Oral Presentations

Saturday, 16 June 2007

Cariology

OS078

Dental caries and salivary levels of s-mutans and lactobacilli in asthmatic children receiving anti-asthma inhalers

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Aim: The aim of present study was to assess salivary levels of' 'streptococcus mutans' and 'lactobacilli 'in addition to DMFS score of asthmatic children and non-asthmatic controls.

Methods: Forty-five asthmatic children between age 6 and 12 and 46 matched control non-asthmatics entered the study. DMFS score recorded according to visual-tactile method. Stimulated saliva sample obtained from each patient during a 5-min period. Demographic data and complete medical history recorded. Data analysis performed using Mann–Whitney, Rank correlation, Chi-square, Fisher exact and *t*- test, ridge regression.

Results: The difference between mean DMFS score of asthmatics (3.98 ± 2.53) and non-asthmatics (4.30 ± 2.81) was not significant. Microbial count revealed no significant difference between salivary levels of *Lactobacilli* in asthmatics (2.01×104) CFU and non-asthmatics (2.34×10^4) CFU. However streptococcus mutans count was significantly different between asthmatics (8.9×104) CFU and nonasthmatics (1.5×10^5) CFU. asthmatic children receiving anti-asthma regimens containing combination of β2-agonist and a corticosteroid inhaler had better DMFS score although it was not significant ($P = 0.11$). In asthmatic children the co-varieties in regard to dental caries such as (age, sex, drug regimen and duration of usage, technique of spray application, use of spacer, level of parent's education, number of family members, and monthly income) being considered at first. Variables with $P < 0.2$ were considered and their significant interferences were assessed by ridge regression with $P < 0.05$. The significant parameter concerning caries was drug regimen (corticosteroid along with reliever bronchodilators versus bronchodilators, alone).

Conclusions: Asthmatic children use inhalers had a better dental health, in compare to healthy controls, (although it was not significant). This maybe because of regular visits to their physicians. Asthmatics receiving a protective corticosteroid along with reliever bronchodilators less frequently had asthma attacks, leading to less use of bronchodilators, which are potent xerostomic drugs, and less caries.

OS079

Streptococcus mutans count in saliva of caries free children

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Objectives: The aim of this study was to estimate the count of *Streptococcus mutans* in saliva of caries free children using Dentocult SM Strip Mutans and to evaluate the effect of fluoride varnish on the *Streptococcus mutans* count in saliva of these caries free children.

Methods: Thirty caries free children were selected for the study based on the information obtained from a questionnaire prepared. They were randomly assigned into the control group and the study group consisting of ten and twenty children respectively. Samples of saliva were collected using the saliva strips from the Dentocult SM kit and after incubation the presence of the *Streptococcus mutans* was evaluated using the manufacturers' chart. The study group was subjected to Fluor Protector fluoride varnish application after 24 hours following which the samples were collected again.

Results: The average *Streptococcus mutans* count in primary dentition of caries free children was in the range of 10^4 to 10^5 colony forming units/ml. The average *Streptococcus mutans* count in primary dentition of caries free children after Fluor Protector fluoride varnish application was below 10^4 colony forming units/ml.

Conclusions: Fluor Protector fluoride varnish application showed a statistically significant reduction in the *Streptococcus mutans* count in saliva of the caries free children in the study group.

OS080

Dental treatment of children at a Jeddah hospital, Saudi Arabia

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Objective: The objective of the study was to investigate the frequency of dental extractions and restorations of carious teeth in children treated under general anesthesia at the National Guard Hospital, Jeddah.

Methods: The complete electronic records of 327 children treated between 2001 and 2005 were reviewed retrospectively. The age, gender, indication for GA, and type of treatment was recorded. The restorations were classified as stainless steel crowns, glass ionomers, composites, and amalgams. Preventive resin restorations and fissure sealants were included. The data was entered into the computer and descriptive statistics were generated using SPSS for windows software.

