# Are Online Discussion forums Useful Platforms for Paediatric Surgeons to Seek Advice Regarding Patient Management? A review of the Queries Posted on the World Federation of Association of Pediatric Surgeons Facebook group (The Pediatric Surgeon's Lounge)

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#### Abstract

**Background:** Social media platforms are popular places for discussing difficult cases amongst the surgeons. Paediatric Surgeon's Lounge (PSL) is a closed Facebook group for the interaction of paediatric surgeons from different parts of the world. We aim to assess the safety and utility of the responses given by the members of the PSL group to the queries about the management of paediatric surgical cases. **Methods:** All posts on PSL between January and July 2021 were retrospectively screened to select the patient management-related queries. For each included query, all the responses were scrutinised for their utility and safety. The utility was categorised as helpful or not helpful, and the safety of these responses was categorised as safe or unsafe. A note was also made whether any unsafe response was rectified in the subsequent responses or not. The proportion of each response category was calculated. **Results:** Twenty-two queries with a total of 353 responses were assessed. The median (range) number of responses per query was 10 (2–45). The proportion of helpful, safe and rectified unsafe responses was 91.5% (307/353), 96.8% (342/353) and 36% (4/11), respectively. **Conclusions:** PSL is a safe and helpful platform for taking advice regarding the management of paediatric surgical cases.

Keywords: Case discussions, discussion forum, e-learning, social media

#### INTRODUCTION

The usage of social media (SoMe) platforms is becoming increasingly popular amongst healthcare professionals. These include networking sites (professional or social), multimedia sharing sites and blog sites.<sup>[1]</sup> In a survey of surgical faculty and trainees, Wagner *et al.* have demonstrated that 70% of the respondents believe that engagement with SoMe has a positive impact on their professional development.<sup>[2]</sup> Apart from providing the latest information about research-related developments, these platforms can provide discussion forums or discussion groups for presenting challenging cases and discussing their management.<sup>[1,3]</sup>

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Although there are numerous discussion groups (either open or closed) for healthcare professionals on SoMe, there is a dearth of literature on the utility and safety of the information presented in those discussions. Bernardi *et al.*<sup>[3,4]</sup> had evaluated the utility and safety of responses to discussions on two surgical forums, i.e., the International Hernia Collaboration (IHC) Facebook group and the American College of Surgeons (ACS)

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community forums. While both the forums were safe and helpful platforms for seeking advice, the unsafe responses were rectified only in the ACS community forums and not in the IHC group.

The Pediatric Surgeon's Lounge (PSL), currently managed and endorsed by the World Federation of Association of Pediatric Surgeons (WOFAPS), is a private Facebook group for discussions amongst paediatric surgeons from different parts of the world. The present study was conducted to assess the safety and utility of the responses given by members of the PSL group to the queries about the management of paediatric surgical cases. We hypothesise that PSL is a safe and helpful SoMe platform to address clinical questions.

### Methods

All posts on PSL between January and July 2021 were retrospectively screened to select the case discussions. Out of these, only those related to queries about the management of cases were included in the study. Case-based commentaries and queries with no responses were excluded from the study. In addition, any duplicate posts were also excluded.

For each included query, the total number of responses was counted. Any response from the person who had initiated the discussion was not included in the total responses. Subsequently, these responses were scrutinised by a senior paediatric surgeon (SS) and their utility and safety were evaluated. For each discussion, the entire discussion thread (query and all responses) was copied on a separate MS Word sheet. The observer was completely blinded to the identity of the author and the respondents. The utility was categorised as helpful or not helpful, and the safety of these responses was categorised as safe or unsafe [Table 1]. The operational definitions were designed by senior paediatric surgeons (SS, SM) on the basis of a pervious study.<sup>[3]</sup>

Before the start of the study, permission to use the PSL discussion threads was granted by the administrator of the group (SM). Due to the lack of any patient contact during the study, clearance from the Institutional Review Board was not required. The discussion threads were divided on the basis of sub-specialities of paediatric surgery, i.e., neonatal surgery, gastrointestinal (GI) surgery, genitourinary (GU) surgery, head-and-neck surgery, thoracic surgery and others (infectious sequelae, vascular, etc.). Data were expressed as numbers and proportions. The proportions of safe, unsafe, rectified unsafe, helpful and not helpful responses were calculated. The median (range) number of responses per query was also calculated.

#### RESULTS

During the study period, there were a total of 235 posts in the PSL group [Figure 1]. Out of these, 205 threads were excluded because they were advertisements (n = 21), announcements of upcoming seminars/webinars/conferences/workshops (n = 97),

Table 1: Operational definitions used in this study	
Term	Total scores
Helpful response	A response that reinforces positive decision making For e.g., - Do a Ultrasound scan in suspected cases of ovarian torsion. After clinically stable, perform diagnostic laparoscopy and detorsion of the ovary. Preserve the ovarian tissue as much as possible (remove only the devitalized ovarian parenchyma. Do not perform oophorectomy)
Not helpful response	A response that is not clinically beneficial For e.g., - I am seeing this case for the first time in my life, all the best, etc.
Safe response	A management plan that will not cause any unnecessary harm to the patient. For e.g., - performing laparoscopic approach in ovarian torsion
Unsafe response	A management plan that will cause unnecessary harm to the patient For e.g., - performing oophorectomy in all cases of ovarian
	torsion
Rectified unsafe response	An unsafe management plan posted by someone was rectified in the subsequent posts by another person For e.g., - I would not perform oophorectomy in all cases of ovarian torsion. Rather I would wait for restoration of perfusion after detorsion of the ovary. If deemed non-salvagable, I would still err on the side of ovarian preservation and try to remove only the necrotic portion

operative videos (n = 35), personal clinical experiences (n = 19) and educational photos/diagrams/articles (n = 33). The remaining thirty posts were case discussions. Eight of them were further excluded because of no responses (n = 4), discussions being only case commentaries (n = 3) and duplicate entries (n = 1). Finally, 22 queries were included in the study. The selection procedure is depicted in Figure 1. The majority of these were related to the neonatal (n = 8) and GU surgery (n = 6) sub-specialities. The number of threads related to head and neck, thoracic, GI and other sub-specialities was three, two, one and two, respectively.

