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ORIGINAL ARTICLE

Pediatric anamnesis: revising a tradicional medical topic

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Keywords:
Office Visits, Referral and Consultation, Pediatrics, Anamnesis.

Abstract

Objectives: To review the main topics that constitute the medical history in pediatric consultations. **Methods:** Non-systematic review of the scientific literature, covering 280 databases of the area of health sciences linked to the portal of CAPES Journal. **Results:** The main points found in the literature regarding the periodicity of the consultations and the most important elements of the clinical history are presented. **Conclusions:** In spite of the change in the epidemiology of the conditions that affect the health of the child in Brazil, the adequate accomplishment of the pediatric anamnesis remains a cardinal element in the child care.

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INTRODUCTION

The term anamnesis derives from the Greek anámnesis, and ana means = to bring back, to remember; and mnesis = memory; that is, retrieving from memory the signs and symptoms related to the disease.[1] In pediatrics, it is the moment during the medical consultation when parents and/or caregivers report the child's complaints.

The first difference between pediatric and adult consultation is that there is no subjective reference of the symptom by the pediatric patient, and all clinical reasoning is based on the testimony of parents and/or caregivers.[2] During the pediatric consultation, a relationship of trust must be established between three subjects: the doctor, the caregiver (or parents) and the child. The good quality of the anamnesis depends both on conditions inherent to the informant (memory, cooperation) and on medical skills, such as welcoming, respect, valuing the caregiver's speech, patience when listening, accessible and understandable language and ability to detail the complaint[2-4]. These predicates aim to strengthen the physician-family relationship, thus improving the reliability of information and treatment compliance. From a historical point of view, the doctor-patient or doctor-family relationship in the context of pediatrics emerged together with the Hippocratic medicine, whose goal was pure human benefit, considering the person, and not simply the disease.[5]

Current medical practice does not require only technical training based on nosological knowledge, interpretation of complex exams, and prescription of specialized medications. Equally essential is humanitarian training, based on empathy, communication and understanding the perspective of the disease within the family nucleus and its biopsychosocial context.[6] Empathy, understood as the ability to feel and put yourself in the other's place, is a fundamental element of the humanitarian approach, and has become a topic of discussion and training in several medical schools across the country.[6,7]

Pediatric semiology is also unique, because it involves an individual at different stages of growth and development. Growth is determined by several biological changes that culminate in an increase in body mass, and its assessment is determined by quantitative anthropometric measurements, such as weight, height, head circumference, chest circumference and abdominal circumference. The general somatic growth, although progressive, is not uniform, with periods of greater acceleration: the first years of life and puberty. Development refers to the acquisition of qualitative neuropsychomotor and cognitive skills, affective-emotional skills, and those related to sexual-reproductive maturation. According to the particularities of these biological processes, there are different age groups in the field of pediatrics[8]:

- Prenatal period: embryonic (conception until 8th week) and fetal (second and third gestational trimesters)
- Postnatal period: neonatal (0-28 days), infant (29 days up to 2 years old, exclusive), preschool (2 years up to 7 years old, exclusive), school (7 years up to 10 years old, exclusive)
- Adolescence: 10 to 20 years of age, exclusive.

Childcare is the area of pediatrics aimed at ensuring the perfect physical and mental development of the child, from gestation to 5 years of age, and by extension until puberty. This definition assumes that childcare in all its biopsychosocial aspects can prevent diseases, aid in genetic expression, and result in a healthier adult with a better quality of life[9].

The World Health Organization (WHO) estimates that between 2000 and 2012, 74% of deaths among adults aged 30 to 70 years were due to chronic non-communicable diseases, including those of cardiovascular origin (31%); cancer (17 %); nutritional, maternal and perinatal problems (13%); conditions which origin is found in childhood[10]. According to the theory of early metabolic programming, the first thousand days of an individual - counting from the date of their intrauterine conception - form a window of great cellular plasticity, in which cytogenesis, organogenesis, endocrine-metabolic responses and gene expression (epigenetics) are modifiable by external factors (environmental and lifestyle) and influence the development of chronic diseases in the future. According to this logic, maternal obesity, excessive weight gain and diet quality during pregnancy, diabetes mellitus, postnatal overfeeding, brief exclusive breastfeeding, and excessive protein intake in the first months of life are strong determinants of visceral adiposity, insulin resistance, metabolic syndrome, hypertension, coronary artery disease, stroke and asthma[11]. 21st century childcare is thus faced with a new social scenario, in which new family structures coexist, different forms of communication and social interactions, acceleration of consumerism, immediacy in relationships, interaction with new technologies, dietary and lifestyle modifications, which can compromise the child's health in the present and in the future[10].

Based on the relevance of preventive health care, humanitarian medical training and the fundamental role of childcare in this context, our goal with this study was to carry out a non-systematic review of the scientific literature on aspects inherent to pediatric anamnesis and its specificities, considering updates on this well-known topic and an updated model of pediatric anamnesis from the Martagão Gesteira Institute of Child Care and Pediatrics (IPPMG) - Federal University of Rio de Janeiro (UFRJ).

