

The Effect of Circumcision on the Mental Health of Children: A Review

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SUMMARY

Circumcision is one of the oldest and most frequently performed surgical procedures in the world. It is thought that the beginning of the male circumcision dates back to the earliest times of history. Approximately 13.3 million boys and 2 million girls undergo circumcision each year. In western societies, circumcision is usually performed in infancy while in other parts of the world, it is performed at different developmental stages. Each year in Turkey, especially during the summer months, thousands of children undergo circumcision. The motivations for circumcision include medical-therapeutic, preventive-hygienic and cultural reasons. Numerous publications have suggested that circumcision has serious traumatic effects on children's mental health. Studies conducted in Turkey draw attention to the positive meanings attributed to the circumcision in the community and emphasize that social effects limit the negative effects of circumcision. Although there are many publications in foreign literature about the mental effects of the circumcision on children's mental health, there are only a few studies in Turkey about the mental effects of the one of the most frequently performed surgical procedures in our country. The aim of this study is to review this issue. The articles related to circumcision were searched by keywords in Pubmed, Medline, EBSCHOST, PsycINFO, Turkish Medline, Cukurova Index Database and in Google Scholar and those appropriate for this review were used by authors.

Key Words: Circumcision, child, mental health, psychology, trauma

INTRODUCTION

Circumcision is one of the most common and oldest surgical procedures throughout the world. Each year 13.3 million boys and 2 million girls undergo circumcision (Dekkers et al. 2005, Denniston 1999). The World Health Organization (WHO) estimates that overall 30-33% of the males at or over the age of 15 are circumcised. WHO estimates that the prevalence of circumcision in United States and Canada are 75% and 20% respectively, while the prevalence in Europe is lower than 20% (WHO 2006). The practice of circumcision is common in regions where Muslims predominant, including some regions of southeast Asia, America, the Philippines, Israel and South Korea. It is relatively less common in Europe, Latin America, some regions of Africa and large parts of Asia and

the Pacific (WHO 2006). It has also been reported that female circumcision is carried out in 27 African countries at rates ranging from 1% (Uganda) to 97% (Somalia) (WHO 2008). In Asia, the Middle East, South America and Australia, it is rarely performed (Schroeder 1994, Toubia 1994). It has been estimated that more than 100 million women are circumcised all over the world (Shah et al. 2009). As far as we know, there is no reported case of female circumcision in Turkey. Other studies have definitively stated that female circumcision is not performed in Turkey (Verit 2003).

Circumcision may be carried out for varying reasons in different societies. The reasons may be classified as: medical-therapeutic, preventive-hygienic, religious and cultural. Males are usually circumcised for medical-therapeutic, preventive-

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hygienic and religious reasons, while girls are circumcised for cultural reasons (Dekkers et al. 2005). In deciding to undergo circumcision, varying factors may play a role in combination. In Western societies, circumcision is usually performed in infancy. In other communities, it may be performed at different periods of development (Rhinehart 1999, Zoske 1998). Each year in Turkey, particularly in summer months, thousands of children undergo circumcision. The majority of the population in Turkey is Muslim and almost all of the males are circumcised. Unlike Western societies, circumcision is carried out at a more advanced age. According to the results of a study carried out on 411 circumcised children, the age of circumcision in Turkey varies between 2-11 (mean 7) and 15% of the children are circumcised before the age of 1. Eight percent are circumcised between the age of 1-3, 35% are circumcised between 3-6, and 41% are circumcised after the age of 6 (Sahin et al. 2004). In Turkey, circumcision is usually carried out with ceremonies accompanied frequently by music and entertainment and are important social events for families (Sarı et al. 1996, Sahin et al. 2004). The aim of this paper is to review and outline the literature addressing the historical, religious, physical and ethical dimensions of circumcision, a common practice in Turkey, and investigate its impact on the mental health of the children.

