

Research Article

Views, Experiences, and Challenges of Anesthetists and Anesthesia Technologists on Parental Presence During Induction of Anesthesia in Children: A Mixed Method Study

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Source of Support: This study was conducted as part of master's thesis, which was supported by the Saudi Arabian Cultural Bureau in London, UK.

Conflict of Interest: None.

Received: Jan 19, 2022; Revision Received: Jun 4, 2022; Accepted: Jun 9, 2022

Aljohani DM. Views, experiences, and challenges of anesthetists and anesthesia technologists on parental presence during induction of anesthesia in children: a mixed method study. *Glob J Qual Saf Healthc.* 2022; 5:65–74. DOI: 10.36401/JQSH-22-2.

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ABSTRACT

Introduction: Parental presence during induction of anesthesia (PPIA) has a potential positive impact on the pediatric patient, parents, and anesthesia staff. Several studies have explored the effectiveness of PPIA. However, there are no recent studies that explore the anesthesia staff's views, experiences, and challenges toward PPIA. The aim of this study was to discover the views, experiences, and challenges of anesthetists and anesthesia technologists regarding PPIA within a hospital in Saudi Arabia. **Methods:** This study followed a mixed-method design with a qualitative descriptive approach. A methodologic triangulation of data collection, comprising phase one, quantitative Likert-scale questionnaires, and phase two, qualitative semi-structured interviews. Thirteen anesthetic practitioners were recruited in the questionnaire phase, and then six anesthetic practitioners participated in the interviews. The quantitative data set was analyzed using Microsoft Excel and results are given using descriptive statistics. The qualitative data set used thematic analysis and results are given using themes and participants' quotes. **Results:** The data analysis identified representative themes and revealed no major differences in the opinions and experiences of anesthetists and anesthesia technologists on PPIA support. Based on the anesthesia staff's experiences, they believed in PPIA benefits, such as reduction in sedation use, minimizing the child's anxiety, and enhanced level of cooperation with the staff. Several points were raised indicating that there were challenges of PPIA with anxious parents and hospital policy being the main concern. **Conclusion:** The study provides evidence from anesthetic practitioners that PPIA is seen in a positive light within the Saudi hospital. The study's findings support further research to improve pediatric anesthesia practice, including a review of the hospital guidelines and policy.

Keywords: anesthesia induction, parental presence, pediatrics anesthesia, Saudi Arabia

INTRODUCTION

A child's preoperative anxiety may result in physical and psychologic adverse effects, such as difficult anesthesia induction, a high risk of laryngospasm, and increased pain, leading to increased analgesic requirements.^[1] Accordingly, avoiding the negative effects of preoperative anxiety and distress is one of the main purposes of anesthesia care for pediatric surgery. Anesthetists continue to look for a technique that is cost-

effective, simple to apply, and a thorough way to decrease anxiety.^[2] Two approaches are commonly used among children undergoing surgery to minimize preoperative anxiety, namely pharmacologic methods such as pre-medications, and nonpharmacologic methods such as facilitating the presence of a parent during anesthesia induction.^[3,4]

The aim for parental presence during induction of anesthesia (PPIA) is to relieve anxiety, facilitate smooth anesthesia, enhance the cooperation of the child with

the anesthesia staff, and reduce the need for premedication sedation, hence, preventing possible side effects.^[5-7] Parents normally have a better understanding of their child's reaction, apply strategies for coping and are therefore able to manage the child's anxiety appropriately.^[8] In this regard, many studies found that PPIA can reduce the anxiety levels in pediatric patients aged between 1 and 18 years.^[8-13]

Most of the studies that were conducted in different countries concluded that the majority of anesthetists were in favor of PPIA.^[14-16] In contrast, some anesthetists have considered PPIA undesirable, arguing that parental attendance is effective in minimizing levels of anxiety only if the parent is calm.^[14,17] Although parents or guardians can be present with their children during induction in the anesthetic room in some countries, such as United Kingdom (UK) and United States (US) hospitals,^[18] in Saudi hospitals, PPIA is not yet a common occurrence, which might be attributed to the operating theater design. Usually, the anesthetic rooms are designed to be separate from the operating theaters; thus, allowing the parents to attend induction of anesthesia with their child and prevent pediatric patients from seeing and hearing the surgical equipment setup, therefore reducing their anxiety.^[19,20] This is different to practice in Saudi Arabia (KSA) in which the induction of anesthesia occurs inside the operating theater,^[21] which might produce too complex of a working environment for parents to be present.^[14] In comparison to pediatric anesthetists in the UK, anesthetists in the US did not prefer PPIA in their practice, indicating a cultural difference.^[17]