METHODOLOGY

We ran a non-systematic review of the scientific literature, covering 280 databases in the field of health sciences linked to the Capes Journal portal. The main search terms used were "pediatric interview", "pediatric consultation", "pediatric anamnesis", "pediatric semiology", "childcare", "empathy" in the "title" field, without restriction to the time period. Since this is a basic theme for clinical training, books related to pediatric semiology were also included in the research. Institutional databases belonging to the Ministry of Health, the Brazilian

Society of Pediatrics, and the Society of Pediatrics of Rio de Janeiro were used to select sub-themes belonging to the wider field of childcare, such as: neonatal screening tests, postpartum follow-up, neonatal resuscitation, nutritional guidelines, oral hygiene guidelines, accident prevention, neuropsychomotor development and adolescence.

RESULTS

Based on the analytical reading of scientific papers, books and institutional scientific documents and traditional knowledge acquired in clinical practice, a pediatric history and monitoring form for neuropsychomotor development was proposed, the details of which are found in Figures 1 and 2, respectively.

DISCUSSION

Frequency of Pediatric Consultation

According to the Brazilian Society of Pediatrics, the frequency and regularity of childcare consultations are10: a) Infants: 1st week of life, 1, 2, 3, 4, 5, 6, 9 and 12 months; b) Preschoolers: 15, 18, 24, 30, 36, 42 and 48 months; c) Schoolchildren and adolescents: annual. The Ministry of Health proposes a higher frequency between appointments: 1st week, 1, 2, 4, 6, 9, 12, 18 and 24 months; after 2 years, annual consultations[14].

Neonatal Period

The anamnesis of the newborn begins with the prenatal history, evaluating the number of consultations, whether the pregnancy was planned and/or desired. Planned pregnancies make women completely interrupt alcohol[15], drugs and smoking[16] before conception, as well as start a healthy diet[11] plus iron and periconceptional folic acid supplementation to prevent neural tube defects[17]. Vaccines for pregnant women are also recommended, namely: vaccine against hepatitis B (3 doses), dual adult (3 doses), annual seasonal influenza (at any time of pregnancy) and dTpa (1 dose every pregnancy from the 20th week)[18]. Evaluate the results of serology for syphilis, toxoplasmosis, rubella, cytomegalovirus, Herpes, HIV, and Zika, as well as complications of pregnancy (gestational diabetes, hypertensive syndromes, urinary infections, fluid loss, bleeding and restricted intrauterine growth)[19].

Conditions associated with perinatal asphyxia and ischemia, such as hemorrhages, umbilical cord compressions, uterine rupture, shoulder dystocia, as well as need for neonatal resuscitation and low Apgar scores should be evaluated in the history, due to the high frequency of systemic consequences: renal (50%), hypoxic-ischemic encephalopathy (28%), cardiovascular system (25%), and lungs (23%)[20].

Risk factors for neonatal jaundice due to indirect hyperbilirubinemia such as O or Rh negative maternal blood type, previous sibling with jaundice, maternal diabetes mellitus, low birth weight or prematurity, low intake of breast milk in the first week of life associated with accentuated weight loss (> 10%) should be checked[21].

Newborn screening tests are essential diagnostic tools for early detection of pathologies and are regulated by law in the country. The tests are currently available in table 1[22-24]:

Nutritional History and Oral Health

Breastfeeding should ideally be maintained exclusively for up to 6 months and supplemented for up to 2 years or more. Faced with the impossibility of breastfeeding, the infant may receive infant formula (0 to 6 months) and follow-up infant formula (from 6 months on), all those available in Brazil are safe, and they follow the resolutions of the National Agency of Health Surveillance. Cow's milk (in natura, whole, powdered, or fluid) is not considered suitable for children under one year of age due to its biochemical characteristics: low levels of essential fatty acids, high protein content, high levels of sodium, low levels of vitamins C, D and E, and low bioavailability of iron and zinc[25]. However, the Ministry of Health contemplates the use of modified cow's milk for children under 1 year who cannot receive breast milk or modified formulas. In this case, cow's milk must be diluted up to 4 months, and after this age, offered in full. Children who are on this milk feeding regimen can start complementary feeding from 4 months, to avoid nutritional deficiencies[26].

Complementary feeding should be started after 6 months for infants who are breastfeeding or using infant formula. It is not recommended to add salt to the main infant food or sugar/milk to the fruit porridge for up to 12 months. Industrialized (processed and ultra-processed) preserved foods, ice cream, soft drinks, juice powders, sweet and savory cookies, chocolate drinks, cake mix, pizzas, meat extracts (e.g., nuggets, sausages, breaded, hamburgers), mayonnaise, candy and treats should be abolished in the first years of life. Honey should not be added to the diet of infants up to 12 months old, due to the possibility of Clostridium botulinum spores capable of producing toxin in the intestinal lumen, causing botulism. From the 6th month onwards, fruit should be offered in the form of porridge or shavings and a main porridge of multiple mixtures (cereal + tuber, pulses, meat/egg, and vegetables + vegetables). Between the 7th and 8th month, the second main mush of multiple mixtures is added. Between the 9th and 11thmonths, food consistency is transitioned to come increasingly close to the family meal. Eight to fifteen exposures to the same food are necessary to assess its acceptance and palatability by the child[25].

