

## What's up dermatology? A pilot survey of the use of WhatsApp in dermatology practice and case discussion among members of WhatsApp dermatology groups

Sir,

The latest trend in the use of social media in medicine is the use of smartphone based platforms such as WhatsApp® for clinical case discussion. Capturing and sharing images on such platforms is very easy and effective responses can be obtained in a short time which improves decision-making ability. We attempted to evaluate the frequency and types of uses, advantages and disadvantages of WhatsApp® based

clinical discussion groups as perceived by members of a few such groups.

An online survey (designed using Survey Monkey®) based on a convenience sampling method was sent to all members of three WhatsApp® dermatology groups through the WhatsApp® application itself. The questionnaire focussed on the amount of individual activity, satisfaction and perceptions regarding pros and cons of such platforms.

Sixty-one respondents (all dermatologists) completed the survey out of a total of about 100 in all three groups together, of which 38 were male and 23 were female. The age of the respondents ranged from 26 to 57 years (mean age 38.5 years). The groups had members ranging from residents to senior consultants. The years of experience varied from 1<sup>st</sup> year of residency (four of the respondents were

residents) to 34 years with a mean experience of 9.5 years (experience of residents were put as zero for calculation of the mean).

Most of the respondents were members in multiple clinical case discussion groups. Of the total, 18 (29.5%) were members of only one group, 28 (46%) were members of two groups, 11 (18%) were members of three groups and 4 (6.5%) were members of four groups or more. Of the total, 15 (24.5%) respondents mentioned that they posted cases themselves at least once a week, 16 (26.2%) mentioned that their frequency of posting was around once a month, 17 (27.8%) posted infrequently and 13 (21.3%) had never posted cases themselves.

Regarding responding to cases posted by other members 9 (14.7%) responded daily, 22 (36%) responded at least a few times in a week, 27 (44.2%) responded at least once a week, while 3 (4.9%) never responded. When it came to non-clinical discussions, 20 (32.7%) participated often, 35 (57.3%) participated sometimes, while 6 (9.8%) never participated.

Fifty (81.9%) of the respondents were active in other web-based forums such as Facebook® or other e-groups. Of these, 35 (70%) agreed and 17 (34%) strongly agreed that WhatsApp® was a better forum for discussion of clinical cases.

The main advantages of WhatsApp® as compared to other online forums, as perceived by the respondents included ease of image uploading and downloading (54 [88.5%] agreed or strongly agreed), a less time-consuming process (100% agreed/strongly agreed), faster responses (60 [98.3%] agreed or strongly agreed) and more number of relevant responses (49 [80.3%] agreed/strongly agreed).

The main limitations of using WhatsApp® as mentioned by the respondents were issues with internet connectivity (42 [68.9%] agreed or strongly agreed on this point) and lack of adequate follow-up in many of the case discussions (37 [60.6%] of the respondents agreed/strongly agreed on this). As far as quality of the clinical photographs posted were concerned 33 (54%) of the respondents agreed/strongly agreed that this was a significant problem. Patient confidentiality was mentioned as an obstacle only by 23 (37.7%) of the respondents.

All the respondents agreed that discussions in their respective groups definitely helped to enrich their clinical knowledge in general, in terms of not only clinical cases discussions but also by sharing of learning resources both of relevant references/journal articles and of upcoming conferences or meetings relevant to the group.

Smartphones have been found to be effective in teledermatology for basic diagnosis and triage in spite of inherent limitations such as a lower image quality as compared to dedicated cameras.<sup>[1]</sup> An extension of the use of smartphones is in the form of clinical discussion groups based on mobile phone platforms such as WhatsApp®. The concept of such groups is similar to web-based forums, e-groups or Facebook™ groups. The disadvantage of web-based forums especially e-mail based ones is that the process of sending, receiving and commenting on cases can be cumbersome and less spontaneous. Uploading, downloading, saving and viewing images is much more convenient with WhatsApp®. An additional advantage is that the sender knows how many people have viewed the case making it easier to decide on whether to post reminders, if necessary.

A study by Johnston *et al.* analyzed the effectiveness of using WhatsApp® as a communication method among members of an emergency surgery team. The study concluded that WhatsApp® represents a rapid and efficient means of communication even in the context of emergency medicine. One of the key points the study highlighted was that participants felt a “flattening of the hierarchy” in the team.<sup>[2]</sup> This is something we also felt in our study as the members in the groups we studied ranged from fresh specialists and residents to experienced consultants, all of them contributing actively without inhibition.

