

From Nuremberg to bioethics: an educational project for students of dentistry and dental prosthesis

Silvia Marinozzi, PhD¹
 Gilberto Corbellini, PhD²
 Livia Ottolenghi, MD, DDS³
 Francesca Ripari, PhD, DDS³
 Antonio Pizzuti, PhD⁴
 Marcello Pezzetti, MA⁵
 Fabio Gaj, MD⁶

- ¹ Department of Molecular Medicine, "Sapienza" University of Rome, Italy
- ² Department of Medical and Surgical Sciences and Biotechnology, "Sapienza" University of Rome, Italy
- ³ Department of Oral and MaxilloFacial Sciences, "Sapienza" University of Rome, Italy
- ⁴ Department of Sperimental Medicine, "Sapienza" University of Rome, Italy
- ⁵ Director of the Museum of Shoah of Rome, Italy
- ⁶ Department of General Surgery, Surgical Specialties and Transplants, "Sapienza" University of Rome, Italy

Corresponding author:

Silvia Marinozzi, PhD
 Department Molecular Medicine
 "Sapienza" University of Rome
 Viale dell'Università 34/A
 00185 Rome, Italy
 Phone: +39 06 64451721
 E-mail: silvia.marinozzi@uniroma1.it

Summary

In the lessons of medical-scientific methodologies of the medical faculty at the Sapienza University of Rome, basic notions on the ethical and deontologic aspects characterizing the history of the medical profession are provided, including the formulation and application of bioethical principles to clinics and biomedical research. Within such framework, an educational project has been initiated on the historical origin of the current normative and juridic dispositions in the regulation of experimental biomedical research and the relationship between health operators and patients, with particular attention to the procedure, the meaning the value either professional or deontologic, of ethics and the legality of the informed consensus. Emphasis is put on medical and experimental abuses that occurred in Germany during the nazi regime.

Key words: history of bioethics, dentistry in the nazi Germany.

Eugenic theories in Europe in the XVIII and XIX century

The diffusion of the Hippocratic oath formed the basis of the principles of medical deontology, morally constraining the doctors to follow specific norms and forbidding attitudes and practices that would violate the "purity of art". Deontology, as a set of norms regulating the professions, reflects principles and models of the general moral of a given culture and society, but also builds the foundations and reinforces an internal culture characterizing socially and legally the main self commitment (mandate) of each profession.

The care of patients as primary goal of the doctor, *primum non nocere*, a guide principle of the medical behaviour, to equally care for all humans without discrimination, are values sanctioned in the hippocratic code, confirmed by all authors, both doctors and non doctors, that in the course of the centuries have dealt with ethical and deontological aspects of the medical profession never put in discussion or denied in the medical communities of the XVIII and XIX century

However, in the course of the XIX century, experimental research in biology and medicine started to develop, while anthropological studies validating the biological theories proposed classifications of human races that became the presupposition of the doctrine constituting the ideologic basis of the politics of "racial hygiene" and eugenetics in nazi Germany.

The cruel and lethal medical experiments carried out on the jewish and other prisoners used as human guinea pigs in the concentration camp, provides the core of the debate that from after the Nuremberg trials has determined that there is the need of an univocal normative limiting the biomedical research within the boundaries of moral and ethical lawfulness.

"Racial hygiene" in the nazi Germany

The programme of "racial hygiene", proposed and performed by Hitler, freely interpreted and misinterpreted the idea of the eugenics started in 1883 by the English scientist Francis Galton, cousin of Charles Darwin, who considered that the progress of the human race depended on the improvement of selective transmission of heritable traits in the population to future generations. In Germany, the eugenics movement was already very active in the XIX century and the work of their founders Wilhelm Schallmayer and Alfred Ploetz had distorted its meaning; in 1908 in the period when Germany had colonies in South West Africa, all mixed marriages were annulled and the germans involved in mixed marriages

were deprived of their civil rights. After 1933, when the nazis came to power, the eugenic ideas became ripe for political purposes that aimed through euthanasia, sterilization and selectivity of marriages to reach the ambitious goal of creating a “superior race”.