Vitamin D is recommended at a dose of 400 IU/day (0-12 months) and 600 IU/day (1-3 years), even if the infants are breastfeeding or using infant formula. Iron, a fundamental element for erythrocyte metabolism and intelligence, should be supplemented at a dose of 1mg of elemental iron/kg of weight/day from 3 months to 24 months for full-term infants who are on exclusive breastfeeding or not, or in use of infant

Figure 1. Pediatric Anamnesis Template Form.

PEDIATRIC ANAMNESIS					
Identification					**Date:**
Nome					Chart:
Age/DoB		Sex: ☐female ☐male			Skin color:
Mother/Father					
Address:					
Telephone			Place of Birth:		Nationality:
Main Complaint:					
History of the Current Disease:					
Gestational History					
Pre-natal? ☐ yes ☐ no	Nº gestations:	Nº of deliveries:	Miscarriages?	Maternal Age:	Paternal Age:
Gestação planejada? ☐ yes ☐ no Desired pregnancy? ☐ yes ☐ no	Maternal diseases? ☐ Fever ☐ Exanthema ☐ HDP/HBP ☐ DM ☐ Bleeding ☐ Loss of liquid Others: When? ☐ 1st trimester ☐ 2nd trimester ☐ 3rd trimester Fetal movements? ☐ no ☐ yes				
Drugs? ☐ Alcohol ☐ Smoking ☐ Illegal drugs ☐ Which? When? ☐ 1st trimester ☐ 2nd trimester ☐ 3rd trimester			Prescription drugs? ☐ no ☐ yes. Which? When? ☐ 1st trimester ☐ 2nd trimester ☐ 3rd trimester		
Blood tests STORCHHZ	Syphilis VDRL ( ) Trim.: Toxoplasmosis IgM ( ) IgG ( ) Trim: Rubella IgM ( ) IgG ( ) Trim:		CMV IgM ( ) IgG ( ) Trim: Herpes IgM ( ) IgG ( ) Trim.: HIV ( ) Trim.:		HTLV-I and II ( ) Trim.: Hepatite B ( ) Trim.: Zika ( ) Trim.:
History of deliveries					
Means of delivery ☐ Vaginal ☐ C-Section ☐ Forceps		Gestational age: ☐ Premature ☐ Term ☐ Post-term		Complications? ☐ Long delivery ☐ PA ☐Maternal fever	
Neonatal history					
☐ AGA ☐ SGA ☐ BGA	Weight:	Length.:		HC:	Apgar1'5:
Resuscitation? ☐ No ☐ Yes. PPV( ) ECM ( )		Asphyxia? ☐ No ☐ Yes. Seizure 1st hours of life? ( )			
Blood groupo: Mother ( ) Baby ( )		Speech therapy? ☐ No ☐ Yes		Exsanguinous transfusion? ☐ No ☐ Yes	
Infection? ☐ No ☐ Yes. Antibiotic:		Ventilatory Disorder? ☐ No ☐ Yes. Which? CPAP? ☐ No ☐ Yes OTI? ☐ No ☐Yes			
Neonatal problems?					

Neonatal Screening Tests	Blood Biochemical Test: □ Normal □ Altered. Alteration: Oximetry: □ Normal □ Altered. ECO: Otoacoustic emissions (EOA): □ Normal □ Altered. BERA: Red Reflex Test: □ Normal □ Altered. Fundoscopy: Barlow and Ortolani Test: □ Normal □ Altered. Hip USG:				
História familiar					
Heredogram[12]			□ Normal man ○ Normal Woman ■ Affected man ● Affected Woman ◊ Sex not reported ◘ Intersex ■ ● ♦ Miscarriages or stillborn □-○ Couple □=○ Consanguineous Couple		
Consanguinity?	□ No □ Yes. Kinship:				
Other diseases					
Past Diseases History					
□ Not Relevant	Other(s):				
Nutrition history					
Breastfeeding	Exclusive? □ No □ Yes. Duration:		Complemented? □ No □ Yes. Total duration:		
Other formulas	□ Pediatric formula □ Cow milk		Volume/Frequency:		
Meals	Coffee				
	Collation				
	Lunch				
	Snack				
	Supper				
	Dinner				
Micronutrients	Iron: □ No □ Yes. Dose?		Vitamin D: □ No □ Yes. Dose?	Vitamin A: □ No □ Yes. Dose?	
Oral Hygiene	Frequency:		Problems?		
Sun exposure	Duration:		Photoprotection?		
Physiological history and daily program					
Enuresis? □ No □ Yes	Constipation? □ No □ Yes	Remedial classes? □ No □ Yes	Diarrhea? □ No □ Yes	Vomit? □ No □ Yes	Headache? □No □ Yes
School history	Year:	Remedial classes? □ Não □ Sim	Learning difficulties? □ No □ Yes Which?		
Sports	Type/Frequency:			Total screen time (including TV, cell phone, tablet, videogame): h	
Sleep details	Sleep/Wake up times:		Problems?		
	Sleep duration:				
Neuropsychomotor Development History (see attached form)					
Gross motor	□ Adequate □ Delayed, compatible with the age of:				
Fine/Adaptive motor	□ Adequate □ Delayed, compatible with the age of:				
Language	□ Adequate □ Delayed, compatible with the age of:				

