considered as a part of physicians empathy and connect. Corporatization of healthcare further adds up to increased use of these gestures.

COVID-19 disease outbreak has assumed pandemic proportions ever since its first detection in Wuhan city, China on December 31 2019. The disease is caused by "SARS-CoV-2" virus and has now been detected in more than 100 locations internationally including India. As on

12 March 2020, 73 cases of COVID-19 have been reported from India. So much so is the impact that all existing visas stand cancelled until 15 April 2020 and travel advisory is against non-essential travel to COVID-19 countries.[2] As the time passes, these restrictions are bound to increase. Corona virus disease is basically a zoonotic disease. However human to human spread is well established. The disease spreads between people who are in close contact with one another and also through respiratory droplets produced when an infected person sneezes or coughs.

It has been conclusively established that handshake is a route for transmission of various pathogens and hence an important mode of disease spread.[3,4] Various studies have suggested that handshake practice should be abandoned in healthcare set ups.[5,6] Studies have shown that doctors and other health workers have often been negligent about hand hygiene measures.[7] In wake of corona virus, the international leaders have abandoned handshake. Prince Charles and other leaders adapted to Namaste instead of handshake.[8] Present study assesses habit of handshake amongst doctors practicing in a busy tertiary care hospital setup after the outbreak of COVID19 disease. It also explores the popular alternatives acceptable to doctors.

METHODS

This cross-sectional analytical study was carried out in a tertiary care hospital in New Delhi, India. The hospital is also a teaching institute with more than 250 medical practitioners and 500 medical students. All the medical staff had undergone an orientation program on coronavirus pandemic in preceding week as per the institute's policy on recent health care issues.

A structured questionnaire was developed with inputs from Community medicine and Microbiology departments. The questionnaire contained two parts. First was to assess the knowledge and attitude of the medical staff regarding handshake in view of corona virus pandemic. The second part was in two subgroups, exclusive for responders who confirmed or denied handshake in preceding 48 hours. The practice of handshake and possible alternatives were assessed in this part. At the start of the questionnaire, the participants were assured of confidentiality. No individually identifying information was collection; no information regarding personal medical condition was solicited. As it was an online questionnaire only discussing knowledge and practices and no personal health information, there were no ethical issues involved.

The questionnaire was finalized after a trial by 5 members of the core team who framed the questionnaire. After this the questions were locked for modification and an online form was generated. This online questionnaire was circulated amongst 500 medical practitioners, including the final year medical students and interns. The response acceptance was closed within 48 hours in 2nd week of March 2020. The entire study was completed in first half of March.

Inclusion criteria

All the Faculty members of the Hospital, Medical Consultants, Interns and Medical Students attending Clinical postings.

Exclusion criteria

Those who did not give consent were excluded. The study did not include Nursing and Paramedical Staff or Doctors from AYUSH background.

The survey was conducted using the free application by Google called Google Forms. This also facilitated the data entry in the same application. Data analysis was done using Microsoft Excel. Charts were generated using Google Forms and Microsoft Excel. Descriptive and analytic statistics for quantitative data thus generated as relevant were applied.

RESULTS

Out of the 500 targeted practitioners, 228 responded to the questionnaire. Out of these 228 responders 72.8% (n=166) were practicing doctors, 17.1% (n=39) were interns and 10% (n=23) were final year students.

All 100% (n=228) respondents confirmed that they were aware that handshake is a potential way of transmission of the microbial infections including Novel coronavirus 2019. 96.5% (n=220) confirmed that they had read the advisories of WHO and Ministry of health and family welfare, Govt. of India regarding Coronavirus spread prevention and were aware that non-essential physical contact should be avoided as a part of same.

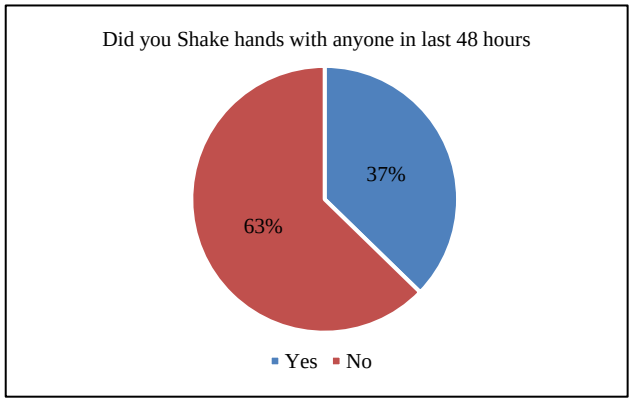

Figure 1: People who shook hands despite advisory to avoid non-essential physical contact.