Culture and parent's sex might influence the effectiveness of PPIA and pediatric patients' anxiety, as mothers tend to be anxious and stressed more than fathers.^[10,22] Some countries, such as the UK and the US, have their own current guidelines for pediatric anesthesia practice; however, there are no clear standard practice guidelines in the KSA.^[18,23] Therefore, hospitals in the KSA follow various pediatric anesthesia guidelines, such as the American Society of Anesthesiologists' guidelines or those of the Royal College of Anaesthetists. This variation can be detrimental to patient care, particularly if the child has to move between a US- and UK-driven hospital because they may have their treatment changed to meet varying guidelines. It also does not take into consideration any cultural differences between a Western healthcare management system and an Arabic-managed healthcare system. In the Saudi context, pediatric patients receive surgical and medical care in nonspecialized hospitals, where the pediatric services are insufficient.^[24]

To our knowledge, no studies exploring the Saudi anesthetic practitioners' views have been published recently despite the significance of practitioners' opinions, which can influence whether the clinical practice of allowing parents to be present is implemented or not. Therefore, this research aimed to explore the views,

experiences, and challenges of anesthetists and anesthesia technologists regarding PPIA for pediatric patients in KSA.

METHODS

Ethical approval was obtained from the hospital Research Ethics Committees to recruit participants and then from the Cardiff University School of Healthcare Studies. Participants were provided with an information sheet, invitation letter to interview, along with informed consent. In the questionnaire phase one, it was explained to the participants that completion and returning of the questionnaire were considered to indicate consent. However, before each interview, a signed informed consent was collected from all participants. Participants' anonymity was ensured by using pseudonyms and assuring them that the data collected would be used only for the current research purpose to ensure participants' privacy and would not be disclosed to others.

Study Design

This research is a mixed-methods (explanatory sequential) design, where the qualitative descriptive data were used to explain data generated from the preceding quantitative approach. The qualitative descriptive method is a significant and applicable approach to provide a comprehensive summary that consists of direct and precise answers to a research question, especially when it is relevant to the participants' experiences.^[25,26] Methodologic triangulation was recommended to ensure a cross-validation of information, to minimize researcher bias and to gain a robust understanding of the research phenomenon, which might not be achieved if only a single method is used.^[27] To address the research aim and objectives, methodologic triangulation was achieved by first using research questionnaires and then gaining a deep understanding of the phenomenon by conducting semi-structured interviews.

Sampling and Recruitment

This study was conducted in Imam Abdulrahman Al Faisal Hospital in the Eastern province of KSA because this hospital enables parents to be with their child during the induction of anesthesia inside the operating room. A purposive sampling technique was used to recruit participants who have sufficient knowledge and experience in pediatric anesthesia to share their views and experiences of this aspect, which helped to answer the research question.^[26] The study went through the following two phases: phase one that was questionnaire-based, followed by phase two that was in-depth interviews. The inclusion criteria to participate in this study was being an anesthetist or anesthesia technologist currently working or had worked within the pediatric specialty. The exclusion criteria were all anesthetists and

anesthesia technologists (ATs) who had not worked within pediatrics anesthesia or anesthesia interns.

Data Collection Procedure

Phase one: Questionnaire

A validated Likert scale questionnaire was adapted from qualitative survey study that explored PPIA.^[28] Permission was granted from the original authors. A Likert scale was established to understand participants' views. However, not only it is very difficult to measure opinions in numeric form, but minimal qualitative data can also be gained from numeric scales.^[29] Therefore, to provide in-depth descriptive qualitative data, interviews were conducted after the questionnaire phase. The questionnaire consisted of 15 questions, using a five-point Likert scale as follows: strongly agree, agree, disagree, strongly disagree, do not know.^[28] Some changes in the questionnaire were made by the researcher to suit the present study's aim and objectives, which involved ATs as well as anesthetists. Then, piloting of the questionnaire was carried out by four AT volunteers who had the same characteristics as the study participants. Based on their suggestions, a minor modification was made to question number seven by adding another question to be more specific and clearer about the child's age range. The reliability of the questionnaire was found acceptable with 0.81 Cronbach's alpha. The data from the pilot study were not included in the analysis phase.

A researcher-administered approach was used for the questionnaires to reduce risk of low response rates. The total number of anesthetists and ATs in this hospital was 13 and all of them met the inclusion criteria and were suitable for the phase one. The data collection period for the questionnaire was 4 weeks from the research launch in January 2020 at one of the department meetings. Two weeks from the launch, a second presentation was done to remind participants to complete their questionnaires. We asked all volunteers to complete and return the questionnaire to a returns box located within the theater reception. The final sheet of the questionnaire was an invitation for volunteers to participate in the semi-structured interview phase two of the research. The acceptance slips were placed in a second returns box to maintain the anonymity of participants who filled the questionnaire.

Phase two: Semi-structured interviews

Interviews were conducted after the questionnaire data collection phase had been accomplished. The interview questions were constructed through critical appraisal of the literature and piloted by the research supervisor to assess the feasibility and validity of the questions. The interviews were conducted individually in the anesthesia office in the operating room and each one lasted approximately 30 minutes. Interviews were audiotaped and subsequently transcribed verbatim. To obtain more details, probing questions were used during the interviews, such as, "Do you think you have the right to

refuse PPIA? Why?" After finishing six interviews, we noticed that data saturation was reached because there were no new data, codes, or themes identified. Therefore, a total number of participants for the interview phase was six—three anesthetists and three ATs. According to Guest et al.^[30] data saturation is achieved when there is no further feasible coding.