METHOD

In order to investigate the effect of circumcision on the mental health of children, English articles found in databases including Pubmed, Medline, EBSCHOST, PsychINFO and Google Scholar were searched using the different combinations of key words "circumcision", "child", "mental health", "psychology" and "trauma". In order to reach articles on this issue published in Turkey, databases of Turk Medline and Cukurova Index were searched using the Turkish counterparts of the same key words. The retrieved articles and their sources were investigated and the studies appropriate for this review were included.

The history of circumcision and its religious dimension

It is thought that male circumcision dates back to the earliest periods of the history of humanity. Depictions of circumcision can be seen in wall paintings belonging to the Stone Age or ancient Egyptian cemeteries (Dunsmuir and Gordon 1999). It is thought that in ancient Egypt, circumcision was offered to the youth as a threshold of maturity whereby they show their domination of pain and achieve maturity (Gollaher 2000). In ancient Egypt, there was no distinction between religion and medicine. Priests were healers as well. Circumcision was also regarded as a part of moral, psychological and intellectual development in addition to its hygienic effect. In ancient Egypt, captured warriors were often mutilated before being condemned to slavery. Castration was common, but the morbidity was high and their resultant value as slaves was reduced. The Phoenicians, and later the Jews who were largely enslaved, adopted and ritualized circumcision. In time, circumcision was incorporated into Judaic religious practice and viewed as an outward sign of a covenant between God and man (Dunsmuir and Gordon 1999).

At present, circumcision is basically performed by Jewish and Islamic religions. In Jewish religion, God had commanded Abraham to circumcise himself and his son. In the Old Testament, this command was written as follows: "This is my covenant with you and your descendants after you, the covenant you are to keep: Every male among you shall be circumcised. From generation to generation, every male child must be circumcised on the eighth day after his birth" (Dekkers et al. 2005). In Islamic beliefs, circumcision is based upon the concept "sunnah", which is determined by the acts and words of the prophet. For circumcision, Hz. Mohammed is said to state that, "law for men and preservation of the honour for women" (Dekkers et al. 2005). There is no certain age of circumcision in Islamic religion, but is usually carried out when a child reaches the age of 7. Although it is not an absolute command for Muslims, it is considered a tradition with a great symbolic significance (Solomon and Noll 2007). In practice, almost all male children undergo circumcision. While Jews state the commands of God as reasons for circumcision, Muslims also cite cosmetic, hygienic and medical grounds (Dekkers et al. 2005).

In contrary to Jewish beliefs, Goodman, a Jewish researcher, suggested that circumcision is not the foundation of Jewish identity and stressed that beliefs on circumcision should be changed, and that children who did not undergo circumcision should be considered to be complete Jewish boys (1999). The first reports on phimosis were published in the beginning of 19th century (Dunsmuir and Gordon 1999). From the mid 19th century and on, advances in anesthesia and antisepsis changed the practice of circumcision surgery. At this period, it was reported that circumcision has a protective role against impotence related to phimosis (Lynch and Pryor 1993), sexual problems, priapism, excessive masturbation, sexually transmitted diseases, epilepsy, enuresis, and night terror (Dunsmuir and Gordon 1999). In 1903, English surgeon Sir Frederick Treves made a comprehensive description of the basic surgical principles of circumcision, which has been considered valid until now (Dunsmuir and Gordon 1999).

The prevalence of circumcision has decreased since the second half of the 20th century (Dunsmuir and Gordon 1999). In the United States, while 80% of the men were circumcised in 1976 (Gee and Ansell 1976), this rate dropped to 61% in 1981 (Poland 1990) and still continues to decrease (Buick 1997). It is thought that this decrease can be ascribed

to the perception developed in the community maintaining the uselessness of circumcision in medical respects and the presence of the pain and disturbance experienced by children related to the procedure. The fact that the American Academy of Pediatrics and other medical circles do not recommend circumcision also influences the decisions of parents and physicians (Fiely 2006). The decrease in the United Kingdom is even more dramatic. The rate of circumcision fell from 30% in the 1930's to 6% in 1975 (Anand and Carr 1989).

