Clinical, ethic-legal and neuro- psychic repercussions of female genital mutilation in 21st century, in Europe. The legitimacy of tradition and the fight against extreme forms of discrimination

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Abstract:

This paper raises the issue of non-medical genital mutilation acts conducted on various individuals before marriage, carried out nowadays, in the 21st century, also in Europe (Belgium, France, England), as well as in Canada, Asia, Australia, New Zealand, USA too, due to immigrants coming from countries where genital mutilation is performed in 98% of women. For African countries, although in the constitution of Somalia - genital mutilation of women is not permitted, or declared forbidden (e.g. in Egypt), genital mutilation is frequently performed.

The evolution of the morpho-functional perfection of the human brain and body adds to the quality of sexual intercourse between males and females. Following mutilation, the capacity of external genital organs is removed for life, as is the protection of the biological future of the females in question.

The types of non-medical mutilation of the external genital organs of girls may be singular (partial or total clitoridectomy, excision of small labia and their suture) or complex and combined, causing very serious immediate complications (the latest case referred to by the press in July 2018 – in Somalia, where a 10-year-old girl was taken by her mother to have her traditionally circumcised, with the mutilation of the genital organs causing a haemorrhagic shock leading to her death).

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Immigrants respect their ethnic and religious traditions, including the ritual of female genital mutilation at puberty (on 14-15 years old girls) or in their teenage years. Upon marrying people from the country of adoption, women adopt the religion and traditions of their partner, as well as the non-medical mutilation of their daughter.

According to Beatrice Ioan and collaborators, the occurrence of genital mutilation has been on the rise, which indicates that the communities of refugees from Somalia, Yemen to Great Britain, circa 10,000 children are at the risk of genital mutilation, as a result of their parents conferring them identity as per tradition.

I emphasize the fact that immigrants comprise a social group bringing also their epidemiological pathology into the country of adoption, such as transmissible diseases characteristic of the place of origin.

Key words:

mutilation, female, external genital organs, tradition, brain.

Background

Originally, sexual intercourse was performed strictly for procreation purposes. Afterwards, the practice of mutilation attested before Christ, based on various motivations and performed as part of specific rituals, emerged. In principle, mutilation aims at preserving the "chastity belt", preventing sexual intercourse from taking place before marriage. This should, however, not allow to cause their child to be damaged for life, let alone in the 21st century.

In the 19th century, clitoridectomy was also recommended for the treatment of nymphomania, epilepsy, hysteria or the prevention of masturbation, a practice with a different connotation in the 21st century.

I underline that in this case I do not mean acts of violence committed during the criminal forced sexual intercourse (rape) or acts of sadism, where investigation authorities are always notified, thus leading to a solution, but to practices of genital mutilation carried out in the context of "traditional or religious customs", under insubstantial conditions and with rudimentary and improvised non-medical devices, by people with no medical training.

In this case, based on the justification that "their mother, their sister, and grandmother also underwent mutilation according to tradition", the subjects feel offended that a notification of the relevant authorities is required, in absence of which this criminal act will not be eradicated even in the 21st century.

The mutilation of the external genital organs in a woman consists in the partial or total removal of the genitals, or the conduct of other injuries performed without medical indication. It was also called "feminine circumcision," an improper and confusing term, which has nothing to do with the circumcision of the penis, which is why in 2017, the English called it "female genital cutting" (in 2017).

Method

Based on the analysis of the complex effects of the mutilation of genital organs, which the World Health Organization (WHO) divided into four types, we found the following:

TYPE 1: Removal of the foreskin (clitoral hood) and of a part of the clitoris

a) an odd, median organ, the clitoris is located at the anterior commissure of the vulva, between the labia majora and labia minora. It is one of the important erectile organs of the vulva, which, through its connection with the neighbouring erogenous areas, directly participates in the creation of the woman's erotic feeling, enhancing her state of excitation.

During the excitation phase, the size of the gland can double, but after the partial clitoridectomy this does no longer occur.

The sensation from the gland receptors no longer reaches the medullary ascending pathways, or the brain, respectively, with the clitoris represented only by the remaining part of the clitoral body and the "roots of the clitoris ";

b) The urinary tract lies posteriorly and it may be involved in the empirical section, and the lesions may be responsible for the secondary frequent urinary pathology in the case of mutilation.

