

Original Research

Impact of various factors on parent's decision to accept dental treatment for their children under general anesthesia

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ABSTRACT:

Background: Dental general anaesthetics undertaken in hospitals or day procedure centres on young children are amongst the most common of all hospitalizations of children. The present study was conducted to assess impact of various factors on parents decision to accept dental treatment for their children under general anesthesia. **Materials & Methods:** 68 children age ranged 6-14 years of both genders. A questionnaire containing information such as case selection for DGAs, quality of care, changes in general dental practice, limited alternatives to DGAs, improved safety of DGAs, private sector DGA cost, emergency and elective DGAs etc. was recorded. **Results:** Out of 68 patients, males were 40 and females were 28. Questionnaire used was case selection for DGAs which found to be very important by 65%, important by 20% and not important by 15%. Quality of care was very important by 70%, important by 22% and not important by 8%, changes in general dental practice found to be very important by 75%, important by 20% and not important by 5%, limited alternatives to DGAs was important by 80%, important by 16% and not important by 4%, improved safety of DGAs found to be very important by 55%, important by 42% and not important by 3%, private sector DGA cost found to be very important by 74%, important by 16% and not important by 10% and emergency and elective DGAs found to be very important by 60%, important by 25% and not important by 15%. The difference was significant ($P < 0.05$). **Conclusion:** Case selection for DGAs, quality of care, changes in general dental practice, limited alternatives to DGAs, improved safety of DGAs, private sector DGA and emergency and elective DGAs were factors affecting parents decision to accept dental treatment under general anesthesia.

Key words: Elective DGAs, General anesthesia, Quality of care.

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INTRODUCTION

Dental general anaesthetics (DGAs) undertaken in hospitals or day procedure centres on young children are amongst the most common of all hospitalizations of children.¹ The number of Potentially Preventable Dental Hospitalizations (PPDHs) in this age group has been increasing. Between 2013-14 and 2015– 16 there was a 17% increase to 4891, making PPDHs the highest of all Potentially Preventable Hospitalizations (PPHs) and double the rate for asthma admissions.² These PPHs are admissions for conditions where hospitalization is considered to have been avoidable if timely and adequate non-hospital care had been provided or if the condition had been prevented in the first place.³ Paediatric dentistry deals with a special group of patients and not with individual disease patterns or therapeutic areas like other specialities.⁴ In the treatment of children, physiological, psychological and a epidemiological differences should be considered in comparison to adults. In Germany, the current a epidemiological studies show that untreated dental caries in primary teeth is still a relevant problem. This

increase in caries experience level could be a result of dental fear and non-cooperative behaviour.⁵

According to many studies the quality of work, waiting time, involving patients in treatment decisions, the ability to communicate with the patient and the praxis team or kindness are considered to be the most important factor in decision making.⁶ The present study was conducted to assess impact of various factors on parents decision to accept dental treatment for their children under general anesthesia.

MATERIALS & METHODS

The present study comprised of 68 children age ranged 6- 14 years of both genders. Parents consent was obtained before starting the study.

Data such as name, age gender etc. was recorded. A questionnaire containing information such as case selection for DGAs, quality of care, changes in general dental practice, limited alternatives to DGAs, improved safety of DGAs, private sector DGA cost, emergency and elective DGAs etc. was recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 68		
Gender	Males	Females
Number	40	28

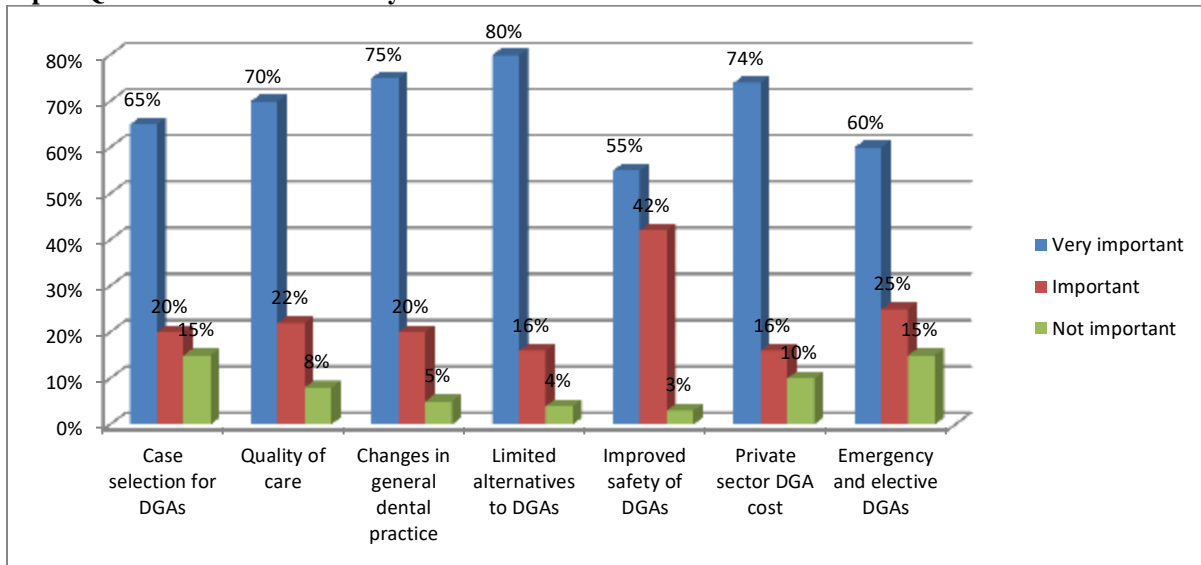
Table I shows that out of 68 patients, males were 40 and females were 28.