In 1934, Operator Doctor Cemil Topuzlu submitted an article on circumcision to the Turkish Medicine Council (Turkiye Tip Encumeni). He started his presentation with the expression "Circumcision is rumored to be beneficial for health. Diseases rumored to be due to lack of circumcision." and made an analogy between circumcision and carrying out appendectomies on all children in case they will have appendicitis in the future or removing their fingernails in case dirt is accumulated under them (Naskali-Gursoy E 2009).

The anatomy and function of prepuce

The prepuce is a free retractable skin covering the tip of penis (Bigelow 1995). It is an organ of two parts, the outer part and the inner part of containing a highly sensitive mucous membrane (Cold and Taylor 1999). The prepuce takes part in protection of the glans penis and immunity response. It contains high amount of specific nerve receptors and has free nerve endings providing the equivalent sensitivity as fingertips, lips and oral mucosa. The prepuce enables erogenous sensitivity and provides the necessary skin for normal erection and allows the movement of the skin over the body and the glans penis. It plays a stimulatory role during masturbation and the secreted mucosa facilitates smooth and soft movements between the penis and vagina during coitus (Bensley and Boyle 2000, Fleiss 1997).

Medical consequences of circumcision

The most common early side effects of circumcision are mild and treatable. They include pain, bleeding, swelling and inadequate removal of skin. However, serious side effects can occur during the procedure including death due to excessive bleeding and amputation of the glans penis (Weiss et al 2010). Late side effects include pain, wound infection, skin bridge, infection, meatal ulcer, meatal stenosis, fistulae, loss of sensitivity, impairment of sexual function and edema of the glans penis. In general, it is reported that the rate of side effects is higher in older children and that side effects may occur at the rate of 14% even in sterile conditions. The rate is lower in newborns and infants and severe side effects do not occur (Weiss et al. 2010).

Side effects of female circumcision may be divided into immediate, middle and long-term effects. Immediate side effects

include hemorrhagic shock, and urethra, bladder, vaginal wall and anal sphincter injuries. In addition, sepsis, tetanus and urinary infections may occur. Hemorrhagic shock, septic shock and tetanus may be fatal. Mid-term side effects are anemia, malnutrition, wound infection, necrotizing fasciitis, pelvic inflammatory disease, dysmenorrhea, vulvar cystitis, abscess, vaginismus, and painful sexual intercourse (Magoha and Magoha 2000). In the long term, vaginal stenosis, infertility, fistulae, recurrent infections, urinary incontinence, and HIV infections may be seen (Elchalal et al. 1999). It has been reported that gynecological side effects such as painful menstruation and problems in sexual intercourse may lead to depression and anxiety disorders (Lanonde 1995). It has been reported that female circumcision is carried out in 27 African countries at rates ranging from 1% (Uganda) to 98% (Somalia) (WHO 2008), and that is very rare in Asia, Middle East, South America and Australia (Schroeder 1994, Toubia 1994). In Turkey, female circumcision has not been reported (Verit 2003).

Ceylan et al. (2007) reported that a small proportion of circumcisions are carried out in hospitals in Turkey. They stated that the procedure is usually carried out at homes, health centers or schools and especially in rural areas by inexperienced personnel without using anesthesia. They also stressed that social support organizations, local municipal governments and political parties organize collective circumcision ceremonies and that in these ceremonies, circumcising many children in a short period of time increase the rates of side effects.

There are also reports suggesting the medical benefits of circumcision. Singh-Grewal et al. (2005) reviewed the results of 12 studies on 402,908 children and reported that after circumcision, the risk of urinary infection decreased significantly in children. Moses et al. (1998) concluded that there is compelling evidence that circumcision protects males from HIV infection, penile carcinoma and ulcerative sexually transmitted diseases. There are increasing data reporting that circumcision is valuable particularly in regions where HIV, genital cancers and sexually transmitted diseases are common (Austin 2010). Burgu et al. (2010) reported that circumcision decreased the risk of urinary tract infection, but there is no evidence supporting that circumcision should be routinely carried out at the newborn period. They suggested that circumcision may be especially beneficial in conditions of renal pathology such as vesicoureteral reflux, hydronephrosis and posterior urethral valve.

