



KAP of General Dental practitioner regarding Pedodontic Treatment.

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Abstract:

Aim: To find the type of dental treatments rendered to the child patient by the General Dental practitioner in both urban and rural area. To find if the general dentist has adequate knowledge, aptitude and clinical skill to practice and deliver dental treatment to a child patient.

Methods and Material:

Total of 259 general dentists was given the questionnaire. In this 134 dentists were practicing in an urban area and 125 were practicing in the rural area. The questionnaire consisted of 6 questions. The answers were of a dichotomous nature (yes/no). The questions were pertaining to treatment rendered to children below 13 years.

Results: Analysis of types of treatment did between urban and rural population to a child was found to be significant. Placement of stainless steel crown was found to be significant both in urban and rural clinics. Placement of S.S crown by Pedodontic consultant was found to be significant both in urban and rural clinics. Placement of space maintainer by Pedodontic consultant was found to be significant in rural clinics.

Conclusions:

To psychologically understand the child's emotions, modify the behaviour and delivering effective treatment is unfortunately not practiced by the majority of the General Dentist. Most of the dentist does not have clinical skills or aptitude to manage a difficult child which leads to ineffective treatment of the child.

Key-words:

Urban, rural, general dentist, pedodontist, visiting consultant, space maintainer, extractions, deciduous teeth.

Introduction:

India is a developing country where the majority of the population live in rural area. People, who shift to an urban area for sake of education or job, stay back in cities because of better infrastructure facilities. This leads to a greater disparity in the workforce of all kinds, especially in the health

sector in villages. The stark contrast in treatment facilities affects the overall health and dental health of the rural population. The dentist themselves are forced to render treatment in a prosaic way.

Aims & objectives:

To find the type of dental treatments rendered to the child patient by the General Dental practitioner in both urban and rural area. To find if the general dentist has adequate knowledge, aptitude and clinical skill to practice and deliver dental treatment to a child patient. To analyze whether the child receives an effective dental treatment

Methodology:

A total of 259 general dentists were given the questionnaire. In this 134 dentists were practicing in an urban area and 125 were practicing in the rural area. A dental clinic located in the state capital, district capital's zonal limits was considered as an urban practice. A dental practice located within 10 km radius of a dental college was also considered an urban practice. A dental clinic located in a village, panchayat or taluk was considered as rural practice. The questionnaire consisted of 6 questions. The answers were of a dichotomous nature (yes/no). The questions were pertaining to treatment rendered to children below 13 years. The questions were as follows.

1. Are you treating the child patient yourself? Or a Pedodontic consultant does the treatment
2. Are extractions done?
3. Is space maintainer given if indicated?
4. Is pulpal treatment rendered, if indicated?
5. Is stainless steel crown given, if indicated?
6. Are you comfortable in delivering treatment to child patients?

Results:

A total of 259 practicing general dentist with their own private practice were taken in the study. In this 134 clinics were in urban area 125 in a rural area. Among urban area clinics, 82 had Pedodontic consultant visiting their practice and 52 clinics were without any Pedodontic consultant. Among rural clinics, 50 clinics had Pedodontic consultant visiting and 75 clinics had no

Pedodontic consultant. The results were tabulated and analyzed using SPSS software. Chi-square analysis was used to compare the treatments done between urban and rural area, given in Table-1 and treatments are done with/without Pedodontist in both the areas, given in Table-2.

Discussion:

The quality of health sector in a rural area is not that appreciable when compared to the urban population in India.^{1,2} In India, 833 million reside in rural areas and 377 million in urban areas.³ In 2004, dentist/population ratio in urban India was 1:10000 whereas in a rural area it was 1:2.5 lakh⁴. Only 5% of graduated dentist in India work in Government sector.⁴ There has been variance in dental treatment rendered between the urban and rural population. The urban population is educated and aware of the dental care and treatment options are easily available. Affordability of treatment, Pedodontic consultant's availability to render treatment, dental labs' expertise or dentist's skill in making space maintainer, refills delivery of semi-permanent crowns at the clinic office by the marketing personnel, determine the effectiveness of the treatment in a clinic. In the present study, extractions done in urban area clinics are statistically significant (0.002) than rural area clinics. Similarly are the treatment procedures performed like space maintainer, pulpal treatment and stainless steel crown (significant at 0.000). It is easier for a general dentist to extract the tooth rather doing pulpal treatment. Pulpal treatment in children, stainless steel crown placement, space maintainer insertion are found to be done less because the need of expertise and time taken to manage the child. Clinics having one dental chair seem to be more affected as the time factor is concerned. Because of these reasons extraction becomes an easy option, resulting in future orthodontic needs. The reason primarily for not doing pulpal treatment is difficulty in behaviour management of a child.^{5,6} According to 2006, world health report, India has 0.60 doctors, 0.80 nurses, 0.47 midwives, 0.06 dentists and 0.56 pharmacists per 1000 population. In Tamil Nadu, it is 0.163 dentists per 1000 population.⁷ Since most of the data collected were from Chennai and surrounding rural areas where many dental colleges are there, the actual situation in remaining part of the country may be much grimmer. If Pedodontist is not visiting a clinic, specialty treatment is not effectively done. In rural clinics treatment is done by visiting pedodontist for placement of space maintainer, stainless steel crown is statistically significant. Pedodontist is called in 61.2% in urban clinics and 40% in rural clinics. Thus for delivering effective treatment, a consultant is been called to render treatment. By distribution of skillful dentist better preventive oral health care could be achieved.⁸ The distribution of Dental Colleges is also uneven in entire India.⁹ Karnataka has the highest number of dental colleges when compared to Northeastern states. Northeastern states have only 2 Government Dental colleges and none private college. Tamil Nadu has one Government Dental College and 28 private Dental College. The rate at which dental students graduate out, there will be more than one lakh dentist by the year 2020. This only leads to unemployment and wastage of skilled forces.¹⁰