Normally, the increased influx of blood from the cavernous structures delimited by the albuginea, a slightly expandable membrane that increases local congestion, increases the erectile sensitivity and tactile corpuscles (which, after mutilation, remain in part) preparing the genital organs for copulation, ejaculation and orgasm.

The body covered by the clitoral fascia is hidden between the labia (Fig.1). When touching the clitoris during the copulatory movements the woman's excitability increases, thus participating in the ejaculation and orgasm.

While normal clitoral vasoconstriction occurs within 3-5 seconds, or later in the case of older females, where clitoris ablation is no longer the case, clitoris ablation leads to its non-existence, as mutilation is a decisive factor of anorgasmia.

In comparative anatomy terms, the clitoris is the counterpart of the penis and, therefore, the erectile structures of the clitoris are considered to resemble the cavernous body of the penis. Thus, physiologically speaking, if a male's first response to a sexually arousing factor leads to penile erection and discharge of a translucent liquid through the urethra, both required for the penetration of the vagina, in the case of females, the erection of the clitoris and the lubrication of the vagina normally occurring in 20 to 30 seconds, are no longer the case, in which context sexual intercourse becomes painful and unwanted.

The longer the clitoris, the more increased the excitation surface and the stronger the erotic state.

TYPE 2: Clitoridectomy with the partial or total excision of labia minora, with their proximity and suturing until scarring.

The labia minora, together with the labia majora, through the medial faces, delimit the vaginal vestibule where the corpuscles are found, which, when touched, especially when the mucosal surfaces are touched, trigger the erotic sensation of the woman.

On the labia minora, besides the special tactile corpuscles (of voluptuousness), there are other receptors (Meissner, Krause, Vater-Pacini and Carrard), smooth muscle fibres and a well-developed vascular-nervous system that provides erectile qualities, but also abusive bleeding in case of mutilation.

Accessory glands, large and small, on the labial mucosa are numerous. These glands drain the contents into the vulva, lubricate the surface of the vulva and the vaginal introitus,

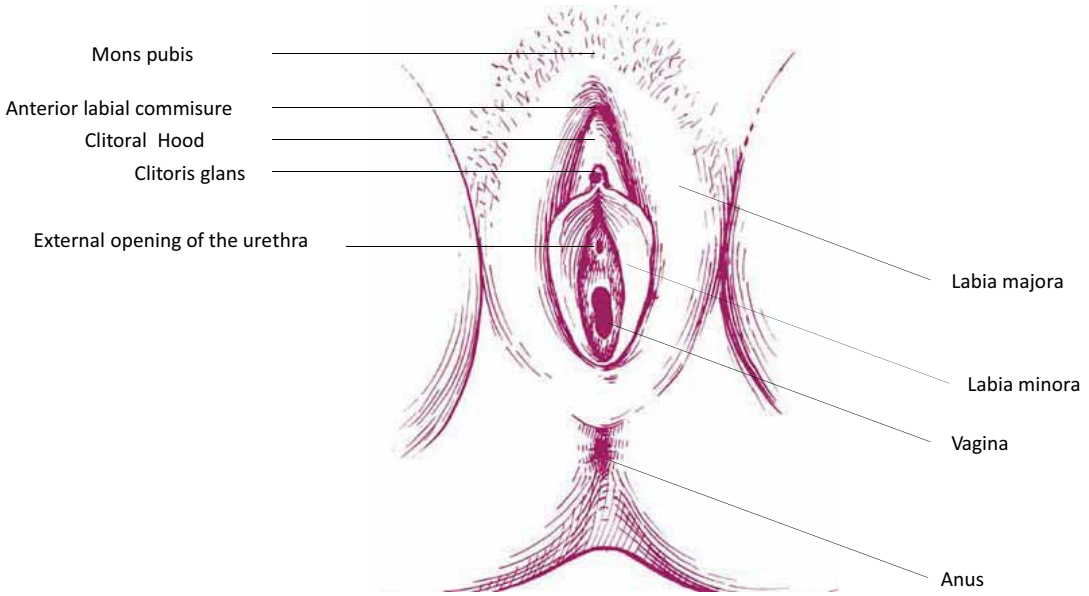

Fig. 1 - The anatomy of the female external genitalia (sketch from Treaty of Clinical Sexology)

offering the possibility to penetrate the vagina easily. The content of pheromones induces and increases the libido, the excitability and the penile tone of the partner.

The sectioning and suturing of the base of the labia minora no longer allow the normal discharge of the urinary jet and menstrual blood, which is why a small drainage hole is made. So practically there is no total suture of the labia minora.