Data Analysis

Questionnaire data analysis

The data derived from the Likert scale were analyzed using Microsoft Excel to provide some descriptive numeric data. The results are presented graphically with percentages and number of respondents and displayed by using pie charts to compare the questionnaire data with the interview data.

Semi-structured interviews thematic data analysis

Thematic analysis was used as it is a flexible and valuable research tool, commonly adopted in qualitative descriptive studies.^[31] We followed the six steps in the framework for thematic analysis set out by Braun and Clarke.^[32] First, we chose to transcribe the data alone as this allows the researcher to immerse themselves and become familiar with the data.^[33] Therefore, each interview was transcribed by listening to the tapes many times. Then, to guarantee the accuracy of the transcripts, they were reviewed and double-checked by the researcher's supervisor. Second, we started to generate codes that might be modified through the coding process to organize the data systematically and meaningfully. Third, the codes were examined for themes, and it was found that some codes fitted into one theme. The data related to each theme were color-coded by hand using Microsoft Word and color coding. Last, we reviewed the themes to the coded data extracts to examine its reliability to the study aim.

Trustworthiness

The application of methodologic triangulation can enhance the credibility and confirmability of the findings.^[34] After each interview, the researcher documented the options from the fieldwork and made a draft of the interview; these steps helped in identifying additional questions to be asked in the upcoming interviews. Fieldwork ensures the trustworthiness of the study and minimizes the risk of bias by enhancing the visibility of the research process and the accuracy of data analysis, which is known as reflexivity.^[33,34] We also reviewed thematic analysis together to confirm and verify the consistency and the accuracy of the themes.

RESULTS

A total of 13 completed questionnaires were returned, which represents a 100% response rate. The interview phase was meant to gain more in-depth information about the problem. With inductive thematic analysis, themes were generated from the data themselves

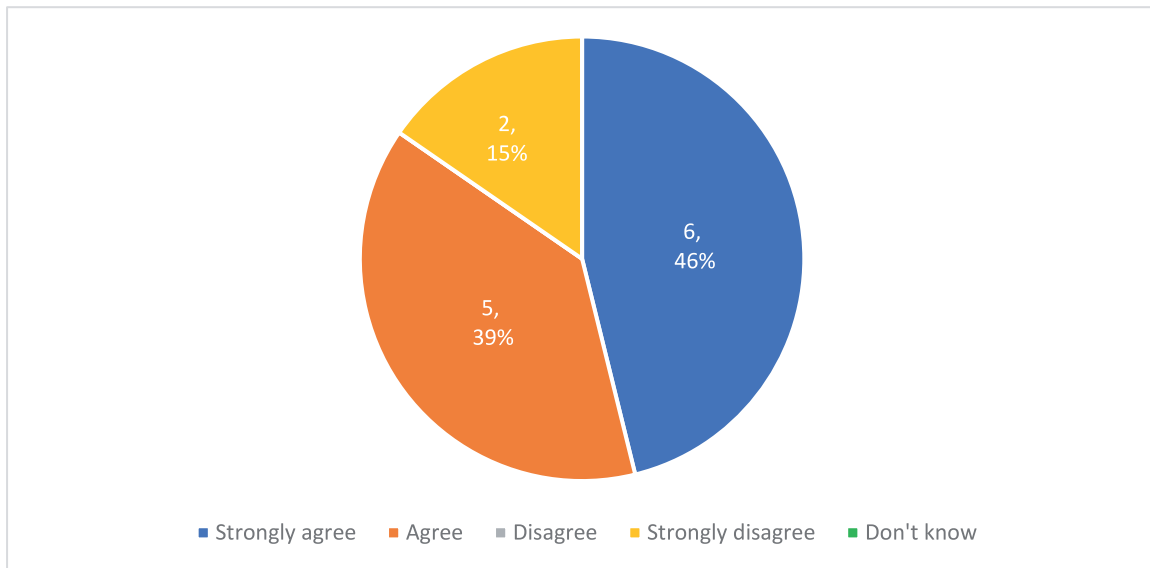


Figure 1. I am supportive of parental presence during anesthesia induction.

without trying to fit it into pre-existing coding framework. Data analysis revealed the following three main themes: views on PPIA, experiences of PPIA, and challenges of PPIA. Themes and illustrative quotes are presented below, the results from the interviews were triangulated with questionnaires. Six anesthetic practitioners were recruited in the interview phase as follows: anesthesiologists were given the initial letter “A,” and anesthesia technologists were designated “AT.”