Non-therapeutic circumcision and ethics

A treatment is therapeutic when it is administered for the chief purpose of preventing, removing, or ameliorating a cosmetic deformity, a pathological condition, or a psychological disorder. Therefore, medical procedures that fall outside of

this definition are non-therapeutic. There are those advocating that circumcision not carried out for medical reasons is not ethical. The fact that circumcision is carried out at an early age when the child is unable to decide on whether he wants to be circumcised led to a controversy on the concept of “informed consent” in children (Price 1999). Price, a British medical anthropologist who is an expert on human rights, suggested that circumcision and similar procedures can be carried out on adults who can make their own decisions, but these procedures are not legal when performed on children who can not consent. He stressed that, if their patients are children, doctors are responsible only to their patients. In support of this opinion, he cited the Geneva Declaration issued in 1948. In the Declaration, it is stated that “ a physician should primarily considerate the health of his/her patient. He/She should not permit considerations of religion, nationality, race to come between his/her duty and the patient, nor shall a doctor use his/her medical knowledge contrary to the laws of humanity” (Declaration of Geneva 1948).

In 1995, the American Academy of Pediatrics Committee on Bioethics released a statement on “Informed Consent, Parental permission, Assent in Pediatric Practice”. They stated their position as follows: “Most parents seek to safeguard the welfare and best interests of their children with regard to health care, and as a result proxy consent has seemed to work reasonably well. But consent expresses something for one’s self: a person who consents responds based on unique personal beliefs, values, and goals. Thus “proxy consent” poses serious problems for pediatric health care providers. Such providers have legal and ethical duties to their child patients to render competent medical care based on what the patient needs, not what someone else expresses. Although impasses regarding the interests of minors and the expressed wishes of their patients or guardians are rare, the pediatrician’s responsibilities to his/her patient exist independent of parental desires or proxy consent”. The Committee reported that informed consent of the parents can be obtained only in cases of clear and urgent medical indications and in other situations, physicians and the family should wait until the time when the consent of the child can be obtained (Committee on Bioethics 1995, Price 1999).

The British Medical Association (BMA) in its explanation in 1996 stated its position as follows: “With all procedures, professionals have an ethical obligation to weigh the potential benefits and harms of the procedure and explain these in an appropriate manner to the patient or person consenting on the patient’s behalf.” The BMA does not have a policy on the ethics of male circumcision for religious or cultural purposes but issues this guidance in response to doctors for all relevant factors to be taken into account (British Medical Association 1996, Price 1999).

Price also asserted that it is discrimination to consider circumcision as a crime when carried out on girls and to view

it as normal when performed on boys. He also considered that it was also discriminatory to carry out circumcision depending on the birthplace of the children and stressed that deciding on circumcision depending on the gender, country or parents of the child at birth is not acceptable (Price 1999).

Circumcision and bodily integrity

The notion of bodily integrity has a firm basis in religious, theological and philosophical thinking. What is meant by it can be provisionally indicated by examples from everyday life, for example, as when a child is puzzled (and scared) by blood coming out of a wounded finger. The same anxiety is experienced by medical students at their first visit to an anatomical theatre to dissect a corpse, and the first time they give someone an injection or make a surgical incision. Within a biological perspective, one can distinguish between an anatomical and a functional perspective. The idea of anatomical wholeness means that, although the human body consists of numerous body parts, organs, tissues, cells, and subcellular components, it is still an anatomical unity, an integrated whole which is more than the sum of its parts. Functional wholeness refers to the proper operation of the body or of body parts (Dekkers et al. 2005).