“Useless lives”: the T4 experience

Hitler put in charge some hierarchs to extend medical authority to evaluate those persons considered beyond cure after accurate diagnostic evaluations, to whom a “merciful death” would be allowed. The “Reich Committee for the scientific research of serious diseases of heritable origin” had prepared the registration forms to record useful information to select the persons “worthy of help” from those considered “useless lives” and the distribution of such questionnaires was carried out in the long stay hospitals, the sanatoria and in the madhouses. The directional center for the “euthanasia” operation had its residence in Berlin in a house at n. 4 of Tiergartenstrasse. All mentioned questionnaires were sent to this address where each case was examined by a doctor; the selected patients were then transported and killed in one of the five centers for euthanasia in Germany or in the one in Austria (Linz). This procedure went down in history as the T-4 operation.

There are not reliable data on the number of people killed by “euthanasia”; it is said between 120.000 and 275.000 cases and that only 15% of the mentally ill people of Germany survived the program of the third Reich.

It is interesting to note that those that constituted the program of so-called euthanasia were not ignorant, nor mentally insane, but doctors, hospital nurses and bureaucrats seduced by the idea of a “pure” nation in which chronic disease and disability were considered an unjustifiable burden. Among them famous scientists as C. H. Schroeder, pioneer in the etiology and mechanisms of heritable transmission of oral schisis, who in 1931 recommended to carry out the eugenic measures for those individuals affected stating that the prevalence of this pathology was increased because the surgical intervention contrasted natural selection.

The law for the *Prevention of birth of persons affected by heritable disease* of 14 July 1933 envisages the obligatory sterilization, thus making explicit the concept already expressed by Hitler in *Mein Kampf* to systematically prevent all unhealthy individuals to generate diseased and insane offspring, as a “compassionate action”, that would spare undeserved suffering and improve the health of the race on the whole. Also in this case, the tribunals in charge of the selection of the subjects were composed by a qualified commission represented by a lawyer, a family doctor, and a doctor specialist in hygiene; they had the duty to select the risky categories, including deafness, acute alcoholism, epilepsy, blindness, but also physical malformations such as oral schisis and all doubtful cases of cranio-facial malformations such as the simple open bite, which in the uncertainty were anyway sterilized.

The program that planned to “protect the german honour and blood” was even more ambitious, therefore the “law for the prevention of heritable diseases”, that in a first mo-

ment had given the license to marry to persons with oral schisis or with a anamnestic positive family history only if sterilized, subsequently forbade the union of a healthy person with a person pre-emptively sterilized, on the assumption that the goal of the marriage is mainly the production of healthy offspring for the Nation. The attempts to avoid such dictates were eluded by the certainty that the “sick” subjects would have survived as stowaway for their entire life, since the Ministry of Public Instruction banned access to schools to the children or access to any public job to the adults, thus excluding them from any social contact.

The atrocity judged at the Nuremberg process were part of a global system that had been encouraged by eugenic euthanasia, such as the obligatory sterilization, the selective marriages on the basis of the genetic health and racial hygiene, among which also the subjects with oromaxillofacial malformations were included.

Racial hygiene and oro-maxillo facial district

As all professionals in the medical field, dentists were obliged to report about all patients affected by congenital malformations.

The racial health became an obligatory subject in all student classes of medicine and dentistry and the scientific literature on the same topic was very prolific in the 30s, as it can be deduced from the proclamations with racial content. Among them, the “*Neue Grundlagen der Rassenforschung*” states that the movements of mastication of the arian men are horizontally oriented to allow mastication with closed mouth, while in men of different race, as in animals, the movements of mastication are perpendicular, to let them chew with an open mouth; moreover, while the canines of an arian man are not higher than the other teeth, in the other races they are in general higher, round and large, as in animals.

Since the beginning, the german dentists and their scientific and professional organizations were involved in the consequences of the power achieved by the nazis in 1933.

In the same year, Ernst Stuck became *Reichszahnarztfuehrer* (i.e. head doctor of the Reich) and decided that each dentist working in private had to complete a course of ideologic and military education over eight weeks in order to get access to funds from social welfare; in his opinion, each dentist should become a national-socialist, trust the Fuehrer and follow him faithfully in his progress to contribute to reach the victory. The results was that during the first months of the war 6000 dentists enrolled in the german army.

