Forensic, ethical and religious issues regarding the cremation process

Carmen Corina Radu¹, Codrin Rebeleanu²*, Daniel Ureche², Calin Scripcaru³

Abstract: Since the early human period, cremation was one of the main methods for disposal the human body. It has some advantages that make this form of funeral ritual most accepted throughout Asian and Western cultures, being regulated by tradition, ethics and legislative laws. In Eastern Europe this regulation is lacking and that may be a source for the social stand against it, even if there is an increasing number of cremations each year. In this paper we intend to reveal all ethical and forensic sensitive aspects regarding cremation. The Orthodox religion statements represent the most considerable arguments for not destroying the body through the “violence” of cremation. On the other hand, the Hinduism not only that allows cremation but it also finds it to be the most appropriate ritual for celebrating the “soul leaving” the life circle and finding a new meaning through reincarnation. From the bioethical and forensic points of view, even if the general opinion is perfectly lined up with arguments for cremation, some voices might oppose the particular aspects which accompany cremation as being a complete destruction of the body with no possibility to identify its DNA or biologic profile.

Key Words: cremation, incineration, burial practices, funeral rituals.

INTRODUCTION

Cremation is the process by which the body of a deceased person is subjected to a combustion action in specially designed furnaces (electrical or oil-heated) which are heated - up to 1,093 degrees Celsius. After the burning, the remains will be turned into ashes by milling. From historical perspective, incineration practices have been extensively used throughout human history. Kaczmarek and Piontek [1], noted that incineration as a mean of body disposal was prevalent in Central Europe since Neolithic times until the Middle Ages.

According to Bowler et al. [2], cremated human remains dating back 25,000-30,000 years were found in Lake Mungo, Australia, which attest early practice of incineration.

Although the incineration practices seem to had been a common feature since prehistoric times, their use in Western society, as a mean of burial of Christians, was met with controversy, especially in the UK, because it is a method of destruction the human body that may have important forensic implications. Which is why, recently, Germany introduced a system whereby all bodies to be cremated are carefully examined by doctors [3].

Nowadays, cremation is practiced worldwide and it is dominant in Japan (99.85%), Taiwan (92.47%), India (85%), China (48.50 %), UK (72.44%), Sweden and Denmark (70%), according to International Cremation Statistics [3].

Legal aspects of the human cremation process

In Romania, the right to be incinerated after death is guaranteed by domestic and international law. The law articles related to this issue are: New Civil Code [4], art. 80, on respecting the will of the deceased: "(1) Any person may determine their funerals rituals and can dispose of his/her body after death. For those lacking legal capacity or those with limited legal capacity it is necessary the written consent of parents or legal guardian. In the absence of express option of the

1) University of Oradea, Faculty of Medicine and Pharmacy, Oradea, Romania
2) "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania
* Corresponding author: E-mail: dr.madu.daniel@gmail.com
3) Institute of Legal Medicine, Iasi, Romania
deceased, the decision will be made by, in order, the will of spouse, parents, offspring, collateral relatives up to the fourth degree inclusive, universal legatee or the mayor of the village, town or municipality in whose jurisdiction the death occurred. In all cases, account will be taken of the deceased’s confession”.

Article 319 of the Penal Code which provides for the offense of desecration of graves, punishable by imprisonment from three months to three years if: the desecration, by whatever means, manifested upon a grave, funeral urn or a corpse. Law 119/1996 on civil status, republished in 2012 (Mon. Of. 339 / 18.05.2012), art. 38, paragraph 1, states that “after establishing the cause of death, the civil officer issues a certificate of burial or incineration to the applicant”.

Forensic aspects of human cremation

From the point of view of forensic medicine, incineration or complete carbonization can be carried out under increased heat in special oven or human incinerators (complete incineration is achieved in 50-60 minutes) whereas in the conventional furnaces it takes up to 40-50 hours running to burn the whole body of an adult, up to 4-5 hours for a dismembered body and about 100 minutes to completely incinerate a fetus or newborn [5].

However, as Bass noted in 1984, even if the fire has the potential to destroy the underlying soft and hard tissues (bones, teeth), it is almost impossible to completely eliminate the whole body. Although, to identify a partially charred corpse the most effective method is DNA profiling, after commercial cremation process, the DNA results are at best unreliable, most likely because of the DNA contamination through processing and handling maneuvers that occurs in such commercial crematoria [6].

Religious aspects of human cremation

In Asia, incineration is used in Buddhism and Hinduism religions, being along with the burial, one of the most common techniques. On the opposite side there are Christianity, Judaism and Islamism that refuse the practice of incineration. Although some liberal Hebrew accept cremation, in Israel the use of human crematoriums is not a routine practice, because it conjures to extermination camps used during the Holocaust.