There is also a concept of subjective-experiential wholeness. Patients with a stroke may neglect a paralysed body part. Patients suffering from Body Dysmorphic Disorder feel completely uncomfortable with a healthy and well functioning body part (Vaele 1996). Patients with amputated limbs may experience phantom sensations (Dekkers et al 2005). Psychological consequences as a result of amputative or mutilative surgery are well recognized in the medical literature. Potential effects of loss of body parts are: grief for altered body image or function, or both; anxiety, depression, and sexual problems; and avoidance of or obsessive preoccupation with the loss (Bensley and Boyle 2000, Maguire and Parkes 1998).

Some authors were of the opinion that the foreskin is nothing more than a vestige of man’s evolutionary past. However, most anatomists did not consider the foreskin to be a bit of excess tissue, but an essential and integral part of the sexual organ (Dekkers et al. 2005). It was also emphasised that Freud, referring to male circumcision, even spoke of “cutting the penis” since he did not consider the prepuce a structure separated from the penis (Gollaher 2000). In some studies, adult men have reported experiencing emotional and psychological harm as a result of being circumcised, both from the sense that their bodily integrity was violated as infants and from the belief that circumcision has adversely affected their sexual enjoyment as adults (Bensley and Boyle 2000, Hammond 1997, Hammond 1999).

According to Dr. Dekkers et al., bodily integrity is at risk in both male and female circumcision. Authors have suggested

that the reason why circumcision is not perceived as disruption of bodily integrity among Jews and Muslims may be that circumcision is a rule established by God. Female circumcision is not considered God's command, which why it is regarded as abuse (Dekkers et al 2005). In addition, they stated that the idea of the association of circumcision with perfection was present in Muslims as in Jews and that in some Muslim circles, it is believed that Mohammed was born circumcised or circumcised at on the 7th day of his life. According to them, the belief that circumcision contributes to perfection underlies this opinion. The prepuce is considered a defect that must be corrected in order for the body to regain its ideal form. Female circumcision is considered to be a more serious intervention with more adverse effects than male one (Dekkers et al. 2005).

Circumcision and psychoanalytic approach

Freud stated that at the 4th and 5th years of life, attention focuses on genitalia and at this period the sexual organ assumes narcissistic significance. This stage, termed the phallic-oedipal stage, is important for the discovery of basic anatomic differences by the child and for the foundations of gender identity. In the phallic-oedipal stage, a strong sexual interest towards the mother and desire to possess her develops in boys. This interest usually becomes visible at the age of 3 and reaches its peak at the ages of 4-5. At the same time, the child wants to eliminate his father. Due to aggressive feelings towards his father, the child expects a serious punishment and this expectation leads to castration anxiety (Freud 1905).

In psychoanalytic view, the idea that interventions to the sexual organ of children at the phallic-oedipal stage will enhance castration anxiety is common. It is stated that circumcision will be perceived by the child as an attack on himself and will exert adverse effects on self-esteem of the child. Freud stressed that castration anxiety, neuroses and circumcision may be associated (Freud 1933).

According to Freud (1913), children consider circumcision identical to castration. In psychoanalytic literature, there are relatively old publications reporting that procedures such as circumcision may lead to the resurgence of castration anxiety not only in the oedipal-phallic period, but also in other stages of sexual development and enhance homosexual tendencies (Fenichel 1945).

Anna Freud (1952) stated that surgical interventions to the child's body may activate the fantasies of being attacked and castrated in the child. According to Anna Freud, the meaning of surgical intervention lies not in the severity of the procedure, but in the type and depth of fantasies produced by it. For example, if there is aggression towards mother in the fantasies of the child, surgical procedure may be perceived by the child as the retaliation attack of the mother on his body. The procedure

may represent to the child a sadistic approach subordinating him to the role of passive sexual partner. In addition, this procedure may be perceived as punishment for oedipal envy, masturbation, penis envy and exhibitionist desires.

According to Anna Freud, if a surgical procedure is carried on the penis, castration anxiety is activated, irrespective of the stage of sexual development. The surgical procedure results in the realization of suppressed fantasies and hence leads to the doubling of the anxiety associated with them. Increased anxiety gives rise to an inner threat with which the child has to confront. In cases where defense mechanisms are adequate to cope with anxiety, the child responds to the procedure with neurotic explosions. In cases where the ego fails to cope with anxiety, the procedure may become traumatic (Freud 1952).