Theme One: Views on parental presence during induction of anesthesia (PPIA)

Subtheme one: Views on preference and need of PPIA

It emerged from the questionnaire that 85% ($n = 11$) of the respondents claimed to support PPIA, while only 15% ($n = 2$) strongly disagreed with it (Fig. 1). A total of 77% ($n = 10$) of the respondents strongly agreed or agreed that they would request parent to be present with their own child during induction of anesthesia. This finding is consistent with the interview results as it captured several agreements and few disagreements within the anesthetic practitioners' views toward PPIA. Participant responses are as follows:

Participant A1: “I prefer their presence during induction.”

Participant AT2: “I really support parents being present during induction of anesthesia.”

Participant A3: “I am not allowing the parents to be around during induction of anesthesia.”

Despite professionals' differences, many participants support PPIA. These agreements were noted in both findings. All the anesthetic staff, 100% ($n = 13$), agreed that the child's anxiety level may decrease with parental

presence, 85% ($n = 11$) agreed that the child's cooperation level can be enhanced during induction, while 54% ($n = 7$) of the respondents believed that PPIA could decrease operating room (OR) efficiency.

Similarly, in phase two, participants responded as follows:

Participant AT2: “I believe parental presence can release most of the child's anxiety before induction, also avoiding the use of midazolam, because sometimes, you know, premedication has side effects.”

Participant A2: “We need parents' help sometimes... if we face any difficulties, such as putting intravenous cannula for the child, we prefer to have one of the parents... This can enhance the child's cooperation... their presence offers some sort of sedation and I feel that children who have their parents during induction, they recover after anesthesia more relaxed.”

Participant AT3: “I am 100% sure that parental presence can decrease the child's anxiety and enhance the child's cooperation.”

Furthermore, participants pointed out certain essential factors that influence the effectiveness of PPIA, such as the child's age and parent's sex. Participants believed that there is a relationship between children's ages and anxiety levels that younger children might suffer from a high level of anxiety. In the questionnaire findings, 77% ($n = 10$) respondents indicated that the suitable child age range for PPIA is 1–4 years, while only one respondent chose 1–10 years. Of note, the interview findings were slightly varied:

Participant A1: “I think babies from 1 year to 6 or 7 years need their parent's presence.”

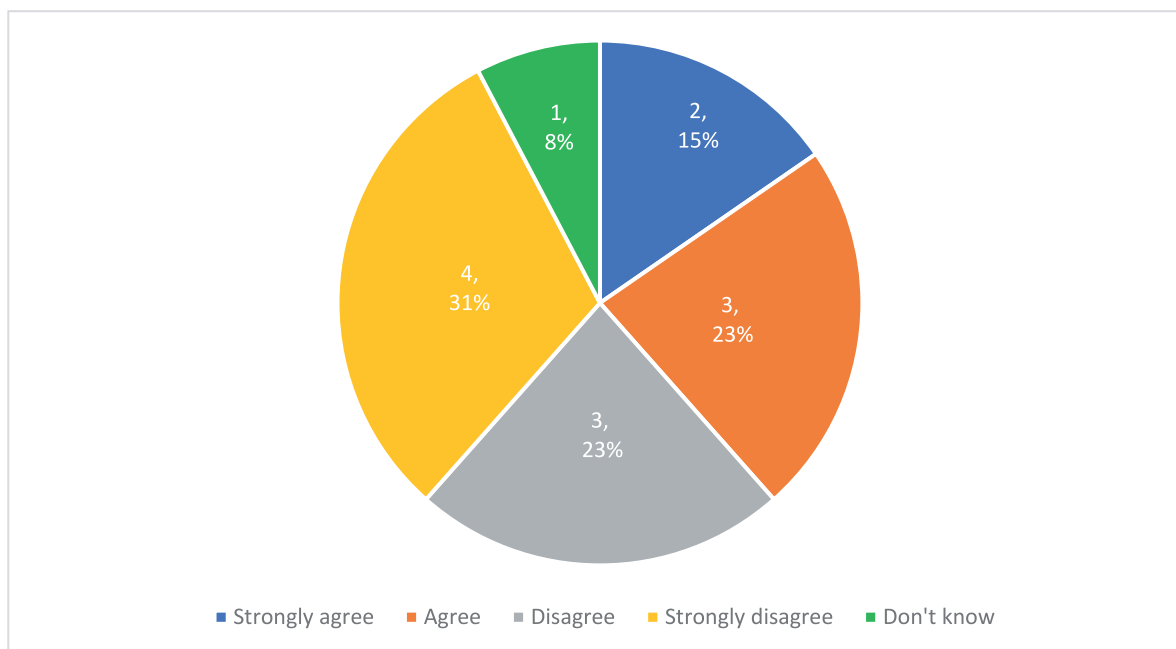


Figure 2. For emergency operations, do you think parents should be offered the option of being present in theater during anesthesia induction?

Participant A2: “Hmm—it depends. Of course, the younger the child, the more need for the presence of a member of the family. Older children like 7, 8, or 9 years old, I think they can manage alone.”

Participant AT1: “To be honest, it is different from one child to another, but let’s say from 1 to 9 years.”