Personal-social	□ Adequate □ Delayed, compatible with the age of:				
Vaccination History					
Up to date? □ Yes □ No. Late vaccines:					
Accident Prevention	□ Domestic □ Transportation □Leisure		**Risk situation? Which?**		
Violence occurrence	□ Physical □ Psychological □ Sexual □ Negligence			**Other?**	
Socioeconomical history					
Dwellers	□ Mother □ Father □ Siblings ( ) Others:				
No rooms	Filtered water? □ No □ Yes		Closed sewer? □ No □ Yes	Pets? □ No □ Yes. How many?	
Schooling	Mother: Father:	Occupation	Mother: Father:		Family Income:

Acronyms: DoB: Date of Birth; HDP: hypertensive disease of pregnancy; DM: diabetes mellitus; HC: head circumference; PA: placental abruption; PPV: positive pressure ventilation; ECM: external cardiac massage.

Figure 2. Neuropsychomotor development form 0 - 6 years (Modified from Gesell and Amatruda)[13].

Age	Gross Motor	Fine/Adaptive Motor	Personal-Social	Language
1st week	Supine: semi-bent and slightly rigid posture Prone: maintains semiflexion; clears airways; head below body plane in the ventral suspension maneuver Primitive reflexes*: Moro, Gait, Palmo-plantar grip		Stares at human face or light "Doll's eye" movements during body movement	
1st week	Supine: Head lateral position predominates (ATNR); when pulling to sit, head hangs back Seated: head leans forward Prone: crawling movements; momentarily lifts the head;	Supine: predominantly clenched hands Rattle: hand closes on contact and drops. Hanging Ring: Follows up to the midline. bell: pays attention	**Looks at the examiner's face**	little facial mimics Noise with throat (guttural sounds)
2nd month	Sitting: head upright, swaying Prone: raises the head longer; head in plane on body during ventral suspension maneuver	Rattle: holds briefly Hanging Ring: Follows the midline	Follows a person on the move	alerts facial mime social smile Vowel sounds (a, e, u)
4th month	Supine: Middle head position, hands meet at midline Seated: head firm, leaning forward; sits with full trunk support Prone: head up, legs extended, about to roll	Rattle, hanging ring looks, shakes arms, grabs/gropes/scratches, looks at object in hand, takes the object to mouth	Vocalizes/Smiles when pulled to sit rejoices upon seeing food Pull clothes/cloth over face	Guffaws gets excited
6th month	Supine: Raises legs extended; rolls to prone When pulled to sit, lifts head Sitting: torso leaning forward with both hands on the surface	Cube: held with the palm of the hand Rattle, ring, cube, bell: approaches to pick up; tries to get two At 7 months, transfers objects from one hand to another	Starts discriminating strangers holds the foot Mirror: smiles and vocalizes when seeing own image	**Vocals spontaneously with toys** **polysyllabic vowel sounds**
9th month	Sitting: erect trunk, leans back and returns to original position Standing: holds the full weight of the body Crawls at 10 months.	Cube: 3-finger radial grip; scissors hold Hanging ring manipulates the chain	holds the bottle eats cookie alone	**Vocalizes consonant sounds ("da-da")** **imitates sounds** **Understands: "no-no" and when called by name**