The obstruction of the vaginal introitus will no longer allow the examination of the vagina and cervix, and the screening for cervical cancer can no longer be carried out, this form of mutilation causing further damage to woman's health, including precancerous or cancer-induced lesions of the cervix, the second most frequent type of cancer after the breast cancer.

TYPE 3: The infibulation or pharaonic circumcision

It is the most mutilative procedure. Complex and with the greatest complications, it consists of clitoridectomy, the sectioning of the labia minora, the inner part of the labia majora with the suturing of the edges of the wound created. The bleeding is very high, the mutilation of the genital organs often resulting in death or serious complications. The mutilating effects remain for life.

The closure of the vulva no longer allows the penile-vaginal sexual intercourse, but there is the possibility of performing the penile-anal intercourse or the fellatio.

TYPE 4: Different types of cuts, perforations or other vulvar-vaginal lesions, the application and / or introduction of corrosive substances into the vulva and vagina.

Ethical and legal aspects:

These cases are worrisome, because not only do the individuals subjected to mutilation not file complaints with the courts, but they are also offended when the competent bodies request them to do so. The explanation is that "my mother and grandmother performed the mutilation procedure".

The performance of mutilation in front of community members by using empirical means, where the father approves of the girl/teenage girl being mutilated, thus endangering her life for the alleged purpose of safeguarding her virginity is an irresponsible and incomprehensible act for the 21st century. When the girl resists mutilation, thus breaching community principles, she is severely punished, her face and body cut and mutilated against her will, subjected to the action of corrosive substances, to rape and even murder.

The physiological pubertal and adolescent periods determine the secondary sexual characteristics with complex manifestations that mark the transition from child to adult life, namely the sexual maturity and human procreation. The mutilation during this period, namely the destruction of the insufficiently developed genital organs, causes irreparable disorders in the physiology of the person.

The mutilation of a person's genital organs destroys the possibility of representing their functionality in the brain, causing severe neuro-psychic injuries, an infirmity that will remain until the end of life.

Mutilation is an act of abuse on the part of the family (who is paid money by the future husband) and of society, applying the structures of its own morality.

The decision to mutilate a girl is based on the decision of her family, who does not take into account the medical considerations imposed by the law of the country of residence.

Mutilation is a gross violation of women's rights through a primitive method of removing external genital organs. The mutilation act takes place in front of the tribe, men and women alike, where the agent opens the woman's vagina by using 3 fingers, or where the perineum is cut by way of a rudimentary knife. Afterwards, the woman is sexually raped by young men, the action exceeding the boundaries of morality and humanity, a criminal act after all.

Discussions:

- The change in the topography and structure of the external genital organs by mutilation remains for life, and the sexual life can only begin after a new surgery.
- In the long run, the pathology of genital sphere is complex, especially for the sexual intercourse, pregnancy and childbirth.
- During the excitation period, the clitoris can no longer increase/double after the partial or total clitoridectomy, reducing the state of excitation.
- By clitoridectomy, the sensation of the receptors is no longer transmitted through the medullary ascending pathways to the brain. The sensitivity of the clitoris also disappears, as the person loses the most important centre of sexual sensitivity, thus causing a disability to occur.
- The clitoral gland is not touched in the copulation, and so this form of excitation disappears; ejaculation and orgasm occur harder.
- The erection of the clitoris and lubrication of the vagina, which normally occur in 20-30 seconds, no longer occur, bringing major drawbacks to copulation, the sexual intercourse being painful.
- The excision of labia minora removes the sensory elements that give the erotic sensation of the person, and the disappearance of the small and large vestibular glands, that lubricate the vulva and the vaginal introitus, causes major negative effects of the penetration of the vaginal introitus and copulation for life.
- The excision of the labia minora removes the heat and pain receptors, the special tactile corpuscles, the pheromone secretion, the smooth muscle fibres and the vascular-nervous system,

destroying the erectile qualities of the area, unrecoverable over time.

- The absence of pheromones has a negative effect on the libido, on the partner's arousal and erection. This will no longer be represented in the brain either, because the medullary ascending pathways no longer transmit anything by lack of receptors.
- The adhesion of the labia minora prevents the discharge of the vaginal content, which is difficult. The vaginal cavity can no longer be penetrated to perform the cervical screening and detect the precancerous lesions, decreasing the woman's average life. Cervical cancer is the second most frequent type of cancer, after the breast cancer.
- The removal of the normal morpho-functional organs brings immediate and long-term repercussions.