Out of the respondents, 37.3% (n=85) accepted that despite the advisory and knowledge of avoiding non-essential physical contact in view of COVID-19 pandemic, shook hands (Figure 1). The reasons for

handshake varied from habitual handshake to confidence that the person cannot have COVID-19. Most of the people who shook hands did so as a part of habit to shake hands while greeting people (approx. 78.8%, n=67). The various other reasons are listed in Figure 2. Out of the 85 respondents who had a handshake only 57.6% (n=49) washed hands after handshake.

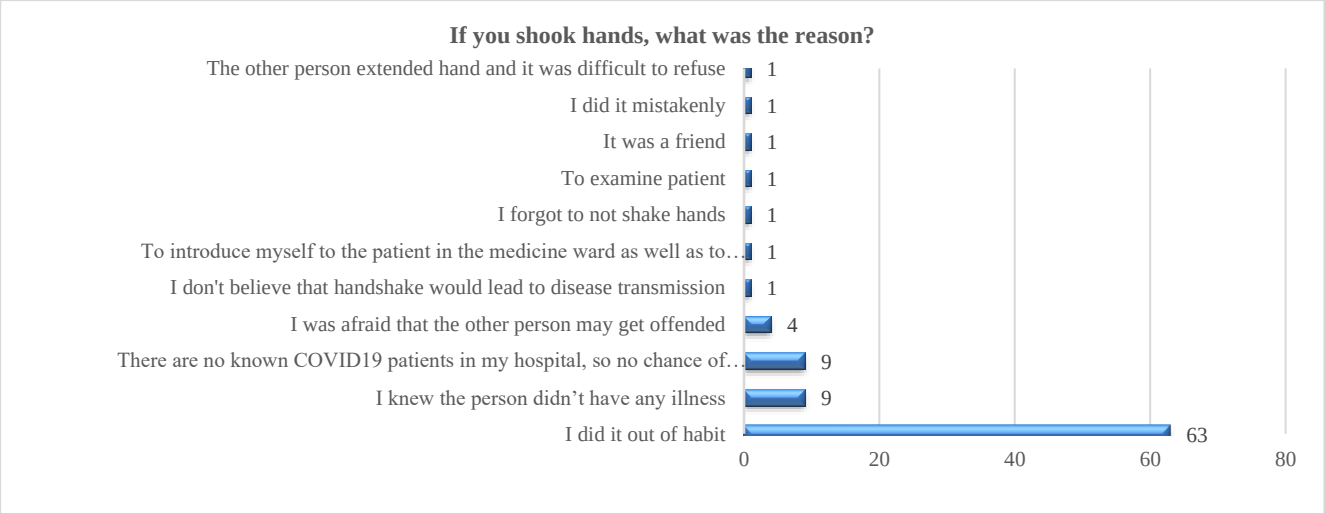

Figure 2: Chart shows the compelling reasons for the handshake amongst those who shook hands.

As a response to the method of greeting these respondents would have chosen if these 85 respondents had not shaken hands, maximum were in favour of Namaste/Aadab as per their and person in contact's beliefs (n=59), waving to the other person was also a favorite choice of these respondents (Figure 3).

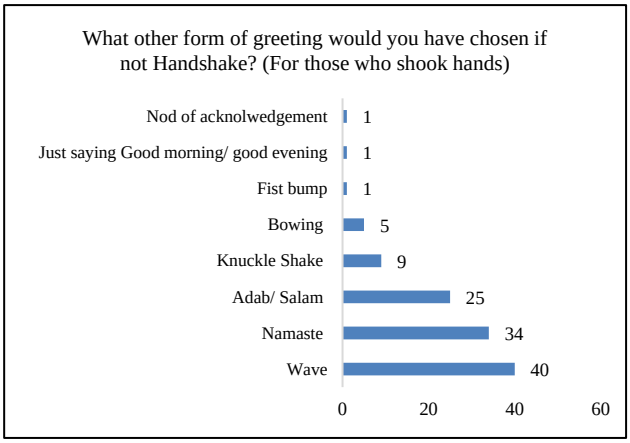

Figure 3: Various alternatives respondents would have chosen if they had not shaken hands.