Table II Questionnaire used in study

Questionnaire	Very important	Important	Not important	P value
Case selection for DGAs	65%	20%	15%	0.05
Quality of care	70%	22%	8%	0.02
Changes in general dental practice	75%	20%	5%	0.01
Limited alternatives to DGAs	80%	16%	4%	0.01
Improved safety of DGAs	55%	42%	3%	0.02
Private sector DGA cost	74%	16%	10%	0.03
Emergency and elective DGAs	60%	25%	15%	0.05

Table II, graph I shows that questionnaire used was case selection for DGAs which found to be very important by 65%, important by 20% and not important by 15%. Quality of care was very important by 70%, important by 22% and not important by 8%, changes in general dental practice found to be very important by 75%, important by 20% and not important by 5%, limited alternatives to DGAs was important by 80%, important by 16% and not important by 4%, improved safety of DGAs found to be very important by 55%, important by 42% and not important by 3%, private sector DGA cost found to be very important by 74%, important by 16% and not important by 10% and emergency and elective DGAs found to be very important by 60%, important by 25% and not important by 15%. The difference was significant (P< 0.05).

Graph I Questionnaire used in study



DISCUSSION

The most recently published guidelines for indications for DGA for children and adolescents have been developed by the American Academy of Pediatric Dentistry.^{7,8} Indications are proposed for: patients who cannot cooperate due to lack of psychological or emotional maturity and/or mental, physical or medical disability; patients for whom local anaesthesia is ineffective because of acute infection, anatomic variations, or allergy; the extremely uncooperative, fearful, anxious or uncommunicative child or adolescent; those requiring significant surgical procedures; patients for whom the use of general anaesthesia may protect the developing psyche and/ or reduce medical risk; and patients requiring immediate, comprehensive oral/dental care.⁹ Higher quality dental care can often be provided in a DGA because it is easier to manage saliva and the tongue in the more controlled environment.¹⁰ The present study was conducted to assess impact of various factors on parents decision to accept dental treatment for their children under general anesthesia.

In present study, out of 68 patients, males were 40 and females were 28. Rogers et al¹¹ assessed factors associated with children’s dental general anaesthetics and to identify policy implications. Interviews with stakeholders were used to develop a framework of factors. Interview data were subject to qualitative analysis, informed by Interpretative Phenomenological Analysis. Eight themes that encompassed 30 main factors were identified through focused discussions with 16 stakeholders. While the safety of dental general anaesthetics has improved and mortality rates are low, side effects are common. Push factors for children’s dental general anaesthetics include a perceived greater ‘child-focus’; preferred models of care; low oral health

literacy; parent guilt; convenience; and some dentists reluctance to treat high needs children in the clinic. Factors that may decrease the prevalence of dental general anaesthetics include: prevention of dental caries; using alternative approaches; an appropriate workforce mix; enhancing oral health literacy; and development of guidelines. The prevalence of hospitalization of children to treat dental caries is increasing. Many factors influence the prevalence of paediatric dental general anaesthetics - relating to the child, parent, oral health professional, financial impact, health risk, and accessibility to facilities. There are quality of care and convenience benefits but also high costs and possible health risks. Family, workforce and health system factors have been identified that could decrease the prevalence of paediatric dental general anaesthetics.

We found that case selection for DGAs which found to be very important by 65%, important by 20% and not important by 15%. Quality of care was very important by 70%, important by 22% and not important by 8%, changes in general dental practice found to be very important by 75%, important by 20% and not important by 5%, limited alternatives to DGAs was important by 80%, important by 16% and not important by 4%, improved safety of DGAs found to be very important by 55%, important by 42% and not important by 3%, private sector DGA cost found to be very important by 74%, important by 16% and not important by 10% and emergency and elective DGAs found to be very important by 60%, important by 25% and not important by 15%.

Mourad et al¹² in their study a questionnaire consisting of 30 items that could potentially be relevant to decision making was sent nationwide in Germany to paediatric dentists to be given to the parents of new patients

(n=450) was applied. Eighty-nine out of 102 returned questionnaires (response rate=22.7%) were evaluated. Parent's and children's experience in previous dental visits played an "important" or "very important" role in choosing a paediatric dentist (78.8% and 62.2%, respectively). The most frequently mentioned recommendation for the paediatric dentist was by friends and acquaintances (86.5%). Recommendations from other dentists were often included in the decision making (60.7%), while specialist journals or Internet portals were less important for the respondents (15% and 19%, respectively). Most of the parents used Internet search engines and the practice website to obtain information.

CONCLUSION

Authors found that case selection for DGAs, quality of care, changes in general dental practice, limited alternatives to DGAs, improved safety of DGAs, private sector DGA and emergency and elective DGAs were factors affecting parents decision to accept dental treatment under general anesthesia.

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