Hinduism is unique among the great religions of the world as it openly allows the burning of death people, calling it “the last rite” (calledamant - sanskar) or “ultimate sacrifice” (orantiesthi) and is part of the 16 rituals of life. Hindus believe that cremation is not only the means by which the body can end up with this life, but also allows the soul to enter into new life and to reincarnate. As for example in India cremation rituals takes place outdoors on wooden pyres which are then released on Ganges.

Muslims prefer to bury their dead as quickly as possible and even in the same day as the death occurs, because they do not want the body to be affected in any way. The lifeless body is taken to the grave only by men and is wrapped in a tunic, without any other clothes or jewelry. In the grave, the body is placed on one side, so that the face is pointing towards Mecca.

During the French Revolution, freemasons, revolutionaries and anarchists chose incineration to reduce the role of the Church in the funeral. In part because of this reasons, the Catholic Church forbade incineration until the twentieth century. But since the decree of the Holy See in July 1963, cremation is not prohibited anymore, provided that this process is not primarily used for reasons contrary to Christian doctrine. Confession continues, however, to privilege the burial funeral of the deceased.

The Orthodox Church forbade incineration, the Holy Synod of the Romanian Orthodox Church on 15 June 1928 decided that priests should warn the faithful people before committing the act of incineration and that the Church makes no assistance to the ones choosing cremation before burial, and those undergoing incineration will be denied any religious service at their death and afterwards. The early Christians insisted in favor of burial instead of cremation due to its setting in the tomb and resurrection of Jesus in the flesh. The insistence on burial is based on respect for the human body as a work of God, which opposes the “violence” of cremation. For the church, the human body is the temple of the Holy Spirit (Corinthians 6:19). The saints who have served and worshiped God truly are, by their relics, the foundation of Church. Patristic Tradition seems to condemn incineration, as a dishonor to the dead, perhaps in light of Genesis 3:19 - “dust you are and to dust you will return” [7].

DISCUSSION AND CONCLUSIONS

Considering the authors’ practice of Bioethics [8-10] and Forensics in the Institute of Legal Medicine Cluj-Napoca, Romania, in recent years, we noticed an increasing demand vis-à-vis the cremation of the bodies that have undergone autopsy, the relatives being more and more interested in the conditions and advantages offered by incineration process compared to the usual practice of burial. It was noted that most requests aimed corpses of infants, children aged between 30 days and 1 year, and female bodies, regardless of their age. The questions related to the cremated bodies concerned the possibility of incineration which were the subject of forensic expertise or raised / may raise suspicions about the cause of death [11, 12]. In such conditions, according to legislation and regulations, cremation can be performed only with the express consent of the person during his/her life or their relatives (stipulated above) and only when the case was settled in terms of forensic medicine and public health [13]. Also, one reason often used in favor of incineration
was the physical mutilation of the body that occurred in a car accident, fire or other traumatic events.

The identification of the body is a basic element in deciding the type of funeral rituals. As for example, an unidentified corpse will never be the subject of cremation, unless biological samples may be taken for a subsequent identification of the corpse. Such precautions may represent a shelter against any cases of justice, set in motion, according to the authors, even decades after the autopsy.

On the other hand, there are also moral constraints about the practice of cremation from caregivers. Fears that often refer to the risk of mixing the remains of their loved ones with materials which go along with the corpse in the furnace such as the coffin wood or even mixing with biological substances (e.g. bone structure remaining from the previous cremation). Even if they seem shallow, these fears can have a consistent background. We have been informed of situations when the grieving family was handed the urn from the burned coffin without any traces of human ashes, or the corpse was buried without the family consent. From the psychological point of view, the cremation offers support for those who feel horror of the thought of being buried or that they might be.

Our arguments in favor of incineration are represented by the similar situations from obstetrical practice where biological residues resulting from curettage and abortions are incinerated, even if there is no religious service to accompany this process. Such parallels may induce moral comfort to the family or relatives who request cremation.

Summarizing, incineration should be seen as a respectful, safe and concordant process with religious values. It is a moral and ethical mean of body disposal. Even more, taking to account the existing and developing cremation infrastructure and problems that accompany traditional ritual of burial we consider that burial practice shall be reduced in near future. Also, excessive urbanization and progressive decreasing of areas intended for cemeteries, represents even more important arguments in favor of cremation.

**Conflict of interest.** The authors declare that there is no conflict of interest.

### References