Results: The mean age was 5.9 (range 2–15) years, and 51% were girls. The most common indication for GA was uncooperativeness ($n = 149$, 45.6%). Of a total 1511 extracted primary teeth, the most were the mandibular first molars ($n = 253$), and the least were mandibular lateral incisors ($n = 62$). Of the 90 permanent teeth extracted, the most frequent were the mandibular first molars (89%). The predominant restorations on primary molars were stainless steel crowns ($n = 994$). Of the 1023 glass ionomer restorations, only 29% were on primary molars. The extractions and restorations were bilateral on the affected teeth. There was a high proportion of extractions among each primary tooth type, compared to a high proportion of restored and protected permanent teeth.

Conclusion: The finding indicated the teeth at most risk for caries which can be targeted for prevention.The frequency of extractions and restorations reflected the high caries rates reported in Saudi

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children. The extractions and restorations were found to be highly bilateral and confirmed reported bilaterality of primary caries in the children. The reasons for the caries prevalence and the need for preventive measures will be discussed.

OS081

Breastfeeding and eruption of the first tooth in Nigerian children

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Aim: This study specifically examines the effect of the form and duration of breastfeeding on the timing of eruption of the first tooth in Nigerian preschool children. Breastfeeding form was classified as exclusive when the mother gave only breast milk without any other supplements; almost exclusively breast fed if water or other non-nutritive liquids were used in addition to exclusive breast-feeding and partial (mixed) when the child is fed with breast-milk and other sources of energy and nutrient.
Materials and methods: A cross sectional study of 27 children (14 girls and 13 boys) age between 8 to 16 months was conducted. The age of the child was calculated from the date of birth in months. The appropriate age for the child was fixed as the attained age in months. The mothers were also questioned on the duration and form of breast feeding. Mothers of the children were also asked to recall the age of eruption of the first deciduous teeth. Only cases where the age of tooth eruption could be recalled were included in the data collection process. Association between form and duration of breastfeeding was then analysed for. Statistical significance was inferred at $P < 0.05$.
Results: There was no association between duration of breastfeeding and timing of eruption of the first teeth ($P = 0.404$) as well as the form of breastfeeding and the timing of eruption of the first teeth ($P = 0.610$).
Conclusion: The result of this preliminary study shows that form and duration of breast feeding does not appear to influence the timing of eruption of the first teeth. A larger sample is however needed to be able to draw a conclusion on this.

OS082

Body weight of 194 young children with dental treatment needs

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Objective: The aim of the present study was to evaluate possible correlations between caries prevalence (dmft) and body mass index (BMI) among young children with dental treatment needs.
Methods: A total of 194 children aged 13–36 months (101 boys and 93 girls; dmft > 2) were included in the study. The dental findings, the weight and height of the children were recorded the same day the dental treatment was performed under general anaesthesia. The statistical analysis was conducted by means of Fisher Test or Spearman's rank correlation coefficient.
Results: The mean dmft of the children was 9.34 ± 4.14 and showed a statistically significant correlation to the age of the children (mean age: 29.15 ± 5.62 months) ($P < 0.05$). The dmft value of the boys (9.98 ± 4.47) was higher than in the girls (8.63 ± 3.65); but the difference was only marginally significant with a *P*-value of 0.051. The mean age and the BMI distribution of both genders differed not significantly. 16.0% of the children were underweight (mean age: 28.77 ± 5.23 months; mean dmft = 9.13 ± 4.39), 73.1% had normal weight (mean age: 29.25 ± 5.70 months; mean, dmft = 9.18 ± 4.02), 5.2% were overweight (mean age: 30.10 ± 5.63 months; mean dmft = 11.50 ± 5.32), and 5.7% were obese (mean age: 28.18 ± 6.05 months; mean dmft = 10.00 ± 3.69).
Conclusion: The BMI values correlated neither with the age nor with the caries prevalence of the children.