Still in 1933, a law was approved forbidding the Jewish dentists to exert their profession in favour of the funds of social welfare, until in 1939 the profession was finally completely forbidden to them, so that the number of jewish dentists went down from 1064 (on a total of 11.332 surgeon dentists) in 1934, to 372 in 1939.

In this period, especially following the promulgation of the racial laws of Nuremberg, the health policy included the ban of marriage among german citizens “pure” and jewish, and afterwards, simple “impure” individuals, with the

defense of the arian species the pillar of the measures of public hygiene, so that the medical and health prevention coincided with the idea of racial hygiene and prevention. Among the numerous scientific works aimed at demonstrating the dangerousness and the risks of contamination coming from uncontrolled marriage unions and to give support to the ban of reproduction not only for those that could actually transmit heritable pathologies, but also somatic and genetic stigmata judged as incongruous and antithetic to the selection of the pure race, there are also studies concerning the connection between maxillo-dental anomalies and some psychiatric pathologies, such as the frequency of prognatism and of an ogival palate among the mentally ill patients. The basic idea, in absolute coherence with the phrenology doctrines of the time, was to nosologically embed some physiognomics for the diagnosis of mental diseases thought to be congenital, to prevent heritable transmission through the sterilization of the subjects.

From the association of ogival palate-prognatism with heritable diseases, it was concluded that all people presenting this kind of malocclusion were carriers of congenital mental disability and therefore had to be included in the categories to be sterilised.

In this respect, the concerns for some oro-maxillo-facial anomalies, was that the knowledge on the transmission patterns of the labio-palatal-schisis in 1930 was very limited. The different authors, among which included Schroeder, observed that oral schisis were present with an incidence of 40.5% among the offspring of affected individuals, that the transmission patterns were multiple even if the recessive heredity seemed prevalent in 75% of cases, that in 64.3% of cases the affected individuals were males and that in particular the labial schisis manifested with a higher frequency in the left lip and was not necessarily associated to palatoschisis. The results provided scientific support to the obligatory sterilization of the adults and to the euthanasia of children affected by oral schisis. They hypothesised a correlation between the oral pathology and other malformations manifested by the same individual or in kins, such as bifid tongue, polydactyly, malformations of the foot fingers, hydrocephalon, stiff neck, and some ocular pathologies.

The social anathema imposed to the subjects with oral schisis was clearly described by Beatty in 1936. Referring to subjects who were surgically treated to solve the oral schisis, he affirmed that if operated early, both the language and the aesthetics seemed to improve sufficiently to prevent pain and the sense of repulsion from the others. Moreover, since the aesthetic defects of the palatoschisis were enhanced by the simultaneous presence of the cleft lip, the psychological effects of such pathology on the children should not be overlooked, risking to hamper the natural process of socio-cultural growth rendering the subject, even if healthy, insecure and with excessive educational and mental delays.

Also Mengele dedicated his studies to the oro-maxillo-facial malformations, obtaining his degree with a thesis entitled "Morphologic racial research on the inferior part of the maxilla of four racial groups" in which he made complex measurements of the alveolar region of the mandible. He concluded that the variation in measurements were

due to well defined racial characteristic and that it would be possible to differentiate the various ethnic groups from the study of the mandible. Combining his interest for the facial development and the experiments conducted in genetics by professor Otmar Freiherr von Verschuer of the prestigious Goethe University of Frankfurt am Main, to whom he was committed, Mengele, was concerned that the progress in the surgical treatment of oral schisis would not have decreased the incidence of these congenital malformations genetically transmitted. He carried out a study on 17 families of 110 patients affected by both labial and palatal schisis resident in Frankfurt: the results suggested that 47% (a higher proportion than that reported in previous studies) had a heritable component. Moreover, Mengele found an association between "cleft lip with/without palatal schisis" and other conditions such as hernia, hemangioma, phimosis, foot malformation, polydactyly and syndactyly, scoliosis, hydrocefalon and spina bifida. Therefore, he hypothesised a link between oral schisis and mental retardation, deafness, strabismus and the delayed closure of the cranial sutures, explaining in this way the pathogenesis of the oral schisis as a "global perturbation of the fetal development" with different degrees of seriousness.