12th month	**Walks with both hands supported**	Small ball: perfect two-finger holding Bell: moves the clapper	Shows the toy without letting go At 13 months, helps with dressing and offers the ball to the mirror image.	At 13 months, speaks two words in addition to ("ma-ma" and "pa-pa") Understands: "give me the toy"
18th month	At 15 months, walks without support. At 18 months, walks well and does not fall. running still rigid Stairs: go up with one hand support	**Cubes: 3-cube tower** **Booklet: flips 3 sheets** **Drawing: scribbles** **Templates: inserts round piece**	delivers the empty plate Carries the toy, pets the doll	**Vocabulary: 10 words** **Understands: two orders with the ball.**
24th month	**running: no falls** **stairs: goes up and down alone** **ball: kicks**	**Cubes: 6-cube tower** **Booklet: turns one sheet at a time** **Drawing: imitates vertical and circular lines** **Template: inserts square piece**	Starts with daytime and nighttime sphincter control Dresses in simple garments	Vocabulary: sentences with 3 words; uses pronouns "I, me and you" Retells immediate experiences Understands: four orders with the ball
30th month	walks on tiptoe Jumps two feet off the ground tries to stand on one foot	**Cubes: 8-cube tower** **Drawing: imitates horizontal and vertical lines; holds pencil between fingers** **Templates: fits 3 pieces**	helps to store things Carries breakable objects	Vocabulary: says own full name says what the objects are for Counts to 3
3 Years	Stairs: switches feet when going up and down Jumps from the bottom step rides the tricycle	Puts 10 pellets (beans) in the bottle in 30 seconds Drawing: names; incomplete human figure. Template: names 4 geometric shapes	eats alone and spills a little Pours liquid from the jar Puts shoes on unbuttons buttons	Vocabulary: uses plurals; sings songs and verses Understands relays
4 Years	takes a big jump Throws the ball over the shoulder	Drawing: human figure with two parts Template: names 8 geometric shapes	Washes and dries hands and face Brushes the teeth Gets dressed and undressed with help Distinguishes front and back of clothes	Vocabulary: tells fantasy stories; gives orders; criticizes
5 Years	Jumps with feet alternately	Drawing: human figure with head, trunk and limbs; draws triangles	Gets dressed and undressed without help	Indicates currency values Counts to 10. Demonstrates numbers with own fingers Asks meaning of words
6 Years	throws the ball far away	Drawing: human figure with neck, hands, feet and clothes; draws diamonds	Ties the shoes	Account up to 30 Addition and subtraction: up to 5 knows right from left

Acronyms: *Rooting reflex; Babkin reflex; propulsion reflex; Gallant reflex; supra-pubic extensor reflex; crossed extensor reflex; airway relief reflex; TANR: tonic asymmetrical neck reflex.

formula starting with less than 500 ml/day. Infants who were born weighing less than 2,500g should receive 2mg of elemental iron/kg of weight/day for 1 month to 12 months, and after this period 1mg/kg/day for up to 2 years. Those born with less than 1,500g should receive 3 mg of elemental iron/kg of weight/day for 1 month to 12 months, and after this period 1mg/kg/day for up to 2 years. Those born with less than 1,000g should receive 3 mg of elemental iron/kg of weight/day for 1 month to 12 months, and after this period 1mg/kg/day for up to 2 years[25]. The Ministry of Health, through the Vitamin A Supplementation Program, recommends that children aged 6 to 11 months receive 100,000 IU vitamin A orally, one dose, and that children aged 12 to 59 months receive 200,000 IU every 6 months in municipalities throughout the country, as it is considered that in these regions the vitamin cannot be ingested sufficiently through food[27].

Breastfeeding is the most appropriate strategy for the development of stomatognathic functions, but if there is contraindication or maternal and infant impossibility, the use of bottles is allowed. Mothers should be advised not to increase the tip hole, because it is precisely the suction effort that helps the development of the orofacial muscles. Before the deciduous teeth erupt, the baby's gums and tongue can be cleaned with gauze or a cloth filled with water. After the eruption of the first teeth, a brush with small, very soft bristles can be used, with a minimum amount of age-appropriate toothpaste (0.01g = 1 grain of rice), and regularly (in the morning, in the evening and afterwards meals). Primary teeth and permanent teeth[28].

Table 1. Newborn Screening Tests.

Test	Technique-Interpretation	Alterations - Diseases
Biological Screening (Newborn Screening)	• Blood collection through heel puncture, ideally on the 3rd day of life (up to 5th day) • Phenylketonuria: level of phenylalanine • Congenital hypothyroidism: level of TSH • Hemoglobinopathy: • Cystic Fibrosis: immunoreactive trypsin level • Congenital adrenal hyperplasia: level of 17-OH-progesterone • Biotinidase deficiency: biotin dosage	• Phase* I: congenital hypothyroidism and phenylketonuria • Stage* II: Previous + sickle cell disease • Stage* III: Anterior + Cystic Fibrosis • Stage* IV: Anterior + congenital adrenal hyperplasia and biotinidase deficiency
Cardiac Screening (Little Heart Test)	• Between 24-28 hours of the neonate's life, perform pulse oximetry measurement on the right upper limb (preductal) and in some of the lower limbs (post ductal). The value should be noted when the oximeter pulse curve stabilizes. • Altered or positive test: when there is SaO2 < 95% or a difference ≥ 3% between the two measurements. Repeat the test after 1 hour, and in the presence of a second positive test, order an echocardiogram.	• Left ventricular hypoplasia • Pulmonary atresia with intact interventricular septum • Tetralogy of Fallot • Total anomalous pulmonary vein drainage • Transposition of the great arteries • Tricuspid atresia • Truncus arteriosus • Aortic coarctation • Dual right ventricular outflow tract • Ebstein's Anomaly • Aortic arch interruption • Single ventricle
Visual Screening (Red Reflex Test or Little Eye Test)	• Direct ophthalmoscope held close to the examiner's eye and 40-50 cm from the child's eye. • Normal response: red pupillary reflex. • Abnormal response: leukocoria (white reflex), black dots, asymmetries. If abnormal, refer to an ophthalmologist. • Periodicity: before hospital discharge, 1st week of life, 2 months, 6, 9, 12 months of life; biannually from 1 year.	• Congenital cataract • Retinoblastoma • Congenital glaucoma • Bleeding • Inflammations • Retinal detachment • Retinopathy of prematurity
Hearing Screening (Little ear test)	• Ideal period: 24-48 h of life • Test: EOAE (Evoked Otoacoustic Emissions) • If changed, repeat EOAE. If failure remains, request ABR (Brain Stem Evoked Potential)	• Neonatal hearing loss