OS083

Long-term effect of treatment of approximal caries on marginal peridontium

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The aim of this study was to evaluate the effect of treatment of approximal caries on the alterations of marginal periodontium of both primary and permanent teeth of the same children up to 5 years. The study was consisted of 46 teeth in 28 children at the aged 5–9 years with approximal caries and loss of marginal periodontium on first and second primary molars. The clinical probing depths at baseline and after the restorations of approximal caries from the same sites were recorded. The clinical probing depth measurements were performed from mesial or distal surface of the primary molars and permanent premolars. Both periapical and bite-wing radiographs were also taken. The children were followed up to 5 years. At the end of this period, 11 out of 28 children were dropped out due to some reasons. Therefore, 28 teeth in 17 children were evaluated. There were radiographical bone gains in approximal bony defects of the primary teeth following caries treatment. The results of clinical and radiographical evaluations for the permanent teeth revealed the presence of healthy periodontium. As a conclusion within the limits of these followed up cases, bone gain in the marginal periodontium of primary teeth as a consequence of successful treatment of approximal caries resulted in a healthy periodontium of permanent teeth.

OS084

Micro-hardness of dentine after silver diamine fluoride application

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Objective: The study is to describe the variations in micro-hardness of silver diamine fluoride-treated dentine caries.
Methods: Children who participated in a 30-month clinical trial of silver diamine fluoride treatment with very mobile primary teeth were invited to have them extracted. Each tooth was sectioned longitudinally along the midline of the carious lesion and the surface of one half was polished using a metallurgical technique. The specimens were mounted and the hardness of the carious lesions was measured by the Knoop indenter of a micro-hardness tester using 5 gf for 10 seconds. The hardness of dentine was determined with the micro-hardness tester at sites below the surface of the tooth at the center of the carious lesion every 25 μm to the pulp. Three sets of measurements were made on each specimen on parallel tracks approximately 150–200 μm apart.

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Results: The median Knoop Hardness (KH) in clinically diagnosed arrested caries was found to be more than 40 in the outer 50 μm of the surface lesion. It then lay mostly in the range of 20 to 30 at points deeper than 50–500 μm from the surface lesion. The KH of soft dentine caries was below 10 in the outer 50 μm of the surface lesion and was less than 15 in the outer 100 μm. It then gradually increased to 20 at 200 μm from the surface lesion. At a distance of 200 μm or more from the surface of the lesion, the micro-hardness of dentine was found to be in the range of 20–30.
Conclusions: The Knoop Hardness in clinically diagnosed arrested dentine caries was more than 40 where as soft caries was below 10 in the outer 50 μm of the surface lesion.

OS085

High-definition X-ray microtomography of dental caries and developmental defects

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Objective: To use a high definition X-ray microtomography (XMT) scanner with polychromatic calibration to study the mineral concentration (Cmin) of teeth with caries and developmental enamel defects in 2 and 3-dimensions (2D and 3D).
Methods: Most laboratory-based commercial XMT scanners are capable of producing 3D images for morphological analysis. However, they are not sensitive to measuring small changes in Cmin due to polychromatic artefacts and low contrast ratio. The high definition XMT scanner developed at Queen Mary, University of London, uses novel aluminium step wedge to calibrate the multi-energy X-ray beam to one with an effective energy of 40 KeV and a novel scanning methodology to improve contrast ratio. This scanner was used to scan carious teeth before and after caries removal using either a hand excavator or Carisolv TM. Teeth with developmental defects were also scanned to ascertain the difference in Cmin of the defective tissues. 2D analyses were carried out by measuring the Cmin gradients from ADJ to surface of XMT slices. 3D analyses were carried out using Cmin histograms for the whole sample.
Results: No polychromatic artefacts were detected in the reconstructed XMT images. The carious enamel and dentine had bowl-shape appearance. Carious dentine removed by an excavator had a different histogram pattern to that removed using CarisolvTM. The Cmin of carious dentine followed a 'decay' gradient from sound dentine towards the lesion edge. The Cmin of defective enamel had an increasing gradient from the surface towards the enamel-dentine junction.
Conclusion: The aluminium step wedge calibration eliminated the polychromatic artefacts in the 3D XMT images. Therefore, small changes in Cmin between two methods of caries removal and a reversed Cmin gradient from ADJ to surface in developmental defects of enamel were detected.