Out of the 143 respondents who did not shake hand, maximum, n=96, also felt Namaste/Aadab were their favourite greeting gestures in view of handshake restriction. Waving is a method which again most of the people prefer as an alternative. Figure 4 shows all the methods chosen by these respondents. Interestingly, only 7.7% agreed that they wouldn't have washed/sanitized the hands if they accidentally shook hands. Almost all others were sure that they would have chosen to wash hands/used a sanitizer.

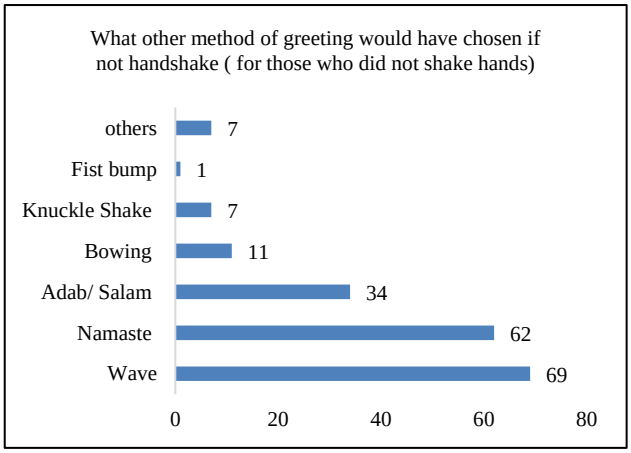

Figure 4: Ways in which people greeted others in view of advisory to avoid non-essential physical contact.

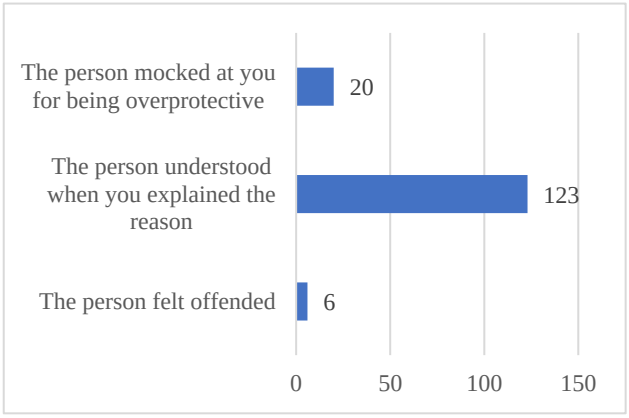

Figure 5: What was the response of the person at other end when you refused to shake hands?

As a response from the second person who was denied handshake by these 143 respondents, maximum agreed that the other person understood when they explained the reason for not shaking hands. Few were mocked at for being over protective (Figure 5).

DISCUSSION

The study highlights very important aspects of modern day medical practice. The medical practitioners are often under tremendous pressures during pandemics and epidemics to regularly attend the patients. At the same time they have to deal with social pressure and feeling of empathy with the patients. In such circumstances they often tend to neglect their own health safety precautions.

It is well established that the rest of health staff (nursing and paramedical staff) follow the habits of medical practitioners in such circumstances. Haessler et al studied that the habit of hand hygiene in a medical practitioner is followed by all other people entering the patient care area.[9]

A study from Southern Nigeria shows that there is very low compliance for hand hygiene amongst doctors.[10] Most of the studies show that the doctors and other medical practitioners are well aware about the importance of hand hygiene, yet they tend to ignore the same.[11]

Present study also shows that at least 37.5% of the practitioners, despite being fully aware of the threat of contracting COVID-19 disease, had habitually shaken hands with fellow colleagues or patients. Mostly they confessed that this was out of habit signifying a background social compulsion of handshakes.

Handshakes are an important cause of microbial transfer. Various studies have suggested to abandon handshake in areas of intensive care and infection control.[12-14] Pediatric care areas are also key areas where handshake should be avoided.[15]

In wake of present COVID 19 pandemic, the study raises an essential issue; should medical practitioners shake hands at all in hospital or work areas? The majority of the practitioners who shook hands did it due to habitual compulsion, if this practice is abandoned completely from health care facilities, it is going to go a long way in prevention of numerous infectious diseases. More importantly, the habitual compulsions during pandemics would not be an issue.

Another fact highlighted by the study is that despite awareness about hand hygiene, especially in present scenario, approx. 42.4% chose not to disinfect hands by washing hand or using an alcohol based sanitizer. Time and again studies have shown that hand sanitization rates after patient contact amongst doctors is poor. This is another issue to be looked into. Continuous awareness and reinforcement at management level would be necessary at all times. This would go a long way to maintain the health of the healthcare staff and thus prevent work hour loss.