Consequences

- **immediate:** haemorrhage, haemorrhagic shock, urinary disorders, infections that may lead to septicaemia
- **long term:** local morpho-physiological modification, complications in pregnancy and post-partum period, infertility, neuropsychiatric complications (nightmares, fear of having a sexual intercourse, pregnancy or childbirth, anxiety, depression).
- The memory of the tragic moments (the operation is performed entirely without any anaesthetics) and the psycho-social impact will last for a lifetime. The brain will keep the memory of the external genital organs now non-existent, as a "false presence" associated with the "Phantom Organ Pain Syndrome" triggered by emotional pain. Such "pain", however, is different from that of the surgical wound pain – as confirmed by African students at the Bucharest Faculty of Medicine.
- The brain will no longer receive normal structural values along the genetic evolution of the body because those organs no longer exist. Nature has selected the values of a performing sexual intercourse in procreation. By mutilation these values are destroyed under various motivations.
- The connection between pleasure and sexuality disappears by destroying the decisive formations.
- Rudimentary, non-sterile devices are used for the mutilation, no anaesthesia is made - the procedure is very painful. There is no asepsis and antisepsis.
- Mutilation is opposed to scientifically-based medical data.

In this case, through the absence of receptors, with the removal of the external genital organs, the brain no longer receives specific information for a normal sexual intercourse, and the infirmity causes major harm to the female's sexual life entirely, including during gestation, childbirth and post-partum.

In fact, the cerebral cortex receives sensory input through the internal granular layer cells, which make contact with the nerve impulses from the receptors of the genitals organs, through exogenous sensory and endogenous sensory stimuli, setting the sexual behaviour of the individual, depending on its biological potential and psychosocial environment. Bioelectrical impulses are the result of information processing by neuronal cell receptors, that lead the information received for processing to the external granular layer of the pyramidal cells, transmitting information to the cortical and subcortical areas. The glutaminergic predominantly pyramidal cells, are in fact neurons modulated by the impulses of the direct or interneuronal related pathways. Neuropeptides in the cerebral cortex (the most important, the dopamine, serotonin, norepinephrine) according to Mesulam (2004) and Lynch (2006), quoted by Leon Dănăilă, influence both neurons and lo-

Fig. 2 -The influence of receptors on sexual behavior

cal metabolic processes. At synapses the bioelectric impulse is transferred from the axon to the dendrite through chemical neurotransmitters located in the astrocytes receptors. Chemical and electrical information is processed by the cortical neurosynaptic circuitry through the processing in the layer 2-3, and then the cortex receives the information from the brain layer 4, and the subcortical level. Information reaches the cortical or subcortical areas. These data, analyzed and transformed into visual, tactile, olfactory, auditory or taste sensations for the type of excitation received, will determine the appropriate response of the person, who may be normal, pathological or absent in the sexual relations. I emphasize that the environment has an important role in the individual's genetic code. The cell's ability to present the information received and to give the order is the processing phenomenon, and the electrical impulse conduction velocity increases with the thickness of the nerve fibre for the same axon.

Sexual behaviour is normally set by the brain, which regulates sex hormone values. As a consequence, the increase in the serum ratio of these hormones, which reach the brain, where they cross the blood-brain barrier, reaches the intracytoplasmic and intranuclear receptors of neurons in the cortex, the limbic system, the hypothalamus (fig.2), where the mechanism of negative feedback reduces the concentration of serum sex hormones, thereby causing the normal ,or abnormal behaviour of the individual.

The excitability of brain neurons is prevented by the absence of receptors in the mutilated organs.

Conclusions

- the non-medical mutilation of female external genital organs, which causes a serious infirmity and inferiority to women, remains an issue subject to public debate, as in the 21st century there is no motivation for dialogue between the Governments of those States, the international institutions and specialists in medicine, biology, genetics, forensics.
- It is my opinion that it is necessary to eradicate the prehistoric non-medical principles and to preserve the structure of the performing values of the human body.
- the mutilation of female genital organs reduces the genetically acquired superior nervous system capacity resulting from evolution, causing the destruction of processes of the human psychic, thus leading to the degradation of women.
- the mutilation of female genital organs for non-medical reasons and therefore lacking scientific justification, is at the basis of this paper and casts a negative light on some countries' Governments claiming that "mutilation is forbidden," at the same time allowing this "traditional practice" to be performed in the case of 94-98% of girls.

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