Unlike Freud, Nunberg (1947) stated that circumcision may have a favorable impact on the psychology of the child and supports identification with the father and induces masculine desires.

Circumcision and trauma

There are many publications maintaining that circumcision has traumatic effects on the psychology of children. Dr. Tractenberg, a Brazilian psychoanalyst, suggested that half of the men in the United States undergo circumcision in the newborn period, which is the consequence of unconscious fantasies of pediatricians, genitourinary surgeons, and *obstetricians* for transforming the American people into selected people who are hygienic, clean, infection and cancer-free and protected from the inclination for masturbation. The author also suggested that physicians and ignorant families are unaware of the sexual importance of the prepuce, and that in the infant, serious depression and asphyxia is observed after circumcision, which prevents the sucking of the baby and the emotional bonding between the infant and the mother. He also stated that although physicians claim that circumcision is a painless procedure, the trauma is permanent in the infant and that this memory is associated with the fear of castration in later periods of life. She also claimed that circumcision causes a loss of sexual potency in the majority of men and it may lead to the emergence of psychopathic, violent, or excessively masochistic behavior in the future (Tractenberg 1999). Consistent with Tractenberg, Denniston stated that circumcision impaired the bonding between mother and the child and that this was not only related to the disturbance in sucking, but circumcision may also destroy the child's confidence in the mother, which leads the individual to distrust women in general (Denniston 1999).

There are some studies reporting that that men dissatisfied with their circumcision often have feelings such as: anger, resentment towards parents, a sense of having been cheated, hurt, sadness, inferiority and embarrassment (Bensley and

Boyle 2000, Bigelow 1995, Goldman 1997). Some men circumcised in infancy or childhood without their consent have described their present feelings as a violation, torture, mutilation and sexual assault (Boyle et al. 2002, Hammond 1997, Hammond 1999).

Dr. Menage (1999) reported that post-traumatic stress disorder (PTSD) may occur after genital procedures such as gynecological operations and circumcision. The author stated that of eight males between the ages of 21-62 who underwent circumcision between the newborn period and the age of 7, six met PTSD criteria. Of the participants meeting PTSD criteria, 2 had other traumatic experiences (death of friend in an accident and a suicide). Menage reported that circumcision includes an imbalance of power between the one who carries out the procedure and the individual who undergoes circumcision, has aggressive and libidinal elements and threatens the sexual integrity of the child with cutting of sexual organ (1999). In the study of Menage, the number of subjects was very low, which makes it necessary to interpret the results cautiously.

Ramos and Boyle (2001) carried out an investigation on 1577 circumcised children from the Philippines between the ages of 11-16 who did not experience any trauma previously and used a PTSD questionnaire form, adapted from Watson et al.'s PTSD-1 (1991) scale, which consist of the components of re-experiencing, avoidance behavior and hyperarousal. They found the prevalence of PTSD to be 70% in children circumcised for cultural reasons and 51% in those circumcised for medical indications. They concluded that both ritual and medically motivated circumcision increase the risk of PTSD, but ritual circumcision carried higher risk of PTSD. Rhinehart (1999) reported that in an adult group comprising 43 cases, individuals circumcised in childhood displayed feelings of being terrified, anger and dissociation when confronted with dangerous situations in adulthood. The author suggested that psychotherapy is beneficial in improving the adverse psychological and behavioral consequences of circumcision but that preventing circumcision in the first place would be ideal. Similar to the study of Menage, this study has very few subjects, which again makes it necessary to interpret results cautiously.

Cansever (1965) administered projective tests (CAT, Rorschach, draw a person tests) to 12 children between the ages of 4-7, 1 month prior and 3 days after circumcision and concluded that circumcision is perceived by the child as an assault which abuses and sometimes completely destroys him. The author also reported that after circumcision, the ego was weakened and the capacity for coping efficiently with trauma and anxiety was reduced.