In terms of the parent’s sex that escorts the child and makes impact on the PPIA efficiency, the participants were asked whether it was mothers or fathers who usually accompanied the child, and they responded as follows:

Participant AT2: “I think most of the kids are attached to their mothers because mothers are the closest person to her kids.”

Participant A2: “The majority are the mothers, but I leave the decision for them to choose which one who wants to accompany their child.”

Most of the answers indicated that it was usually mothers who accompanied children, confirming the questionnaire’s findings, where 85% ($n = 11$) of the respondents chose mothers with the variety of children’s genders (54% [$n = 7$] for ‘females’ and 46% [$n = 6$] for ‘males’).

Although, the questionnaire findings illustrated that 62% ($n = 8$) respondents agreed that PPIA should be available only upon on request, 84% ($n = 11$) respondents either strongly agreed or agreed that theater staff should have the right to refuse the parents’ presence during anesthesia induction.

Subtheme two: Views on PPIA in emergency or special conditions

Despite many participants supporting PPIA, they believe that it would not be suitable during emergencies and some critical situations, such as difficult intubations, as anesthesia staff would need to concentrate on the case without distractions to avoid complications. The questionnaire finding reported that 54% ($n = 7$) of the respondents disagreed or strongly disagreed with allowing PPIA in emergency cases (Fig. 2). This finding supports the following interview findings:

Participant A1: “There is no place for parents’ presence in emergency cases.”

Participant AT3: “The anesthetic practitioners want to focus during some critical cases.”

While in elective cases, 77% ($n = 10$) of the respondents either strongly agreed or agreed to PPIA (Fig. 3).

Furthermore, 85% ($n = 11$) of the respondents strongly agreed or agreed that PPIA should be allowed in certain conditions. Nevertheless, no explanation was provided for what was meant by “certain conditions.” Therefore, during the interviews, participants were asked to provide deeper information and clarification. Participant A3 does not support PPIA except in certain situations when it comes to the benefit of the patients, and stated:

With very particular situations, I can allow parents being present. . . I understand that they want to be with their kids, especially if their child has some congenital heart diseases, severe anxiety that can develop syncope, or develop some serious complications during the separa-

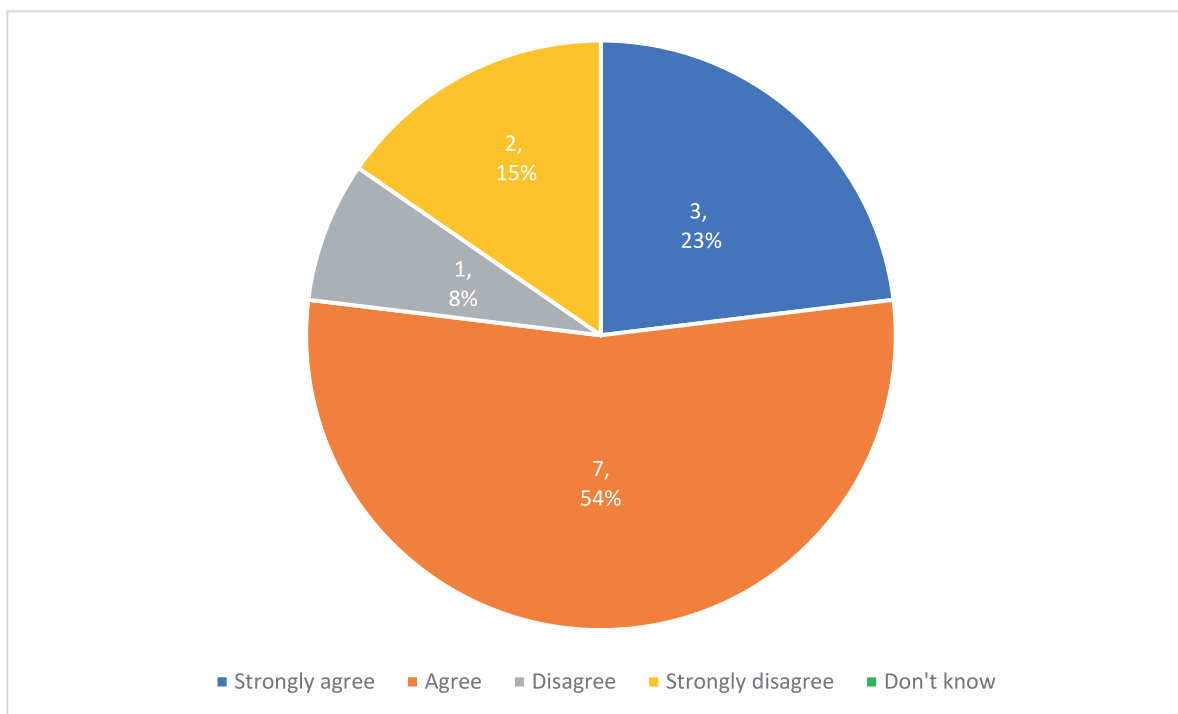


Figure 3. For elective operations, do you think parents should be offered the option of being present in the theater during anesthesia induction?

tion...in some cases, such as Down syndrome patients, I definitely support parents being present with their child during induction.