The numbers of postgraduate seats in Government College are few. Although many private colleges offer Postgraduate programme, the cost of education is high.^{7,9} With opening many private dental colleges, expansion of training programme has increased. But the quality of dental training is questionable.¹¹ Competencies of dental graduates to deliver Paediatric dental specialty treatments is minimal. A hands-on course in Paediatric dental treatments is also less when compared to other dental specialties. Establishing problem-based learning improves logical thinking which would be helpful in the application in practical cases.¹² Competence requires continuous self-assessment about the outcome of patient care. Lack of knowledge can lead to under treatment.¹³ A Dental Intern having competency in delivering dental treatment will improve the quality of treatment rendered in future generation.¹⁴ If India has to be listed as a developed country, a

serious thought has to be given to provide pediatric dental care to all children. People would respond to the treatment if stakeholders are given empowerment to conduct an oral needs assessment in children. Public-private partnership can be used to pool resources and thereby allowing community participation. This would enable resources to be wisely used to rural needy children. Insurance companies providing coverage for a child's oral care would reduce the parents' burden and increase the availability of treatment.¹⁵ Larger samples across the country may be needed for substantiating the present results. The present data reveal that private practitioners are not able to deliver actual treatment needed because of the affordability factor. The healthcare authorities may have to look into this issue seriously and take the necessary steps to make dental health treatment a priority. Dental health policy to make our children have better access to specialty dental care at public cost could be formulated. Primary health centers could be re-strengthened with corrective measures like compulsorily employing a dentist, so as to increase the dental workforce in the rural area.¹⁶

To improve oral health care, a detailed preventive programme including prenatal counseling, infant oral health, and the establishment of the dental home should be done at primary health center.¹⁷ Programmes are needed to promote overall oral health in a rural area encompassing diagnostic, preventive, treatment and rehabilitative measures.¹⁸ Allocation of budget for oral health care is not there in India. Fee collection for dental services limits accessibility of the treatments to the needy.¹⁹ "Dental safety net" provides facilities, support, and payment of dental care for the underserved population.²⁰ Public funded services like National health services are functional in many countries like England. The scheme covers dental treatment too. This provides health care to every legal resident of the country. With a population of more than 1.22 billion, India has a challenge with medical and dental health care system. Low socioeconomic status provides a negative impact on overall health and dental hygiene. A tool²¹ giving evidence-based information about oral health, anticipatory guidance, a consequence of early childhood caries, trauma could be modified and used for Indian population.

Conclusion:

The dental care in the pediatric population is neglected because of lack of awareness of patients, the absence of national health policy and inability to treat by a general dentist. Some of the dentists have a Pedodontic consultant to deliver the treatment. The general dentist themselves do not consider the importance of deciduous dentition. Most of the time treatment is deferred. In an acute emergency situation, extractions are performed. To psychologically understand the child's emotions, modifying the behaviour and delivering effective treatment is unfortunately not practiced by the majority of the General Dentist. Most of the dentist does not have clinical skills or aptitude to manage a difficult child which leads to ineffective treatment of the child.

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Table - 1 showing treatment rendered in the urban and rural area.

N=259	Urban=134		Rural=125		Chi-square analysis between urban and rural population
	n	%	n	%	
Extraction	77	57.46	95	76	0.002
Space maintainer	68	50.7	15	12	0.000
Comfortableness	122	91.0	65	52	0.000
Pulpal treatment	48	35.8	11	8.8	0.000
S.S crown	54	40.3	10	8	0.000

Table-2 showing the treatment done in the urban and rural area based with/without

Pedodontist

N=259	Urban=134	Chi-square based on the visit of a consultant	Rural=125	Chi-square based on the visit of a consultant

Pedodontist Consultant	Yes		No			Yes		No		Between urban and rural
	n=82	%= 61.2	n=52	%= 38.8		n=50	%= 40	n=75	%= 60	
Extraction	45	54.9	32	61.5	0.478	42	84	53	70.7	0.134
Space maintainer	46	56.1	22	42.3	0.156	11	22	4	5.3	0.009
Pulpal treatment	25	30.5	23	44.2	0.139	5	10	6	8	0.753
S.S Crown	39	47.6	15	28.8	0.046	10	20	0	0	0.000
Comfortable	74	90.2	48	92.3	0.765	38	76	27	36	0.000