Boyle et al. (2002) reported that ritual circumcision appeared to be associated with increased aggressiveness, weakening of the ego, withdrawal, reduced functioning and adaptation and nightmares. Emotional numbing, avoidance of the topic of

circumcision and anger are potential long-term psychological consequences of the circumcision trauma. In extreme cases, there might be aggressive, violent and/or suicidal behavior (Boyle et al. 2002). Unlike these reports, Schlossberger et al. (1992) carried out a study on 59 circumcised and 14 uncircumcised men and investigated the perception of the subjects on their body images and did not find any significant difference between two groups in terms of body image.

Ozturk (1973) in a study on 30 children in Turkey, reported that behavioral and transient neurotic symptoms appeared in 19 children. It was also reported that children were afraid of their experiences and controlled their sexual organ to be sure that it was physically present (Ozturk 1973). Ozturk also stated that there were no religious or cultural grounds for carrying out circumcision at the phallic-oedipal stage, when castration fear of the child was markedly higher and added that the most suitable age for circumcision is during the newborn period, and if not possible, between the ages of 7-10 when the child can better evaluate the procedure and social values (Ozturk 2004). The author also suggested that the preparation of the child for the circumcision and how much information he had on circumcision was important with regard to the effects of circumcision. In Ozturk's opinion, children circumcised by deception and force without being told how the circumcision will be made and its social meaning and significance experienced much stronger fears of castration than the children who was prepared for circumcision. The author also stressed that in Turkey, circumcision represented masculinity and that the social impact restricted the negative consequences of circumcision. In Turkey, being uncircumcised is not accepted and boys are ashamed of this situation and feel themselves to be defective (Ozturk 1964, Ozturk 1973, Ozturk 2004). Likewise, Sahin et al. (2003) reported that circumcision is a social pressure and children do not feel themselves to be male until they are circumcised. Kirimli stressed that as a consequence of the circumcision, culture was inscribed on the body and "what is lost physically is gained socially" (Kirimli 2009).

CONCLUSION

Circumcision is a surgical intervention carried out frequently since the earliest periods of history. There are serious criticisms of the non-medical circumcision on the grounds that it is carried out at an age when the child cannot decide for himself, bodily integrity of the child is threatened and in consequence, psychological development of the child is influenced unfavorably. Many of the authors suggest that non-medical circumcision should be postponed until the age when the child can decide for himself.

On the other hand, it was also suggested that in evaluating the psychological consequences of a procedure such as circumcision, which has historical, religious and cultural

significance, social factors should also be taken into consideration. In Turkey, circumcision has quite positive connotations. Circumcision is usually carried out when the child enters latency and is interpreted as a passage from childhood to adulthood. It was stated that in Turkish society, not being circumcised is unacceptable and that boys feel ashamed of being uncircumcised and believe themselves defective (Ozturk 1973). In addition, the age of circumcision in Turkey is 7 or higher unlike Jews and western societies. The child is informed about his circumcision weeks before and receives information beforehand on the procedure he will undergo. Positive image of the circumcision in Turkey and the fact that children are prepared for this procedure with this positive perception and partial information decrease the anxiety of children regarding circumcision and increase their enthusiasm for it. In Turkey, such factors may limit the adverse effects of circumcision.

In conclusion, the authors think that, although there are many publications on the negative consequences of circumcision in

foreign literature, this subject should be interpreted again by systematic investigations considering the positive attributes, such as being masculine and coming of age. The usual performance of the procedure at ages when the child realizes the effect of circumcision to a certain extent and the evidence that non-circumcised males feel estranged as the majority of the population is circumcised suggests that children who undergo circumcision may not be adversely affected from the procedure. It can be seen that the majority of the publications in foreign literature on male circumcision do not rely on systematic investigations and that articles generally present personal experiences. The remaining publications are usually cross-sectional and include few subjects, being methodologically weak. Therefore, the authors have thought that the results of these studies, which harshly criticize circumcision, should be interpreted cautiously. Follow-up studies on children regarding circumcision, which is carried out frequently in Turkey, may make important contributions to our knowledge on the issue.