School History, Sports, Leisure and Sleep Hygiene

Learning is a complex process in which different cortical functions participate in an interdependent and integrated way. Sensory skills (sight, hearing, taste, smell, touch, proprioception), language (reception, expression), social, affective-emotional and cognitive (attention, memory, abstract reasoning) skills synergistically contribute so that new knowledge is incorporated and can contribute to solving a given day-to-day problem. Therefore, it is up to the pediatrician to identify risk factors for low academic performance, such as: 1) organic diseases: iron deficiency anemia and vitamin deficiencies, hypothyroidism, sensory deficit (visual and auditory), sleep apnea and chronic diseases; 2) psychiatric illnesses: depression, anxiety, selective mutism, autism spectrum disorder, oppositional-defiant disorder and conduct disorder; 3) neurodevelopmental diseases: intellectual disability, attention deficit hyperactivity disorder, language disorder, and specific reading, writing, and math learning disorders; 4) problems related to the socioeconomic and cultural environment; 5) inadequacies in the school and pedagogical environment[29].

Physical exercise in childhood and adolescence has multiple benefits, such as promoting health and well-being, reducing body fat, increasing self-esteem, individual and group responsibility, and reducing stress and anxiety. Currently, 20 to 30 minutes of physical activity per day is recommended. From 2 to 5 years old, activities should be linked to relaxation and freedom, as at this stage the child is still developing coordination/balance, orientation in time and space, socialization and rhythm. From 6 to 12 years of age, the activities can be better organized, with predefined rules (e.g., swimming, soccer, martial arts, gymnastics); such as attention and motor skills (strength, endurance, speed, flexibility, coordination) improve. From adolescence onwards, the interest in team and competition sports increases, with more aerobic and strength workout being allowed[30].

It is recommended that all children and adolescents adopt sunscreen because of skin (skin cancer, photoaging, melanocytic nevi) and ocular (photokeratitis) risks of sun exposure. Protection can be obtained from behavioral measures and the use of sunscreens with SPF above 30. Behavioral measures are: "friendly sun" hours (before 10:00 and after

16:00), use of clothes, caps/hats and glasses and preference for shaded places. Physical (inorganic) sunscreens, based on titanium dioxide and zinc oxide, are preferably used between 6 and 24 months, with an immediate protective function against UVA and UVB rays. Chemical (organic) sunscreens can be used from 2 years and require 20 minutes after application for effective protection against UVB and UVA rays. Infants under 6 months of age should avoid direct sun exposure, and when necessary use parasols, caps, umbrellas and protective clothing[31].

In order to minimize sleep-related disorders, parents and caregivers should follow recommendations for good sleep hygiene, such as: avoiding late afternoon naps; put the child to sleep always in the parent's bed, when they are still awake; the environment must be calm, with adequate temperature and without noise or visual stimuli; always put the child to sleep at the same time; create a routine close to sleep time, such as light supper (ex: milk, biscuits, simple cake, white cheese), bathing, oral hygiene, putting on comfortable clothes and reading books; avoid stimulating drinks (chocolate, caffeinated, soft drinks and mate tea); avoid sports 3 hours before bedtime; when the child wakes up at night, go to her room, speak in a low voice and in a dim light, calming her down, but warning her that she will return to her room as soon as she falls asleep[32].

Digital technology should also be a topic of approach during pediatric consultation, especially related to harm to children's health and its judicious use. Early and prolonged use of online games, social media, movies, videos and various applications is associated with socialization problems, language delay, school difficulties, increased anxiety, exposure to violence, cyberbullying, sleep disorders, eating habits, hearing problems from headphone use, visual problems, postural problems, repetitive strain injuries, facilitation of sexual violence, drug purchase and use, and "jokes and challenges" that can lead to coma and death. Therefore, some considerations should be made with families and schools: avoid inappropriate films and videos, especially at mealtimes and 2 hours before bedtime in children under 2 years of age; limit the use of digital screens for a maximum of 1 hour/day for children between 2 and 5 years old; avoid televisions and computers in the bedroom of children under 10; establish time limits for the use of digital technology, proportional to the child's age and development; and preferably, with the mediation of the parents to explain the content and images; monitor websites, programs, applications, movies and videos that children and teenagers are accessing, explaining the risks, individual and non-transferable use of passwords, risks of uploading personal photos and movies. Always talk with the families, emphasizing that the parents' behavior is the model with the greatest impact on education, and that the routines and culture of the home are perpetuated in the future[33].