OS086

Longevity of restorations placed in primary molars by general practitioners

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Objective: To investigate the longevity of restorations placed in primary molars by general dental practitioners (GDPs).
Methods: As part of a randomised control trial of a novel method (Hall technique) of placing preformed metal crowns (PMCs), GDP (n = 17) in Tayside, Scotland (dmft 2.7), placed a conventional restoration in a primary molar in 132 children, as the control for the molar receiving the PMC. 32% of the molars had class I lesions, 68% class II lesions. 42% of lesions appeared radiographically to be > ½ way through dentine. GDPs were asked to place a restoration following their usual practice. The patients were followed up for 30 months. 'Minor failure' was ascribed if the restoration needed repair/ replacement, 'Major failure' if there was a pulpal event; abscess/tooth disintegrated.
Results: Materials used for control restorations were glass ionomer (91); composite (14); amalgam (12); compomer (8); fissure sealant (2); PMC (1); no restoration (4). 78% of cavities had complete caries removal; 22% partial or no caries removal. There were 17 major failures and 55 minor failures of conventional restorations after 30 months. There were significant relationships between major failures and initial lesions > ½ way through dentine (P = 0.004), but not between class I or class II restorations (P = 0.3). There were significant relationships between minor failures and the use of glass ionomer compared with the other materials (P = 0.002) and for class II glass ionomer compared with class I glass ionomer restorations (P = 0.002), but otherwise not for site or extent of initial lesion.
Conclusion: The longevity of restorations placed by GDPs in primary molars in the NHS was poor. A contributory factor was the extensive use of glass ionomer for class II restorations. Supported by CSO Scottish Executive, and 3M/ESPE.

OS087

The HALL technique: 30 month randomised control trial results

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Objectives: To compare clinical outcomes of the Hall technique with those of conventional restorations for carious primary molars in General Dental Practice (GDP) in Scotland, using longevity of restorations and pulpal signs/symptoms as outcome measures.
Introduction: A growing body of evidence supports the premise that effectively sealing caries into a tooth, thus altering the carious lesion's environment, can slow and perhaps even arrest caries progression. The challenge is to determine how this may be used to clinical advantage, avoiding unnecessary tooth substance removal and invasive procedures. The Hall technique is a novel use of preformed metal crowns (PMCs) to seal caries into primary molars. No LA, tooth preparation or caries removal is carried out prior to cementing the PMCs.
Material and methods: GDP-based randomised control clinical trial (132 children, aged 3–10), comparing conventional restorations (control) to the Hall technique (intervention), in carious primary molars with lesions matched clinically and radiographically. Dentists used their preferred restorative option for the control tooth. A PMC was cemented onto the study tooth with glass-ionomer cement (RelyX, 3M) using the Hall technique. The teeth were followed up clinically and radiographically.
Results: Over 80% of patients were available for follow-up at 30 months. The intervention (Hall) technique outperformed the conventional fillings: (i) irreversible pulpitis/interradicular area/ abscess formation; 17 control: 2 Hall, (P < 0.000); (ii) pain; 12 control: 1 Hall (P < 0.002); (iii) minor failure of restoration; 55 control: 8 Hall (P < 0.000).
Conclusion: Sealing caries into primary molars using the Hall technique showed more favourable outcomes for both clinical

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pulpal health and restoration longevity than the standard restorative techniques being carried out in GDP in Scotland. The Hall technique would appear to significantly slow caries progression. Supported by CSO Scottish Executive, and 3M/ESPE

OS088

Effect of iron supplements on mouse teeth caries

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Introduction: Supplements containing iron compounds have been effectively used in the treatment of iron deficiency which cause stains on teeth. A common misconception among mothers is that iron containing drugs will cause dental decay in their children.
Objective: The objective of this study on animals is to carry out a histological investigation of the impact of one of the most commonly used iron containing supplements (i.e., ferrous sulfate) on the supposed cariogenesis.
Materials and methods: In this intervention experimental study, two groups of six rats were selected for the experiments. The first group was fed with iron containing supplements in their cariogenic diets (containing sugar) for 4 months while the second group received only the carigenic diet over the same period. Finally, after sacrificing the rats, 20 micron histological sections of their posterior teeth were prepared using the Ground Section method to be studied under polarized light microscopy. The resulting data were subjects to statistical analysis using chi square tests.
Results: The statistical analysis revealed that the differences between the values for the two groups were significant ($P = 0.001$).
Discussion: From the results obtained from the present histological study, it may be concluded that although iron oral drops may cause stains on the external enamel surface due to sedimentation of iron salts, it will not have an effect on dental cariogensis. Iron orals seem to be attributable to the formation of iron salts increasing enamel surface resistance against the acids produced from the activities of microorganisms.