Theme Two: Experiences of PPIA

The questionnaire's findings revealed that 69% ($n = 9$) respondents believed that PPIA could increase tension at induction (Fig. 4) and subsequently increase the incidence of adverse events (Fig. 5). Participants A3 and AT3 were not in support of PPIA because they experienced some difficulties, hence they prefer using pre-medication. They claimed that parents' presence can create a stressful atmosphere for the anesthetic staff, which may increase the chances of adverse incidents.

Participant A3: "The mother was very anxious during the anesthesia induction, which created extra pressure on us." They continued, "one of the parents developed syncope and fell down on the ground and we started to be engaged with his situation and it was a very big hassle inside the OR." Participant A3 concluded with "I prefer to use an intensive premedication."

Participant AT3: "Some of the mothers are oversensitive and anxious." They further stated, "parental presence is a stressful source. . . the parent was standing and looking at us; therefore, we could not proceed with intubation until the parent was forced to leave the OR." They finished by stating, "it is not worth it to take the risks of having a parent during induction when we have premedication to use."

Participant AT2: "If the parents will make any difficulties during the induction of anesthesia due to their stress and

anxiety, I prefer not to have them inside the OR. . . you know."

Theme Three: Challenges of PPIA and Possible Solutions

Some instructions and preparation methods were recognized during the interviews to address complications related to parents' stress and interruptions.

Participant A1: "We sometimes do presurgery visits to the pediatric patients in their rooms to introduce ourselves and show them some pictures of the OR and the face mask... just to make the child and the family familiar with this stuff."

Participant AT2: "We give the parents some leaflets that contain pictures of the OR and anesthesia equipment and also some explanations about the anesthesia procedure."

Participants experienced some sort of rejection from operating theater staff regarding PPIA:

Participant A2: "Some of the surgeons do not like the presence of the parents during induction and they insist on keeping them outside."

Whereas participant AT1 said: "The nurses here are really supporting this concept and sometimes they help us by staying beside the mothers."

The main reason behind these rejections was infection control.

Participant A3: "Another barrier is the infection control—bringing someone from outside, even if the parent is

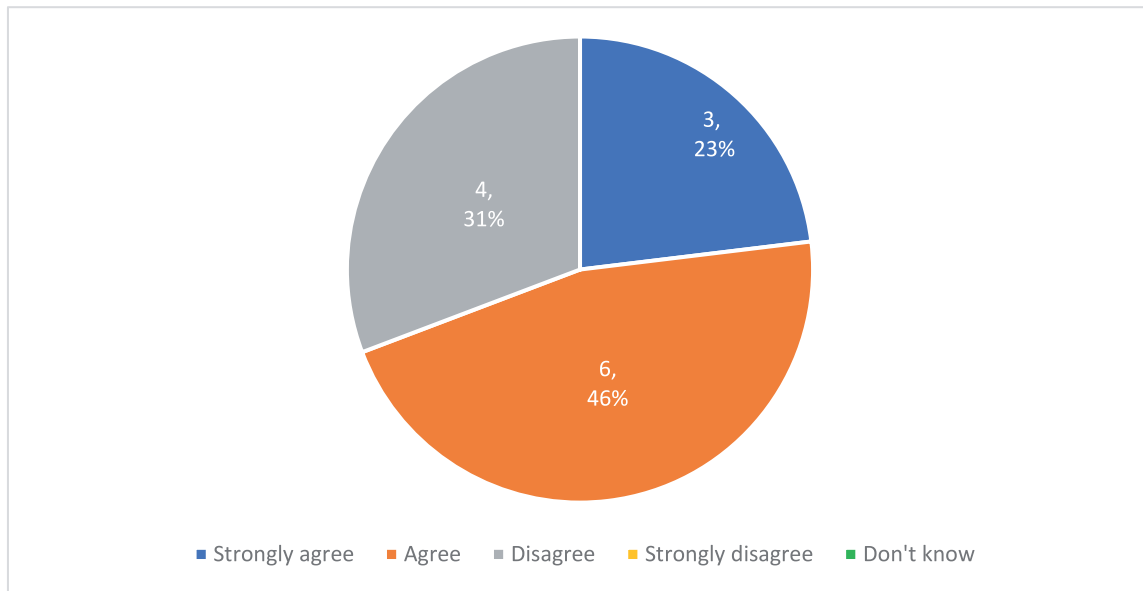


Figure 4. Do you think parental presence during anesthesia induction increases tension at induction?

dressed like the OR personnel, there is still a risk of infection transmission.”

Because infection transmission was the major concern, participant AT3 only accepted PPIA in nonsterile areas, “[during] the MRI, I can give the parents the chance to be present with their child.”

Although some participants believed that wearing the OR attire is more than enough, they have encountered some issues regarding cultural matters.