History of Violence and Accidents Against Children and Adolescents

External causes (accidents and all types of violence) constitute an important group of morbidity and mortality in childhood and adolescence. "Accident" is defined as any unintentional, preventable event causing physical and/or emotional injury at home, work, traffic or leisure environment, and "violence" is defined as any intentional event caused by individuals, groups or nations that causes physical, moral, emotional or spiritual harm to oneself or others. According to the Ministry of Health's Mortality Information System (SIM) in 2015, half of all deaths among children and adolescents occurred in children under 1 year; and almost 30% occurred among adolescents aged 14 to 19 years. Regarding the causes of death, except for those under-one-year-old group, in all other age groups, there is a predominance of external causes, with emphasis on transport accidents related to 60% of deaths in children under 9, and to 50% of deaths between 10 and 19 years. There are several prenatal and perinatal risk indicators for the occurrence of violence against children, such as: unplanned, unwanted pregnancy, paternal abandonment, attempted abortion, family conflicts, abuse of legal and illegal substances, history of mental illness, signs of maternal apathy or sadness, avoidance of holding and caressing the baby, indifference or refusal to breastfeed. Identifying these risk behaviors is an important strategy for preventing child maltreatment[34].

The prevention of accidents, especially those that occur at home and in traffic, is also part of the pediatrician's scope of action. Passive protection, a set of measures that aim to eliminate risks inside the home and outside areas, are the most effective and should be passed on with the family, especially those related to environments such as kitchens, bathrooms and stairs.

CONCLUSION

Over the years, the clinical conditions that affect children's health have changed, with a predominance of issues of a chronic nature. Furthermore, external causes of morbidity and mortality and conditions related to modern life have increasingly affected the quality of life of children. In this scenario of transformations, the only element that remains constant is the care that pediatricians should take when collecting the history of their patients, aiming to promote health and provide the best conditions for children's development.

REFERENCES

1. Santos JB. Ouvir o paciente: a anamnese no diagnóstico clínico. Brasília Med. 1999;36(3):90-5.
2. Pernetta C. Semiologia pediátrica. 4ª ed. Rio de Janeiro (RJ): Interamericana; 1980.
3. Rodrigues YT, Rodrigues PPB. Semiologia pediátrica. 3ª ed. Rio de Janeiro (RJ): Editora Guanabara Koogan; 2009.

