Ethics, bioethics and deontology in naturology teaching in Brazil

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Abstract

The aim of this study was to discuss how the disciplines of ethics, deontology and bioethics are configured within the scope of Naturology teaching in Brazil from a Social Bioethics point of view. A qualitative-descriptive approach was used by means of documental and field investigations, based on two Brazilian universities. Six lecturers participated in this study via semi-structured interviews analyzing six teaching projects, three from each of the two courses. The data collected underwent content analysis, which resulted in four categories: 1) General aspects of the disciplines that include the subjects of ethics, bioethics and deontology; 2) Bioethics as a discipline in the course of Naturology: themes and references for analyses; 3) Theoretical approaches in ethics within Naturology; 4) The study of deontology in Naturology teaching. The need to increase teaching hours in the disciplines of ethics and bioethics was highlighted, as well as the need for constant reflection on professional practice within the social reality of Brazil.

Keywords: Bioethics. Ethics. Ethical theory. Teaching. Complementary therapies.

Resumo

Ética na decisão terapêutica em condições de prematuridade extrema

Objetivou-se discutir, pelo prisma da bioética social, como se configura a inserção das disciplinas de ética, deontologia e bioética no ensino da naturologia no Brasil. Sob abordagem qualitativo-descritiva e por meio de investigação documental e de campo, realizou-se o estudo em duas universidades brasileiras. Participaram seis docentes mediante entrevistas semiestruturadas que permitiram analisar os seis planos de ensino, três de cada curso. Os dados foram submetidos à análise de conteúdo e resultaram em quatro categorias: 1) características gerais das disciplinas que envolvem o estudo da ética, bioética e deontologia; 2) bioética como disciplina no curso de naturologia: temas e referenciais de análise; 3) abordagens teóricas da ética estudadas na naturologia; 4) estudo da deontologia no ensino da naturologia. Considera-se necessário ampliar a carga horária das disciplinas de ética e bioética e assinala-se a necessidade da constante reflexão sobre a prática profissional voltada para a realidade social brasileira.

Palavras-chave: Bioética. Ética. Teoria ética. Ensino. Terapias complementares.

Resumen

Ética, bioética y deontología en la enseñanza de la naturología en Brasil

Se objetivó discutir, bajo el prisma de la bioética social, cómo se configura la inserción de las asignaturas de ética, deontología y bioética en la enseñanza de la naturología en Brasil. Bajo un abordaje cualitativo y descriptivo y a través de investigación documental y de campo, se llevó a cabo el estudio en dos universidades brasileñas. Los participantes fueron seis docentes, por medio de entrevistas semi-estructuradas que pertieron sus planes de enseñanza, tres de cada curso. Los datos recogidos fueron sometidos al análisis de contenido y resultaron cuatro categorías: 1) características generales de las disciplinas que involucran el estudio de la ética, la bioética y la deontología; 2) bioética como disciplina en el curso de naturología: temas y marcos de análisis; 3) abordajes teóricos de la ética estudiados en la Naturología; 4) el estudio de la deontología en la enseñanza de la naturología. Se considera la necesidad de ampliar la carga horaria de las asignaturas de ética y bioética y se señala la necesidad de constante reflexión acerca de la práctica profesional centrada en la realidad social brasileña.

Palabras-clave: Bioética. Ética. Teoría ética. Enseñanza. Terapias complementarias.

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Research article

Health care in extreme prematurity of situation presents an ethical dilemma. The current literature discusses studies that discuss the therapeutic decision making in situations of preterm birth in the points of view cultural, religious, financial, technological and moral. Among health professionals (neonatologists, obstetricians, nurses, physiotherapists, speech therapists etc.) involved in the direct care of premature infants, set the limit for gestational age, selected based on evidence, to judge when the intensive care becomes mandatory, optional or does not provide a guarantee of success, is controversial and sensitive topic.

Currently, it is considered that the therapeutic decision between using comfort and palliative care, avoiding intensive care, it is entirely clear to parents and informed about the clinical conditions involving extreme prematurity and the options available therapy [1]. Several publications have clear results and consistent about the mothers' decision and pregnant women, from the counseling process in situations involving risk of death of babies, while share specific recommendations for medical intervention in cases of extreme prematurity [1-3].

It is noticed that the morbidity gradually have replaced the mortality in preterm infants in different limits of viability [4]. Although it was observed significant decline in mortality of live births in extreme prematurity, Neuroevolutive injury rate remains high [5-8]. Are sparse forms of evaluation of the quality of neonatal care related not only to health services, but the Neuropsychomotor functionality and quality of life of patients [9]. One should take into account issues related to different areas of knowledge, which seek to influence the decision making, transdisciplinary in neonatal intensive care units [10].

