more difficult to obtain the health care their children needed; this was more likely to occur in private vs public insurance subgroups (17.8% vs 12.8%, $p < 0.0001$) and middle income (about 20%) vs lowest and highest income subgroups (about 13% $p < 0.0001$). Overall, 13.1% of parents reported not being able to comply with AT LEAST one of their child's clinician's recommendations in the past 12 months due to trouble paying for it.

Conclusions: About one in six parents reported more difficulty obtaining health care for their children over the past three years. The lowest and highest income subgroups of parents were less likely to report increasing difficulty. Children's underinsurance in the United States has become a major public health issue

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IMPACT OF INTEGRATION OF WHO ELECTRONIC GROWTH CHARTS INTO EMR SYSTEM OF A PEDIATRIC PRIMARY CARE DEPARTMENT

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Background: Studies have shown that pediatricians readily adopted electronic growth charts when the charts were integrated into an EMR system.

Objective: To evaluate the impact of integration of WHO electronic growth charts into EMR system of a Pediatric Primary Care Department on the frequency of recording and interpretation of anthropometric measurements.

Methods: We performed a retrospective review of electronic medical records of pediatricians working in two centers of a Pediatric Primary Care Department over a 6 month period. In the first center clinicians had access to an EMR system, in the second center physicians had access to the same EMR system + WHO electronic growth charts (ANTHRO software downloaded on their computers). We evaluated the frequency with which clinicians recorded and interpreted growth measurements in EMR during health maintenance visits. We compared the results from the two centers.

Results: Rates of recording of growth parameters were significantly lower in the center where

pediatricians did not have access to electronic growth charts. Introduction of electronic growth charts improved recording, plotting and correctly interpreting the growth measurements by pediatricians in our organization.

Conclusions: Integrating WHO electronic growth charts (using ANTHRO software) into the EMR system of our Pediatric

Department represent potential area for quality improvement in pediatric prevention.

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A NESTED CASE-CONTROL STUDY FOR RISK FACTORS OF INFANTILE COLIC

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Background and aims: To analyse infantile (birth characteristics, feeding type) and environmental (maternal smoking, nutrition and psychological status, mother-child bonding, family structure, support to mother, familial atopy) risk factors for infantile colic and to follow up infants with respect to physical growth, sleeping status up to 8 months of age in a nested case-control study.

Methods: 660 mothers who delivered at Dr. Zekai Tahir Burak Maternity Hospital, were enrolled within postpartum 3-72 hours. Infants with insoluble-persistent crying and subsequent four infants with no crying episodes were invited to Hacettepe University Ihsan Doğramacı Children's Hospital at postpartum 30-45 days by phone. At postpartum 40-55 days, infants were examined; 47 infants were diagnosed as colic cases and 142 as noncolic. When the infants were 7-8 month old, another interview was done.

Results: Colic group had higher percentages of less educated (≤ 8 years) and smoking mothers, extended family, families with domestic violence than noncolic group. Colic group had significantly higher rates of "impaired bonding" in Postpartum Bonding Questionnaire, higher scores of Edinburgh Postpartum Depression Scale, higher scores for hostility subscales of Brief Symptom Inventory and

more irregular sleep pattern than noncolic group. At 7-8 months, colic group was shorter than noncolic group.

Conclusion: Colic was associated with some perinatal factors (maternal education, smoking habits, cheese consumption, hostility scores and domestic violence) and having infantile colic had negatively affected sleeping pattern and height of infant.

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WHAT PARENTS (DON'T) KNOW ABOUT ORAL HYGIENE...

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Background and aims: In 2005, the Portuguese National Program for the Promotion of Oral Health was published, with the aim to reduce oral cavity's diseases since the birthday until adulthood. With this study, we made an assessment of the knowledge that parents have about their children's oral hygiene.

Methods: Cross-sectional study with a random application of a questionnaire to the parents of 369 children, who attend a kindergarten in Viana do Castelo.

Results: The median age was 3 years and 9 months. Only 37.1% of the respondents reported that the teeth brushing should start after the eruption of the first tooth. Sixty percent said that the children should go to the dentist only when they have the first caries or when definitive teeth arise. Although only 16.9% of children fall asleep with a milk bottle, 53.3% of them were in the group whose parents said not to eat cariogenic food. Almost all parents (91.6%) didn't know that the caries is an infectious disease. There was a statistically significant relationship between parents' low education and the decayed teeth in the children ($p < 0.01$).

Conclusions: We noticed a great disinformation, which can be reflected in the oral health's quality of our population. The most frequent errors were related to the onset of teeth brushing, the first consultation with a Dentist, the consumption of cariogenic foods and the infectious nature of

dental caries. We believe that this is an issue that all physicians must continually emphasize in their professional activity.

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HEART RATE ASSESSMENT, RIGHT ON TIME (HEART). DIFFERENCES BETWEEN HEALTH CARE PROFESSIONALS DURING SIMULATED NEONATAL RESUSCITATION

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Background: In simulated neonatal resuscitation 28% of heart rate (HR) assessments are sufficiently inaccurate to change management.

Aim: Determine any differences in HR assessment by stethoscope (accuracy and required time) between health care professionals, and relating these differences to participants preferred method for counting HR.

Method: A randomized, single blind, simulation study using a VitalSim© manikin. Participants declared their profession and preferred method to determine HR. A digital timer was visible during assessment. HR was randomly set at 40, 50, 70 and 80 BPM. First scenario assessed absolute HR with assessment of HR range (< 60 , $60-100$, >100 BPM) during bag and mask ventilation in the second scenario and after three cycles of compressions and ventilation in third scenario.

Results: There were 147 participants. 37% of assessments were inaccurate of which 92% were overestimates. Accuracy did not differ significantly between professionals. In scenario 1, midwives were slower in HR assessment than specialist registrars ($P < 0.05$), but not in scenarios 2 and 3. Assessment of HR range was faster than absolute HR ($P < 0.05$). Newborn Life Support (NLS) recommended method to assess heart rate, used in 8.3% of cases, shortened time to determine HR in first scenario as compared to other methods (19 (SD13-23) vs. 23(SD18-32) seconds, $P < 0.05$). In all scenarios NLS recommended method showed a trend towards increased accuracy (63,3% vs 58,3%).