4. Melo EMSC, Aquino LA, Costa CMS, Liquornik PA. A consulta pediátrica. In: Fonseca EMGO, ed. Medicina ambulatorial - SOPERJ. Rio de Janeiro (RJ): Editora Guanabara Koogan; 2012. p. 1-12.
5. Daikos KG. History of medicine: our Hippocratic heritage. Int J Antimicrob Agents. 2007 Jun;29(6):617-20.
6. Balduino PM, Palis FP, Paranaíba VF, Almeida HO, Trindade EMV. A perspectiva do paciente no roteiro de anamnese: o olhar do estudante. Rev Bras Educ Med. 2012;36(3):335-42.
7. Costa FD, Azevedo RCS. Empatia, relação médico-paciente e formação em medicina: um olhar qualitativo. Rev Bras Educ Med. 2010;34(2):261-9.
8. López M, Laurentys-Medeiros J. Semiologia médica - as bases do diagnóstico clínico. 4ª ed. Rio de Janeiro (RJ): Editora Revinter; 2001. v. 2.
9. Bonilha LRCM, Rivorêdo CRFS. Puericultura: duas concepções distintas. J Pediatr (Rio J). 2005;81(1):7-13.
10. Fernandes TF. Habilidades básicas do pediatra. In: Burns AAR, Júnio DC, Silva LRS, Borges WG. Tratado de pediatria. 4ª ed. Barueri (SP): Manole; 2017. p. 79-80.
11. Koletzko BB, Brands B, Chourdakis M, Grote V, Hellmuth C, Kirchberg F, et al. The power of programming and the early nutrition project: opportunities for health promotion by nutrition during the first thousand days of life. Ann Nutr Metab. 2014;64(3-4):187-96.
12. Beiguelman B. O registro gráfico da história genealógica. In: Beiguelman B, ed. A interpretação genética da variabilidade humana. Ribeirão Preto (SP): Editora Sociedade Brasileira de Genética (SBG); 2008. p. 71-5.
13. Knoblock H. Passamanick B. Gesell e Amatruda - psicologia do desenvolvimento do lactente e criança pequena - bases neuropsicológicas e comportamentais. 3ª ed. Rio de Janeiro (RJ): Atheneu; 2002.
14. Ministério da Saúde (BR). Cadernos de Atenção Básica. Saúde de criança: crescimento e desenvolvimento. Brasília (DF): Ministério da Saúde; 2012.
15. Segre CA, Rego JD, Cardoso FC. Síndrome alcóolica fetal: uma questão que deve ser discutida. Rev Ped SOPERJ. 2017 Jun;17(2):6-7.
16. Sociedade Brasileira de Pediatria (SBP). Departamento Científico de Pneumologia. Documento Científico. Tabagismo: o papel do pediatra. Rio de Janeiro (RJ): SBP; 2017.
17. Santos LMP, Pereira MZ. Efeito da fortificação com ácido fólico na redução dos defeitos de tubo neural. Cad Saúde Pública. 2007 Jan;23(1):17-24.
18. Ministério da Saúde (BR). Calendário vacinal 2017 [Internet]. Brasília (DF): Ministério da Saúde; 2017; [acesso em 2019 Mar 01]. Disponível em: http://portalarquivos2.saude.gov.br/images/jpg/2018/janeiro/10/calendario-vacinal-2018.jpg
19. Ministério da Saúde (BR). Cadernos de Atenção Básica. Atenção ao pré-natal de baixo risco [Internet]. Brasília (DF): Ministério da Saúde; 2012; [acesso em 2019 Mar 01]. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/cadernos_atencao_basica_32_prenatal.pdf
20. Bhatti A, Kumar P. Systemic effects of perinatal asphyxia. Indian J Pediatr. 2014 Mar;81(3):231-3.
21. Enk I, Andres L, Enk FL. Icterícia neonatal. In: Burns AAR, Júnio DC, Silva LRS, Borges WG, eds. Tratado de pediatria. 4ª ed. Barueri (SP): Manole; 2017. p. 1262-5.
22. Ministério da Saúde (BR). Triagem neonatal biológica - manual técnico. Brasília (DF): Ministério da Saúde; 2016.
23. Ministério da Saúde (BR). Nota técnica nº 7/2018-CGSCAM/DAPES/SAS/MS. Orientações para profissionais de saúde quanto à sistematização e padronização do teste de triagem neonatal para cardiopatia congênita crítica (teste do coraçãozinho). Brasília (DF): Ministério da Saúde; 2018.
24. Ministério da Saúde (BR). Diretrizes de atenção da triagem auditiva neonatal. Brasília (DF): Ministério da Saúde; 2012.
25. Sociedade Brasileira de Pediatria (SBP). Departamento de Nutrologia. Manual de alimentação - da infância à adolescência. 4ª ed. São Paulo (SP): SBP; 2018.
26. Ministério da Saúde (BR). Guia alimentar para crianças menores de 2 anos. Brasília (DF): Ministério da Saúde; 2018.
27. Ministério da Saúde (BR). Manual de condutas gerais do programa nacional de suplementação de vitamina A. Brasília (DF): Ministério da Saúde; 2013.
28. Sociedade Brasileira de Pediatria (SBP). Guia de saúde oral materno-infantil. Rio de Janeiro (RJ): SBP; 2018.
29. Sociedade Brasileira de Pediatria (SBP). Departamento Científico de Pediatria do Desenvolvimento e Comportamento. O papel do pediatra diante da criança com dificuldade escolar. Rio de Janeiro (RJ): SBP; 2018.
30. Akkari M, Resende VR, Santili C. A criança e o esporte. In: Burns AAR, Júnio DC, Silva LRS, Borges WG, eds. Tratado de pediatria. 4ª ed. Barueri (SP): Manole; 2017. p. 2033-5.
31. Sociedade Brasileira de Pediatria (SBP). Guia de fotoproteção na criança e no adolescente [Internet]. Rio de Janeiro (RJ): SBP; 2017; [acesso em 2019 Mar 01]. Disponível em: https://www2.isend.com.br/iSend/external/magazine?encrypt=856C7AD3F35DE85DA917FC6D79749975342476CDB528F629880FDD92D0E28577
32. Sociedade Brasileira de Pediatria (SBP). Departamento Científico da Medicina do Sono. Documento Científico. Higiene do sono [Internet]. Rio de Janeiro (RJ): SBP; 2017; [acesso em 2019 Mar 01]. Disponível em: http://www.sbp.com.br/imprensa/detalhe/nid/higiene-do-sono/
33. Sociedade Brasileira de Pediatria (SBP). Departamento de Adolescência. Manual de Orientação. Saúde de crianças e adolescentes na era digital [Internet]. Rio de Janeiro (RJ): SBP; 2016; [acesso em 2019 Mar 01]. Disponível em: http://www.sbp.com.br/fileadmin/user_upload/2016/11/19166d-MOrient-Saude-Crian-e-Adolesc.pdf
34. Sociedade de Pediatria de São Paulo (SPSP). Sociedade Brasileira de Pediatria (SBP). Manual de atendimento às crianças e adolescentes vítimas de violência. 2ª ed. Brasília (DF): Conselho Federal de Medicina (CFM); 2018.