Dental anomalies

OS089

Oligodontia: a family affair

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An anomaly of teeth number associated with a group of missing teeth is oligodontia.Though congenital absence of one or more teeth is common, Oligodontia(> 6 missing teeth) is rarer. Failure of teeth to develop may be due to environmental and genetic factors but hypodontia has been attributed to have a genetic predisposition. Interestingly, our understanding of the genetic factors of the agenesis of human tooth is still largely based on the selective agenesis of predominantly posterior teeth. An isolated hypodontia/oligodontia is inherited as an autosomal dominant trait with incomplete penetration and variable expression. This report is an attempt to demonstrate and determine the isolated hypodontia/oligodontia that exist maternally in three siblings. The diagnosis and treatment of hypodontia/oligodontia should be carried out at the earliest to prevent both esthetic and functional problems in the dentition.

OS090

Treatment strategy for children suffering from MIH

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Objective: To present a treatment strategy for children suffering from molar incisor hypomineralisation (MIH) based on extraction therapy.
Methods: Patients with MIH often requires a multidisciplinary dental management. The hypomineralised molars show a variable expression varying from simple white opacities until complete breakdown. This can occur however in the same dentition. In this respect some molars are indicated for adhesive restoration or restorations with stainless steel crowns while others are indicated for extraction. From an orthodontic point of view non-symmetrical extraction if 6-year molars is not an option. Symmetrical extraction can be considered if planned with caution. At the department of paediatric dentistry of the Ghent University hospital a standard strategy of symmetrical extraction was introduced. MIH molars become temporary restored with adhesives or stainless steel crown at young age. General anesthesia is often indicated. Patients are followed with special attention for the development of the 12-years molars. As soon as the bifurcation of these molars is clearly calcified extraction therapy is planned. The heavily restored teeth as well as 'sound' 6-year molars are extracted. Patients are followed without additional orthodontics except this was already started up for other reasons.
Results: Via some cases the described strategy will be illustrated. Children who underwent these treatments end up with a healthy dentition and an acceptable occlusion. Further simple guidelines will be given for the decision-making of this strategy.
Conclusion: Symmetrical extraction therapy is a valuable treatment option in children suffering from MIH. No lifelong follow-up of hypominerlized molars is needed.

OS091

Infection or trauma in primary teeth. Do they affect equally at the germs successor? Report of two cases

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The injuries affecting a developing tooth germ caused by infection or trauma on its corresponding primary tooth are several and they can go from a soft enamel hypoplasia to the complete loss of the germ. These pathologies are irreversibles and also have other consequences such as: loss of the tooth integrity, increased caries risk, position and occlusion alterations, alterations in position and tooth shape, etc. This paper describes two cases in which the loss of the permanent teeth germs has occurred, one due to a severe infection and the other due to a traumatic lesion to their primary teeth. In both cases the development of the germ had stopped, and later the body tended to reject them as foreign bodies, also one of them suffered an important anatomic deformation. The clinic story revealed de age of the beginning of the injury and its severity. Histopathologic studies were carried on and helped to determine de developing tissues behaviour as well as the reason for this behaviour. As said before, the damages caused by this kind of injuries are irreversibles and they cause a rupture of the balance in the oral health of the children, who are in the most important growth age, however they can be avoided using preventive measures.