Doctors have been increasingly using social media sites for professional and personal reasons including interacting directly with patients.<sup>[3]</sup> Patients also tend to use platforms such as WhatsApp® for teleconsultations and follow-up. One interesting report documents the effective use of WhatsApp® in post-stroke care.<sup>[4]</sup> The increased use of social media comes with issues related to patient confidentiality. In our study, a majority of the respondents felt that patient confidentiality was not a major issue. The fact that clear laws regarding patient confidentiality related to telemedicine are not

formulated in our region might have influenced this opinion. A review of discussions in the studied groups show that most dermatologists took precautions to ensure that patient confidentiality was maintained even in lesions over the face. Over the course of time, clear guidelines on the use and transmission of clinical images in clinical discussion groups need to be formalized. The key caveat for the use of social media of any kind is to maintain physician professionalism at all costs.<sup>[5]</sup> Ideally, a consent form for taking photographs signed by the patient should be obtained from each patient and the same should explicitly and unambiguously state that the clinical images could be used for publication, presentation and electronic communications. This should ideally be done even for lesions not involving the face. Moreover, whenever there is an image showing the patient's face, the eyes should be masked to maintain confidentiality. In fact, we feel that the need for maintaining patient confidentiality is more in the context of social media such as WhatsApp®, because the spread of data is sometimes difficult to control as compared to personal e-mails or restricted e-mail groups.

The limitations of using WhatsApp® for clinical discussion seem to relate to the same problems associated with mobile teledermatology in general, internet connectivity and image quality.<sup>[1]</sup>

One of the main limitations of our study was the small sample size besides having all the inherent limitations of a cross-sectional survey which at best can assess perceptions of the target sample. At this stage, we also did not try to evaluate the types of clinical cases posted, the extent of effective conclusion of the discussions and the quality of the clinical images all of which are important factors in determining overall effectiveness of such clinical discussion platforms. We also realize that an ideal format would have been to follow-up and compare the responses for the same set of cases posted in WhatsApp® and other online discussion forums. We hope to address these limitations in a follow-up study that is being planned.

### Acknowledgments

We sincerely thank all the dermatologists of the WhatsApp® groups of Cochin Dermatology Society, Malabar Dermatology Club, Kerala State, India and DERM friends group managed by one of the authors, for volunteering and participating in the survey with earnest enthusiasm without which this study would not have ever materialized.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

**Feroze Kaliyadan, K. T. Ashique<sup>1</sup>,  
Soumya Jagadeesan<sup>2</sup>, Bobby Krishna<sup>3</sup>**

Department of Dermatology, College of Medicine, King Faisal University, Hofuf, Saudi Arabia, <sup>1</sup>Department of Dermatology, KIMS Al-Shifa Super Speciality Hospital, Perinthalmanna, <sup>2</sup>Department of Dermatology, Amrita Institute of Medical Sciences, Kochi, <sup>3</sup>Department of Dermatology, Government Taluk Hospital, Chengannur, Kerala, India

**Address for correspondence:** Dr. Feroze Kaliyadan, Department of Dermatology, College of Medicine, King Faisal University, Hofuf - 31982, Saudi Arabia.  
E-mail: ferozkal@hotmail.com

### REFERENCES

1. Kaliyadan F, Amin TT, Kuruvilla J, Ali WH. Mobile teledermatology – Patient satisfaction, diagnostic and management concordance, and factors affecting patient refusal to participate in Saudi Arabia. *J Telemed Telecare* 2013;19:315-9.
2. Johnston MJ, King D, Arora S, Behar N, Athanasiou T, Sevdalis N, *et al.* Smartphones let surgeons know WhatsApp: An analysis of communication in emergency surgical teams. *Am J Surg* 2015;209:45-51.
3. Chretien KC, Kind T. Social media and clinical care: Ethical, professional, and social implications. *Circulation* 2013;127:1413-21.
4. Dey K. WhatsApp – An innovative solution for the stroke care. *J Neurol Neurosurg Psychiatry* 2014;85:e4.
5. Grajales FJ 3<sup>rd</sup>, Sheps S, Ho K, Novak-Lauscher H, Eysenbach G. Social media: A review and tutorial of applications in medicine and health care. *J Med Internet Res* 2014;16:e13.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Access this article online	
<b>Quick Response Code:</b>	<b>Website:</b> www.ijdv1.com
	<b>DOI:</b> 10.4103/0378-6323.171638

**How to cite this article:** Kaliyadan F, Ashique KT, Jagadeesan S, Krishna B. What's up dermatology? A pilot survey of the use of WhatsApp in dermatology practice and case discussion among members of WhatsApp dermatology groups. *Indian J Dermatol Venereol Leprol* 2016;82:67-9.

**Received:** March, 2015. **Accepted:** September, 2015.