Participant AT3: “Mother’s wear Abaya and they refuse to take it off and put on some suitable clothes for the OR.”

Participant AT2: “Some of the parents are not accepting to wear the appropriate clothes for the OR because they feel nervous.”

The suggestion of having anesthetic rooms that are separate from theaters was pointed to address this barrier.

Participant A2: “I worked in a hospital that had anesthetic rooms, which make a big, big difference.”

Participants expressed issues around the lack of fixed pediatric guidelines, to which all KSA hospitals should be obligated to adhere.

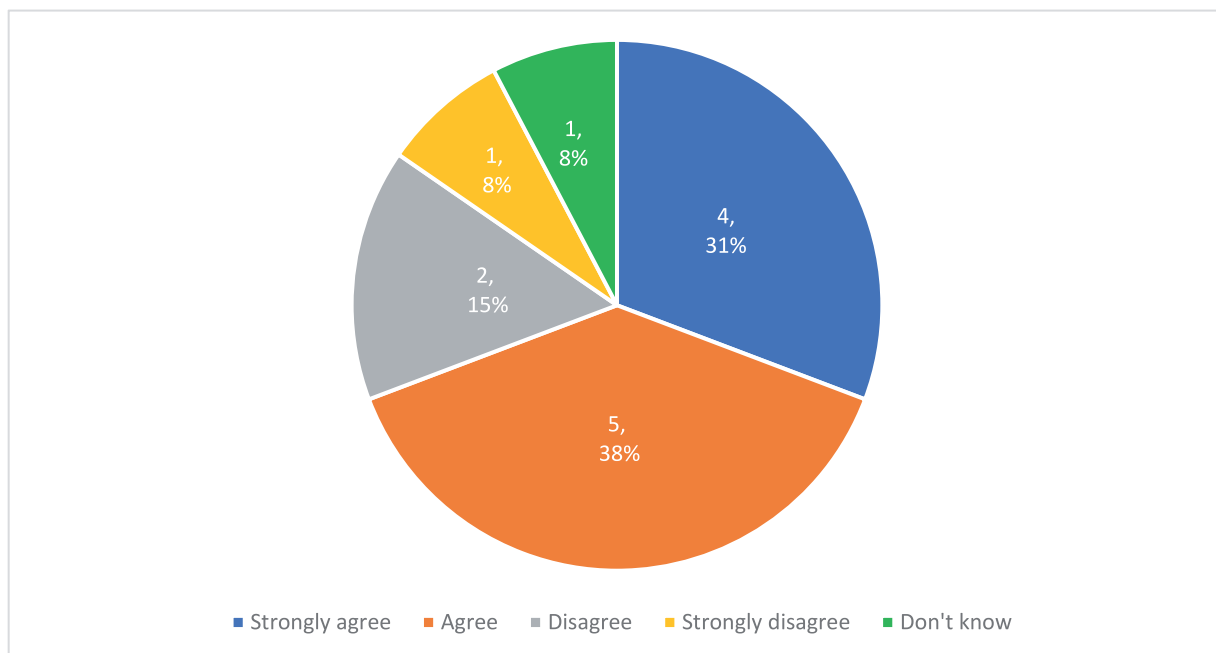


Figure 5. Do you think that parental presence during anesthesia induction increases adverse events?

Participant A1: “Some institutions do not allow [a] parent to be present during PPIA.”

Participant A3: “Sometimes we are tied up with the hospital regulations and policy even if the anesthetic staff agree to apply such programs.”

Participant A2: “I don’t think policy can make a difference because I feel the decision relies mainly on the anesthetist and the family.”

Participant A2 believed that the decision depended on the anesthesia staff and the patient’s family. Thus, A2 deemed that there was no need for a PPIA policy.

DISCUSSION

Literature showed that most of the anesthetists were in favor of PPIA,^[14–16] as many studies firmly agreed that PPIA negated or reduced the need for sedative agents in pediatric patients.^[5,13,35] This is consistent with the findings of our study as four participants who had not experienced any adverse incidents with PPIA were in favor of this practice to minimize the use of premedication sedation, as they believe that parents can produce a sedative impact. However, the remaining two participants were not in favor of PPIA, based on their negative experiences, tension, and stress with parents’ presence. Therefore, they preferred to rely on sedative medications rather than dealing with anxious parents. Similarly, Erhaze et al^[36] found that PPIA alone might not be an appropriate method to control preoperative anxiety among pediatric patients.

Participants believed that the child’s age and parent’s sex might impact on the PPIA efficacy because younger patients are more likely to suffer higher levels of anxiety, which was confirmed by the findings reported by the literature.^[9,11,12] Based on participants’ experience, the most accompanying parents were mothers, yet mothers’ adherence to OR attire was a challenge in maintaining infection control measures. However, mothers might be more capable of reducing children’s anxiety as supported by Ozdogan et al,^[10] which explored the effectiveness of mothers’ presence at induction and found that pediatric patients who had their mothers present experienced less anxiety and stress compared with the control group.