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OS092

Supernumerary teeth: a survey of 208 cases

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Objectives: A retrospective study to describe the characteristics and distribution of supernumerary teeth in the southern Chinese children.
Methods: The study population consisted of 208 children who visited the Paediatric dentistry clinic of the University of Hong Kong. Patients ranged in age from 2 to 15 years. Supernumeraries were detected by clinical and radiographic examinations.
Results: Males were more frequently affected than females in the ratio 3.1:1. Of the 283 supernumerary teeth, 45.5% were unilateral, 43.8% bilateral and 10.5% had three or more supernumeraries, of which 6% were odontomes. Ninety-five percent of the supernumerary teeth occurred in the premaxilla, of which 90.3% occurred in the central incisor region while, the remaining 5% of the supernumeraries were located in the canine, premolar and molar regions. Seventy one percent of the supernumeraries were conical, 47.7% were inverted and 16.9% were erupted. The mean age at the time of diagnosis was 7.3 ± 2.7 years with a minimum of 2.1 years while; the mean age at the time of supernumerary removal was 8.1 ± 2.7 years with a minimum of 4.1 years. Seventy percent of the children were in mixed dentition and 80% of the supernumeraries were removed under General anesthesia. Prior to the removal of the supernumeraries, 53.8% of the children exhibited crowding that involved delayed eruption, rotations and changes in the orientation of the long axis and/or shifts in the maxillary centerline. Furthermore, 3.3% of children exhibited hypodontia in association with supernumerary teeth.
Conclusion: In accordance with the previous studies, majority of the supernumerary teeth were conical, occurred in the premaxillary region assumed an inverted orientation and remained unerupted. The finding that supernumeraries occur more frequently in the mixed dentition is probably a reflection of the time of diagnosis rather than a real difference in their time of development.

Epidemiology

OS093

A systematic review of child oral health research 2000–2005

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Objective: Over the past 20 years the position of children in society has changed with increasing emphasis on children's rights and child-centred services. This study aimed to describe the extent to which contemporary oral health research has been conducted with or on children.
Methods: A systematic review of the child dental literature from 2000–2005 was conducted. A purposive sample of papers was used to develop a series of categories describing the level of involvement of children in research. Four main categories were developed: children as the objects of research, use of proxies on behalf of the child, children as the subjects of the research with some involvement and children as active participants with their perspectives explored. Electronic databases (Medline and Embase) were searched. Studies with no primary data or conference proceedings were excluded. Each of the resulting papers was examined and categorised by two reviewers independently. The frequency distribution in each category was calculated.
Results: The search revealed 5005 individual papers published in dental journals which reduced to 3266 on application of the exclusion criteria. Of these 87.1% were categorised as being research where children were used as objects, 5.7% were found to involve proxies (parents or clinicians) instead of the child, 7.0% involved children to some extent in the research process and 0.3% involved children as active participants.
Conclusion: Most oral health research is conducted on children without obtaining their perspectives or involving them in the research process. To recognise the changing position of children in society, future child oral health research should strive to be conducted with children, involving them as fully as possible.

OS094

Assessing quality of reporting of clinical trials in paediatric dentistry

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Objectives: The objectives were to assess the quality of reporting of published clinical trials in Paediatric Dentistry between 1985–2006 in order to:1. Ascertain whether quality of reporting is adequate to allow readers to assess validity of trials.2. Assess whether the quality of reporting has improved as the introduction of the CONSORT guidelines.
Methods: In order to identify suitable trials for inclusion in this study, a hand search of paediatric journals was performed for the years 1981–2006. Inclusion criteria, the trial was in English, was performed on children, and was a randomised controlled trial. Next, the CONSORT guidelines was made into an operational checklist, which was used to assess the quality of reporting. Each included trial was assessed by two independent researchers to reduce errors. The results were collated and analysed. Checklist items that were not applicable in trials were excluded from the analysis. The overall proportion of adequately reported items and insufficiently reported items was analysed. Trials published between 1985–1997 were compared to trials published between 1998–2006 to examine whether there has been any improvement in quality of reporting since the publication of the CONSORT guidelines.
Results: Report quality show considerable heterogeneity but overall the quality of the majority of the clinical trials published in paediatric dentistry journals is poor, even though report quality has improved significantly since the publication of the CONSORT. Only a few trials were reported adequately.
Conclusion: The quality of reporting of clinical trials has improved since the publication of the CONSORT but in most cases, the quality of reporting is not adequate to allow readers to assess the validity of the trial/intervention. All authors and journals should adopt the CONSORT guidelines to improve the quality of reporting of trials.