Given the variety and complexity of the factors involved in decisions about therapeutic interventions in extreme prematurity conditions, this study discusses ethical aspects of decision making considering the feasibility limit, extreme prematurity and neurodevelopmental.

Method

This study is a critical review of the literature, and we used the databases PubMed / Medline, SciELO and Lilacs. A search was conducted by the "premature" descriptors, "ethics", "new born extremely low birth weight", registered in Descriptors of Health Sciences (MeSH), and the like in English "premature infant", "ethics", "extremely low birth weight infant "(according to the MESH); beyond the terms "viability threshold", "psychomotor development" and "therapeutic decision" considering, in addition, the respective intersections.

We included all studies that focused on the last ten years, without language restriction. Only jobs were deleted presented in summary / abstract. Whereas the subject is vast and controversial, the following aspects were considered in this review: feasibility limit, extreme prematurity, neurodevelopmental and ethical considerations on therapeutic decisions.

Limit of viability

There is variability in premature feasibility criteria between countries (developed and developing) and also depends on the type of health center which assists the mother and the newborn. It is possible, however, to establish the range of possibility of viability between 22 and 26 weeks [11.12]. Available data indicate that it is extremely unlikely survival of newborns less than 23 weeks of gestation and weighing less than 500 g at birth, with virtually zero chance of survival [13-15].

Study by Doyle et al [16] showed that only 10% of the 22 weeks of gestation newborn survived hospitalization in intensive care units, and none remained alive for more than six months. Similar results were found by Markestad et al. [17], for whom no newborn with gestational age less than 23 weeks survived. The results of these studies raise the possibility that the non-therapeutic investment in these newborns would be ethically correct attitude.

For babies who are born with more than 23 weeks gestation and weighing more than 500 g, survival and the results are uncertain and difficult to predict. These children would be in the "gray zone", and therapeutic decision-making should be based on careful evaluation of data relating to prenatal care, gestational age, birth weight and clinical condition at birth 4. You must indicate However, also the definition of "gray area" differs between studies and is considered the period of birth between 24 and 25 weeks [18]. However, Parikh et al [19] showed an overall probability of survival without profound dysfunction in the range 62% to 63% when the newly born at 25 weeks of gestation are subjected to intensive care. Therefore, in many centers, intensive care have been mandatory for children born at 25 weeks gestational age 3. However, in an interview with doctors from developing countries, were con-

sidered non-viable infants with gestational age up to 25 weeks and birth weight of 800 g [12].

Most clinicians and researchers agree to apply the concept of "gray area" as the most consistent to define the limits of viability to much of the population of preterm infants [20]. The classification of patients by "gray zone" takes into account several factors such as, for example, the ability of clinicians to correctly classify the gestational age of the informed woman in labor before and immediately after delivery and to hold regular prenatal visits with the obstetrician and the family.

The neonatologist should participate in the decision-making process before delivery and meet the delivery of all newborn infants who is close to this limit of viability, since below the newborn limit is too immature to have reasonable chance of survival, and However, above, there is a greater chance of survival without severe dysfunction. In addition to gestational age, should consider other factors before making decision, positively influence the prognosis of premature: high weight for a given gestational age, single pregnancy, female and exposure to antenatal corticosteroids [18.21].

Extreme prematurity and neurodevelopmental

Despite progress in the quality of perinatal care, which represents a decrease in mortality, there is still high risk of severe neurological injury [22]. The chance of survival without dysfunctions and / or significant deficiencies decreases with gestational age, although prevalence studies are heterogeneous and outcome of neurocognitive and neuropsychomotor deficiencies associated with extreme prematurity [11.18].

Premature should be evaluated according to the international classification of functioning, which describes aspects of behavioral, socio-emotional and adaptive skills. The main anomalies identified in survivors: developmental delay, due to non-progressive chronic encephalopathy; blindness; deafness; and changes in social and cognitive skills [23].

Unpleasant early experiences can modulate the endocrine function and change the pattern of development of neuronal circuits, which interferes with sensory, motor and cognitive systems. There are reports in the literature that premature newborns (PN) exposed to the stressful environment of prolonged neonatal intensive care unit have abnormal brain and sensory development, hearing loss and language problems [24-27].