Studies have found that one of the main reasons behind PPIA resistance, is the concerns of the operating theater staff about environment sterility.^[16,37,38] Consistently, some study participants considered that surgeons might refuse PPIA due to the lack of a separate anesthetic room, and their worries about infection transmission that might occur if parents refuse to change out of their culturally defined clothes. In addition, literature found that another reason for PPIA rejection was due to the perceived complexity of operating theaters, which made it unworkable to accommodate parents.^[14]

It was also pointed out that PPIA would not be appropriate in several situations for the benefit of

parents and staff, such as emergencies and difficult intubations, as anesthesia staff have many concerns on their minds and they need to be entirely focused on the case.^[37] Similarly, the study participants claimed that having a parent present in emergencies might compromise the safety of the child and the parents. In this regard, Tan and Meakin^[39] emphasized that parents are banned from attending anesthetic induction in children with potentially difficult airways because seeing such a stressful procedure might negatively affect the parent’s psychology.

Anesthesia staff in this study shared a similar view that the parent’s attitude during PPIA is an essential factor that determines whether PPIA works well or not. Because they assumed that anxious parents could cause stress and interruptions on them. Waseem et al^[40] declared that some of the parents who did not attend induction reported their worries about their ability to emotionally handle this distressing event, which might result in increasing stress on their child. Hence, the parent’s desire to attend induction should be considered. The literature concluded that only calm parents were beneficial for their children and the staff.^[17,37,41] Baines and Overton^[37] reported that it was undesirable for aggressive or anxious parents to be present at induction, as they certainly generate extra stress on the anesthesia staff, which leads to distractions. This concern about parents distracting anesthesia staff was also reported by Roman et al.^[14] The increased parental anxiety due to the lack of understanding and education might negatively influence the efficacy of PPIA.^[42] Some participants acknowledged certain solutions to overcome such challenges, for instance, a pre-surgery visit and distribution of educational leaflets. Similarly, Muazu^[43] found that leaflets containing information about the anesthetic procedure were valuable resources that parents needed to have before the child’s surgery. In addition, preparation programs to prepare parents and pediatric patients would help in reducing parents’ anxiety.^[44]

Some participants believed that PPIA is crucial in certain situations, such as children with severe anxiety, congenital heart diseases, or Down syndrome. Chundamala et al^[45] found that PPIA tends to be beneficial for children with developmental delay (i.e., Down syndrome patients), their parents, and the anesthesia staff. Furthermore, patients with congenital heart diseases are more prone to develop anxiety and its correlated conditions, which could lead to a high mortality rate.^[46] Fortunately, this can be managed by PPIA, which is considered a psychotherapeutic intervention to minimize the preoperative child’s anxiety.^[45]

There were some controversial opinions around the need for a hospital policy that would advocate that all parents can be present during induction of anesthesia. This issue was experienced by Bosenberg et al,^[16] the respondents believed that decisions about PPIA should rest solely with the anesthetists and the parents and not be determined by a policy, stating that all parents should

be present during induction, supporting the belief of one of the study participants. The presence of hospital policy that contravenes anesthetic staff's preferences is a potential barrier to PPIA.^[16] Only 44% of hospitals had a formal policy. In fact, this policy excluded parents from being present at anesthesia induction because PPIA might affect the provision of privacy for other patients.^[37]

To the best of our knowledge, the current study is the first study in Saudi Arabia exploring the views, experience, and challenges of anesthesia staff regarding PPIA. However, some limitations exist. The study took place at a single KSA hospital with a small sample size might affect the transferability of the findings. However, methodologic triangulation was used to ensure wider coverage of opinions. In addition, generalizability of findings to other settings could not be guaranteed, because this study aimed to understated and describe views and experiences within a particular context.

CONCLUSION

Although the literature has explored views and experiences of anesthetic practitioners in regard of PPIA, none of the studies have been yet done in the Saudi context. Therefore, this study explored varied views, experiences, and challenges among participants regarding PPIA in a Saudi hospital. The majority of our participants were in favor of this practice due to their beliefs in the benefits of PPIA, such as decreasing the child's anxiety and enhancing the level of cooperation. Fewer anesthetic practitioners do not support PPIA, especially in emergencies; however, they believe it is beneficial in certain conditions, for example, patients with severe anxiety, congenital heart disease, or Down syndrome.

Study participants disclosed several PPIA challenges and possible solutions. For instance, parents' anxiety cause interruptions due to a lack of awareness, which can be reduced by preparation programs, such as pre-surgery visits and leaflets. In addition, concerns about transmission of infection could be prevented by having a separate induction room.

This study highlighted a lack of a clear hospital policy concerning PPIA; therefore, future research is required within the KSA context to develop hospital policy and guidelines for practicing PPIA.

Acknowledgments

The author thanks Dr Mohammed Abdulshafi Yousef and Mr Abdullah Almutairi at Imam Abdulrahman Alfaisal Hospital for support with data collection.

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