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CORRESPONDENCE

Israel National Obstetric Anesthesia WhatsApp group as a communication tool, before and during the COVID-19 pandemic

We would like to report our experience from the Israel National Obstetric Anesthesia WhatsApp group. Obstetric anesthesia is a high-pressure field that requires quick decisions for emergency cases. To provide rapid information sharing, we established a WhatsApp group that comprises 38 attending anesthesiologists from 19/21 (90%) of hospitals in Israel. We investigated our WhatsApp group messages and compared the discussions before and after the COVID-19 pandemic became a concern in Israel. Likewise, we sent a questionnaire before and during the COVID-19 pandemic to ask members about the benefits of the WhatsApp group.

Two independent authors screened the chat history of the WhatsApp group from its inception on March 24, 2017 until March 28, 2020. According to the Institutional Review Board of Shaare Zedek Medical Center, ethical approval was not required for this study. Data were collected about the subject of the discussion, the number of participants, the number of responses, the time it took between raising a topic and receiving the first reply, and the type of media sent. The topics discussed were divided into the following categories: patient case, clinical discussion, obstetric unit organization, conference-related, articles, lectures, and questionnaires.

We considered two specific time periods: before the COVID-19 pandemic (from March 24, 2017 to March 3, 2020) and during the COVID-19 pandemic (from March 5, 2020 to March 28, 2020). Before the pandemic there were 2651 messages sent and during the COVID-19 period there were a total of 121 messages sent (Table 1). We found a higher number of messages sent per month during the COVID-19 pandemic than before the pandemic and fewer responders during the COVID-19 pandemic than before it. The response rates were 34/38 (89.4%) and 25/38 (65.7%) to the first and second questionnaires, respectively. During both periods participants agreed they benefited greatly from using the group (5-point Likert scale: 5 = "benefited greatly" and 1 = "did not learn anything").

A WhatsApp group for peers in the field of obstetric anesthesiology can add substantial value to the group members. This opinion was confirmed by the questionnaires. Unlike other published studies that focus on the use of a WhatsApp group for educational needs, we focused our WhatsApp group on clinical matters.[1] This group not only allowed senior obstetric anesthesiologists to exchange ideas about managing obstetric anesthesiology units, but also to expand their clinical knowledge about anesthetic guidelines and how to deal with complicated cases. We found that most of the discussions held were about obstetric unit organization and about anonymous patient cases. Participation was very high for these two topics, with the members of the group being proactive in sharing their thoughts and recommendations.

Anesthesiologists may require rapid advice regarding a new clinical situation. Because the median response time (including all hours of the day or night) in our WhatsApp group was 4.5 min (only 4 min during the COVID-19 pandemic compared with 5 min before COVID-19), we believe that this requirement was met. A study published by a group of gynecologists describing their use of a WhatsApp group reported the mean time to first response was 52 min.[2]

The benefit of using WhatsApp as a tool of communication has been discussed in previous studies, in which researchers distributed and followed up on questionnaires via WhatsApp. Alias et al. described the use of WhatsApp to call for help during an anesthesia emergency.[3] Help arrived immediately, demonstrating the benefit of using WhatsApp in clinical settings. Bamber et al. reported use of a WhatsApp questionnaire during crisis management of COVID-19.[4] Raitt et al. described the introduction of key performance indicators (KPI) for pre-hospital emergency anesthesia and used WhatsApp to invite clinicians to participate in a web-based survey about the KPI review and reporting process.[5] Obtaining regular feedback from staff is important and in these two studies it was shown that WhatsApp can be used in order to efficiently and easily send out a survey or questionnaire.[4,5]

In conclusion, we report that group members found the use of a professional WhatsApp group provides rapid and useful clinical information, particularly in a crisis period such as the COVID-19 pandemic. We suggest that other communities consider use of such a group to bring rapid advice to specialists in other countries and other fields of medicine.

Declaration of interests

None.

Table 1   WhatsApp message characteristics before and during the COVID-19 pandemic

	Before COVID-19	During COVID-19	*P*-value[a] (95% CI of difference)	Overall
Messages per month (mean)	76	121		77
Number of responses	7 (2.0, 13.0)	7 (3.0, 16.0)	0.006 (2.0 to 8.5)	7 (1.8; 13)
Number of responders	5 (2.0, 8.0)	4 (2.0, 13.0)	0.013 (2.5 to 6)	4 (2.0; 8.0)
Time to first response (min)	5 (1.3, 10.0)	4 (1.0, 8.0)	0.37	4.5 (1.0; 9.8)
Satisfaction rate[b]	5 (5.0, 5.0)	5 (5.0, 5.0)	0.089	
Satisfaction rate[c]	4 (3.0, 5.0)	5 (5.0, 5.0)	0.001 (−2.0 to −1.0)	

All values, except mean messages per month, are presented as median (1st quartile; 3rd quartile).

CI: confidence interval.

Questions asked before COVID-19:

1. How much did you learn from the group professionally on a scale from 1 to 5?

2. How much did you learn about equipment and protocols on a scale from 1 to 5?

3. Have you implemented any recommendations that you received in the group (yes/no)?

4. Did you gain knowledge about specific cases (yes/no)?

Questions asked during COVID-19:

1. How much have you learned about SARS-CoV-2 from this WhatsApp group on a scale from 1 to 5?

2. How much did this WhatsApp group help you prepare to treat a SARS-CoV-2 parturient on a scale from 1 to 5?[a]

Chi-square or Fisher's exact test (when the expected number of events were below 5) were performed for categorical variables. Student's t-test or Mann-Whitney U test (for non-parametric values) were performed for continuous variables. [b,c]

Survey responses on a 5-point Likert scale where 5 = "benefited greatly" and 1 = "did not learn anything" and on yes/no level.;

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