As known by now, the nazi dentists did the extraction of golden teeth at the beginning only from the mouth of the cadavers in the lager, then also from live prisoners in order to reutilize the metal in various ways. Xavier Rioux in his works on the history of dentistry in Germany during the nazi period highlighted how the general order or the dental treatment of the prisoners in the concentration camps was to reduce at the minimum the medical care and to avoid the use of anesthesia during operations, considered by Dr. H. Pock, head dentist of all concentration camps, a practice "too human" for individuals thought to be "less human" (2).

From Nuremberg to modern bioethics

The elimination and the forced sterilization of the "impure" Germans, or those not matching the biological "arian" ideal, the planning of a "final solution" of the Jewish question, the total elimination of a whole people, and the performance of medical experimentations carried out on the prisoners of the concentration camps used as human cavia, constitute the core of the debate that after the Nuremberg trial there was a need for a univocal normative that would limit the biomedical research into the boundaries of moral and ethical lawfulness.

The Nuremberg code of 1947, promulgated just a few days before the end of the process to the nazi officials and health people, underlines the indispensability of the respect of the integrity and the dignity of individuals, and ratifies on one side the priority of a voluntary consensus of the patients and of the individuals under experimental protocols, while on the other side the sense of ethical responsibility, professionalism and legality required of the doctor whenever an experimental research would result harmful to the individual. The "voluntary consensus" becomes an "essential" prerequisite for a morally acceptable conduct of the experiments on humans.

In 1948 the World Medical Association approved the Geneva Declaration, updated the Hippocratic oath and committed doctors not to use their knowledge against human rights “even under obligation”. The debate and the discussions in the medical community that followed post-Nuremberg, and the issue of normatives always being more oriented towards the free consensus of the patients and/or subjects under experimental research, delineate the historical origins of the current bioethics applied in the medical and clinical field. The Helsinki declaration (1964) confirms and reinforces the principle of free and voluntary consensus, which must also be explicit, thus highlighting the need of a normative procedure that further supports the right of autodetermination of the individuals, the guarantee of the welfare of the individual, but also the terms by which the consensus of the patient can be valid (major age, psychical conditions, etc.).

In 1971 the American oncologist Van Rensselaer Potter published “*Bioethics: a bridge to the future*”, and proposed the term “bioethic” as explicitation of an ideal project where the medical ethical problems are inserted in those more general of an “environmental” ethic, integrating the new biological knowledge with the human values, centered on the problems of the demographic development, ecological degradation, and for an adjustment of the technologic and scientific progresses to the moral reference values (*global bioethics*). In a more strict medical field, in 1978 the National Commission for the protection of Human Subjects in the Biomedical and Behavioural Research of USA, drew up the document “*Ethical Principles and Guidelines for the Protection of Human Subjects of Research*” (known as Belmont Report), in which the three fundamental principles of the current medical bioethics are ratified: beneficence and non-maleficence; equity and justice; respect of the decisional autonomy of the patient. The relevance of the treated themes in bioethical considerations induced institutionalisation of an educational route for the students of the Courses of the Medical Faculties of the Sapienza University of Rome, with seminars

integrating the classes of Medical Deontology and Applied Bioethics through the historical reconstruction of the considerations that have been developing from the Nuremberg Code in the medical and scientific community of the western countries. The goal is to offer an educational contribution on the history of medical bioethics through the reconstruction of the historical-cultural prerequisites of the race doctrine, the systems adopted in Germany to carry out “racial hygiene”, from the elimination of disabled to the discrimination of the impure races, the experiments conducted on human beings in the extermination camps until the successive response of the international community, from the Nuremberg Code of 1947 to the Belmont Report, and to the definition of bioethical “codes” in current medicine, with particular relevance to the concept, the history and the worthiness of the “informed consensus” (1).

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