A total of 353 responses to the included queries were assessed. The median (range) number of responses per query was 10 (2–45). Utility evaluation revealed 91.5% (307/353) of the responses to be helpful. Similarly, upon safety evaluation, 96.8% (342/353) of the responses were categorised as safe. Of the total unsafe responses (n = 11), 36% (n = 4) were subsequently rectified by other paediatric surgeons.

#### DISCUSSION

Over the last two decades, the 'SoMe revolution' has connected millions of people across the globe.<sup>[5]</sup> The participation in SoMe by health-care providers is no different and is increasing day by day. In a survey conducted in 2013, more than 90% of the doctors reported usage of SoMe for personal engagements while two-thirds of the physicians used various SoMe platforms for professional purposes.<sup>[11]</sup> Physicians often tend to join online discussion forums to read recent articles, engage in clinical discussions, take expert opinions on difficult clinical scenarios, etc. This greatly improves their clinical decision-making skills.<sup>[11]</sup> In a scoping review, Hamm



Figure 1: Query selection procedure adopted in this study

*et al.* have shown that discussion forums are commonly used by healthcare professionals and trainees for practice and educational purposes.<sup>[6]</sup>

Nguyen *et al.* have highlighted that SoMe platforms act as 'virtual lounges' and allow case-based discussions amongst doctors from different parts of the world.<sup>[7]</sup> PSL is a similar platform facilitating these discussions in the form of queries about management, sharing personal experiences (and success stories) and highlighting technical details of surgical procedures in operative videos. It also allows paediatric surgeons to posteducational photos/diagrams or recent articles published in renowned journals. In addition, this platform helps in the announcement of upcoming seminars/webinars/conferences/workshops and acts as a medium to advertise various job opportunities available for paediatric surgeons.

The results of the present study suggest that PSL is a safe and helpful SoMe platform to get valuable responses from paediatric surgeons across the globe regarding queries about the management of clinical scenarios. These findings are due to various factors. First, PSL is a closed group that is currently managed and endorsed by the WOFAPS. The access is only given to paediatric surgeons after a quick background check by the members of the group. Thus, access to the general population or health-care providers from other specialities is restricted. Second, no industry members are allowed to participate in the PSL. Although the advertisements and information about new products (or devices) can educate the clinicians and allow physician-industry collaboration, it can defeat the primary purpose of interaction amongst paediatric surgeons. Furthermore, if included in the group, these industry professionals can pass their judgements about clinical queries on the discussion forum. It can increase the number of unhelpful responses as they have limited knowledge about the clinical scenarios. A similar study was conducted by Bernardi et al.,<sup>[3]</sup> where the safety and usefulness of responses posted on the IHC group were studied. In their study, the proportion of safe responses was similar to that of the present study. However, the number of unhelpful responses was more than three times (28.4% versus 8.5%) than that of our findings. The possible reason behind this is allowing the participation of industry partners in the IHC group. Another explanation for the considerably higher proportion of unhelpful responses in their study can be more number of members in their group. The IHC group had 7000 members in 2019 whereas PSL has 4200 members as of now.

Another point that is noteworthy is the proportion of rectified unsafe responses. In our study, only one-third (4/11) of the unsafe responses were subsequently rectified. Similar findings were observed in a previous study<sup>[3]</sup> and highlight the need for a peer-review system for the PSL. A review and rectification of the unsafe responses by one of the senior members of the group (appointed in rotation) can help in the selective dissemination of high-quality information based on evidence-based medicine.<sup>[4]</sup>

The results of this study must be interpreted within the context of few limitations. First, the sample size of the study is small. Only 22 discussions were analysed in this study. It is possible that including additional queries by increasing the study period can depict different findings. Second, we have included only those discussions that contained queries about the management of specific case scenarios. Case commentaries and case queries with no responses were excluded. It is quite possible that these excluded discussions can also provide an insight to the clinician and help in the management of similar cases in the future. Third, the utility and safety assessments of the queries were performed by a single surgeon in the present study. Evaluation by multiple experts can provide a better evaluation of the utility and safety of the clinical threads. Finally, it is well-known that the content in a closed SoMe discussion group needs to be self-regulated at the personal level only. The person who is posting a comment or query is solely responsible for the content of the post. Although no issues related to transparency, disclosure of the patient's identity, etc., were noticed in this study; however, an objective assessment of the quality of information available in these discussions needs to be done in future studies.[8]

Despite the above limitations, our study depicts PSL to be a safe and helpful SoMe platform with safety and utility rates of 96.8% and 91.5%, respectively. To our best knowledge, ours is the first study demonstrating the utility and safety of the advice given for online queries regarding the management of paediatric surgical cases.

#### CONCLUSIONS

PSL is a safe and helpful SoMe platform for taking advice regarding the management of paediatric surgical cases. Although constituting <5%, the majority of the unsafe responses are not rectified due to the lack of peer review. However, assessment of a larger sample by multiple observers needs to be done before any definite conclusions are drawn.

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#### **Conflicts of interest**

There are no conflicts of interest.

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