It is known that extremely premature infants have changes in visual development markers, even without apparent brain damage in imaging 28. Critical events and processes that occur in important phase of acquisition of the human visual system (the 20th to 40th week of gestation) such as exposure to excessive light or oxygen therapy can induce retinopathy of prematurity, since degrees lighter and treatable even more severe degrees, culminating in blindness. In addition to these consequences, revealed up changes in the central control of the visual system in areas such as thalamus, occipital cortex, hippocampus, parietal and frontal lobes. All these factors predispose to inappropriate visual development, which interferes with programming and learning of visual functions, visuocognitivas and visuomotor [29-31].

In the long term, differences are observed in the dysfunctions in extremely preterm infants according to age group. Functional limitations commonly found in preschool involve motor skills, self-care and communication; school age, are identified delays in education in more than 50% of the survivors; in adolescence, are still present vocational limitations and there are reports of psychiatric disorders [32]. These activities require neural networks of well-established and functional attention, but children exhibit impairment in early development of attention, which can last up childhood [33], affecting subsequent steps learning.

Ethical considerations on therapeutic decisions

With premature birth, the decision and maintenance intensive or palliative care is very difficult and involves a number of complex ethical issues. The introduction of advanced care can result in the survival of severely compromised newborns of psychomotor point of view, cognitive and affective; on the other hand, no resuscitation or not to impose intensive care at birth implies let the baby die and can suppress the possibility of life of a premature that normally develop [14]. The team's dilemma in decision making on premature to consider viable or not, lies in the recognition and perception of personhood that newborn, and value assignments to life according to cultural and religious factors [34].

The increasing technological advances in health care and the need to seek a humane intervention make it imperative to reflect on bioethical issues in the routine of neonatal units. The new

philosophical concepts and the failure of biologist model have led to the rethinking of care practices, seeking to emphasize the humanistic and existential vision care [35]. It should be noted in this context that the bioethics objective is to seek benefit and ensuring the integrity of the person taking as a guideline the basic principle of protection of human dignity [36].

In neonatology, the principle of autonomy is viewed with reservations. After all, who determines the choice of what is the best or most appropriate to newborn care: professionals or their parents? Whereas autonomy is the right person to make their own decisions and that babies are not able to express autonomy, parents are legally authorized to give consent to have done a treatment [13]. In this sense, are defendants discussions and dialogues continuous between the health team and the legal representatives for decisions to be made about the procedures to be used in the treatment of neonates [36].

Maintain artificially vital functions without reasonable expectations of recovery may prolong the suffering of patients and their families, which comes to undermining the very dignity of the patient. This is not always the optimal balance between risks and benefits and implies very low quality of life, which can still lead to the exclusion of needy patients and viable [37] due to lack of resources to meet all premature. What has been discussed more recently is focused therapy to palliative care in premature infants below the gray area, which includes pain relief and suffering for the newborn and, for the family, psychological support and guidance for the next pregnancies, particularly in cases of congenital malformations [38].

Health professionals should also consider the entire network of social support and support for extremely premature infants that survived needs therefore to improve the prognosis of functional outcome of those with mild to moderate dysfunction, you need to optimize community participation and support for family [32], as early intervention programs appear to be positive in the short and medium term [39]. The team may also seek to ensure ease of access of patients to specialized centers, with follow-up programs after discharge implemented by an interdisciplinary team, focused to serve those with the greatest deficiencies.

Final considerations

Innovations in advanced life support, greater specialization of health professionals, frequency and adequacy of prenatal tests, progress in early diagnosis and intervention perinatal correctable affections are procedures which enable the survival of infants with gestational age and birth weight extremely low, pushing the boundaries of feasibility.

However, given this possibility, it has been seen that a large number of extremely preterm infants is displaying neurobehavioral problems such as decreased cognitive reach, attention hyperactivity disorder in childhood as well as psychiatric disorders in adolescence, even in the absence of non-progressive encephalopathy, implying varying degrees of neurocognitive limitation, physical and functional dependence. This raises the question about the importance of valuing not only the survival of premature infants, but also to maintain their quality of life, since they are more likely to consequences in the short, medium and long term. There is still difficulty in defining the borderline level of prematurity that guide decision-making in relation to therapy that should be adopted (palliative or intensive), especially when considering the resources available on the drive that will receive the extremely premature. It is important to keep family involvement in decision making, so that is not extinguished the possibility of full life to a premature possibly viable.

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Participação dos autores

Fernando Hellmann participou em todas as etapas da pesquisa. Marta Inez Machado Verdi participou da revisão final do artigo.

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