OS095

Children's perception of their dentists

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Objective: To identify children's perception of their dentist.
Method: A questionnaire was filled out by 383 children age range 9–12 years in public schools in of Riyadh, Saudi Arabia to find out how they perceived their dentist.

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Results: Seventy-three percent of the children had been to the dentist before while 26.4% had never been to the dentist. Sixty-two percent of those who had visited the dentist reported liking their visit, 10.4% didn't like their visit, 11.2% were afraid. Children's feeling about their dental experience was found to be significantly influenced by gender as female children liked their visit more than boys ($P < 0.05$). Ninety percent of the children preferred their dentist to wear the white coat, while 38.6% preferred him/her to wear mask and protective eye glasses as protective measure during treatment. Eighty-seven percent of the children preferred their male dentist to wear the formal clothes in the clinic. For clinic design, 58.2% selected the decorated dental clinic over plain clinic and that was true among 9–10 years old children ($P < 0.05$). Fear of local anesthesia and tooth extraction were the most common reasons cited for not liking to have dental treatment.
Conclusion: Sixty-four of children in this study liked their visit to the dentist. Two third of the children prefer the dentist to wear white coat and to treat them in a decorated clinic.

OS096

Subsequent publication of abstracts from IAPD meetings 1999 and 2001

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It is often assumed that information contained in an abstract presented at an international congress will subsequently be published in a scientific journal in full length form.
Objectives: To investigate if abstracts presented to the IAPD meetings result in a subsequent scientific publication and if orally presented abstracts are significantly more often published than poster presentations.
Materials and methods: A total of 771 abstracts were identified from two IAPD congresses in London 1999 and Paris 2001. To determine whether an abstract had been followed by publication of a complete paper, searches of PubMed that included all publications by the first, second and last authors were performed in December 2006. A publication was defined as a full-length manuscript. For each abstract data were extracted regarding authors, country were the research had been performed, area of paediatric dentistry, study design.
Results: Of the abstracts, 231 (30%) were presented orally, 327 (42%) as poster discussion presentations and 212 (28%) as poster presentations. Abstracts on prevention were most prevalent ($n = 138$) followed by dental traumatic injuries ($n = 87$). The abstracts originated from 59 different countries. Of all abstracts 204 (27%) were followed by subsequent publication. Abstracts presented orally were significantly more often followed by subsequent publication of a scientific article, 40% compared to 21% for poster discussion and 19% for poster presentations ($P < 0.001$). The mean time from presentation of the abstract and publication was 19 ± 19 months (range 19–80 months). Papers in the areas of pain and dental traumatic injuries were significantly more often followed by a publication.
Conclusion: Forty percent of orally presented abstracts at IAPD congresses were followed by subsequent publication in a PubMed indexed journal. Most papers were published in paediatric dentistry speciality journals.

OS097

Study of children caries status in shanghai in 25 years

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Objective: Caries status of deciduous teeth of 1–6 year-old children in Shanghai from 1981 to 2005 were compared and analyzed.
Methods: Large-scale survey of caries status of 1–6 year-old children in Shanghai were conducted in 1981, 1990 and 2005, with the study sample of 7047, 10864 and 7279 children, respectively. The changed data were compared, analyzed and investigated.
Results: In 1981, the caries prevalence and mean dft score were 51.80% and 2.71 in 1–6 year-old children; caries prevalence and mean dft score were highest in 6-year-old children (81.9% and 5.16). In 1990, the caries prevalence and mean dft score increased in all age groups,while caries prevalence of 3-year-old children decreased slightly. The caries prevalence and mean dft score of 6-year-old children rose by 6.80% and 0.71 respectively. Comparing to data in 1990, The caries prevalence and mean dft score descended greatly as 51.35% and 2.59, especially for caries prevalence of 4-year-old children and mean dft score of 6-year-old children. Significant difference was found among the results of three survey ($P < 0.01$).
Conclusion: Caries status of deciduous teeth of 1–6 year-old children in Shanghai was worse from 1980 to 1990, and has getting better from 1990 to 2005. Such change in recent years contributed to the success of caries prevention campaign in Shanghai.

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