Practical solution to leave a habit is to develop an alternative practice which is universally acceptable. Such a practice should be unbiased and free of any religious or sociocultural inclination to be acceptable. Gradually the alternative practice should be popularized and made universally acceptable. We found that a majority of people chose to use practice of Namaste or Aadab to greet the other person. This is one of the safest way of greeting, however, predicament towards one greeting or other based on religious and cultural backgrounds is a hinderance. Majority felt simple hand waving towards an acquaintance or a distant hand shake gesture is best alternative to handshake. This creates equal warmth and acquaintance in the present scenario of COVID19 pandemic. The authors feel that this could be the best alternative to handshake in these testing times. This also must be taken as opportunity to totally abandon handshake and promote distant waving as an alternative in all medical facilities.

CONCLUSION

COVID-19 pandemic has once again created a worldwide concern for community transmission of infectious diseases. Importance of hand hygiene is once again on the forefront. Handshake is a long condemned practice in medical care setups and an established cause of microbial transmission. The study finds that a large number of medical practitioners find it difficult to completely quit handshakes, mostly because of habit even in this pandemic emergency. Namaste/Aadab or hand waving are the best alternatives to handshake. A long term change of habit to a universally acceptable “wave” gesture needs to be developed to prevent possible community transmission of infectious diseases.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Thomas, Chris, 2009. Handshake- Priest and two soldiers, 500BC. Pergamon Museum Berlin (SK1708). Picasa Web Albums. 2011.
2. Who.int. 2020. Novel Coronavirus (2019-Nov) Situation Reports. Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/. Accessed on 4 January 2020.
3. Hamburger M Jr. Transfer of beta hemolytic streptococci by shaking hands. Am J Med. 1947;2(1):23-5.
4. Ghareeb PA, Bourlai T, DuttonW, McClellan WT. Reducing pathogen transmission in a hospital

setting: handshake versus fist bump: a pilot study. J Hosp Infect. 2013;85(4):321-3.
5. Sax H, Uçkay I, Richet H, Allegranzi B, Pittet D. Determinants of good adherence to hand hygiene among healthcare workers who have extensive exposure to hand hygiene campaigns. Infect Control Hospital Epidemiol. 2007;28(11):1267-74.
6. Fred HL. Banning the handshake from healthcare settings is not the solution to poor hand hygiene. Texas Heart Inst J. 2015;42(6):510.
7. Ansari SK, Gupta P, Jais M, Nangia S, Gogoi S, Satia S, et al. Assessment of the knowledge, attitude and practices regarding hand hygiene amongst the healthcare workers in a tertiary health care centre. Int J Pharm Res Health Sci. 2015;3(3):720-6.
8. BBC News. 2020. Coronavirus: Indian Greeting Namaste Goes Global. Available at: https://www.bbc.com/news/av/world-asia-india-51854798/coronavirus-indian-greeting-namaste-goes-global.
9. Haessler S, Bhagavan A, Kleppel R. Getting doctors to clean their hands: lead the followers. BMJ Qual Safety. 2012;21:499-502.
10. Omuemu VO, Ogboghodo EO, Opene RA, Oriarewo P, Onibere O. Hand hygiene practices among doctors in a tertiary health facility in southern Nigeria. J Med Trop. 2013;15:96-101.
11. Mela S, Whitworth DE. The fist bump: A more hygienic alternative to the handshake. Am J Infect Control. 2014;42(8):916-7.
12. Sklansky M, Nadkarni N, Ramirez-Avila L. Banning the handshake from the health care setting. JAMA. 2014;311(24):2477-8.
13. Makoul, G, Zick, A, Green, M. An evidence-based perspective on greetings in medical encounters. Arch Intern Med. 2007;167:1172-6.
14. Hurst AL, Child J, Pearce K, Palmer C, Todd JK, Parker SK. Handshake stewardship: a highly effective rounding-based antimicrobial optimization service. Pediatr Infect Dis J. 2016;35:1104-10.
15. Parga JJ, Valadez M, Chang RR, SarinGulian A, Holdbrooks H, Sklansky MS. Handshake-free zone in a neonatal intensive care unit: Initial feasibility study. Am J Infect Control. 2017;45:787-92.

Cite this article as: Jain A, Shaikh A, Malhotra K. Handshake habit amongst medical practitioners, need to abandon and embrace an alternative: analytical study in view of COVID-19 pandemic. Int J Community Med Public Health 2020;7:2352-6.