REFERENCES

- Anand KJ, Carr D (1989) The neuroanatomy, neurophysiology, and neurochemistry of pain, stress, and analgesia in newborns and children. *Pediatr Clin North Am*, 36 (4): 795-822.
- Austin PF (2010) Circumcision. *Curr Opin Urol*, 20 (4): 318-322.
- Bensley AG & Boyle GJ (2000) Physical, sexual and psychological effects of male infant circumcision: an exploratory survey. Understanding circumcision: a multidisciplinary approach to a multidimensional problem, Eds: Denniston GC, Hodges FM & Milos MF, 207-231.
- Bigelow J (1995) *The Joy of Uncircumcising. Exploring Circumcision : History, Myths, Psychology, Restoration, Sexual Pleasure, and Human Rights.* Hourglass Book Pub., 2. edition
- Boyle G, Goldman R, Svoboda ST et al. (2002) Male circumcision: Pain, trauma, psychosexual sequelae. *J Health Psychol*, 7(3): 329-343.
- British Medical Association (1996) Circumcision of male infants. Guidance For Doctors. <http://www.cirp.org/library/statements/bma/>
- Buick RG (1997) Guidelines on circumcision. No longer recommended routinely in North America. *BMJ*, 314: 1573.
- Burgu B, Aydogdu O, Tungal S et al. (2010) Circumcision: Pros and cons. *IJU*: 12-15.
- Cansever G (1965) Psychological effects of circumcision. *Br J Med Psychol*, 38: 321-331.
- Ceylan K, Koseoglu B, Yuksel Y et al. (2007) Severe complications of circumcision: an analysis of 48 cases. *J Pediatr Urol*, 3(1): 32-35.
- Cold CJ & Taylor JR (1999) The prepus. *BJUI*, 83 (Suppl. 1): 34-44.
- Committee on Bioethics (1995) Informed consent, parental permission, and assent in pediatric practice. *Pediatrics* 95: 314-317.
- Declaration of Geneva (1948) Physician's oath. Adopted by the General Assembly of World Medical Association. <http://www.mma.org.my/Portals/0/Declaration%20of%20Geneva.pdf>.
- Dekkers W, Hoffer C & Wils JP (2005) Scientific contribution, bodily integrity and male and female circumcision. *Med Health Care Philos*, 8(2): 179-191.
- Denniston GC (1999) An analysis of circumcision advocacy. Male and Female Circumcision, Medical, Legal and Ethical Considerations in Pediatric Practice. Eds: Denniston GC, Hodges FM & Milos MF, 221-240.
- Dunsmuir WD & Gordon EM (1999) The history of circumcision. *BJUI*, 83(Suppl. 1): 1-12.
- Elchalal U, Ben-ami B & Brzezinski A (1999) Female circumcision: The peril remains. *Brit J Urol Int*, 83: 103-108.
- Fenichel O (1945). *The Psychoanalytic Theory of Neurosis.* New York: Norton.
- Fiely D (2006) No longer routine: Circumcision rates decline nationally, albeit more slowly in Midwest. CIRP, www.cirp.org/news/columbusdispatch01-15-06/
- Fleiss PM (1997) The case against circumcision. *Mothering*, 85: 36-45.
- Freud A (1952) The role of bodily illness in the mental life of children. *Psychoanal Study Child*, 7: 69-81.
- Freud S (1905) *Der Witz und seine Beziehung zum Unbewussten.* Leipzig: Deuticke.
- Freud S (1933) *New Introductory Lectures on Psycho-Analysis.* W. W. Norton & Company: New York.
- Freud S (1913) *Totem and Taboo.* Taylor & Francis E-Library, 158.
- Gee WF & Ansell JS (1976) Neonatal circumcision: a ten year overview. *Pediatrics*, 32(7): 824-827.
- Goldman R (1997) *Circumcision: The hidden trauma.* Boston: Vanguard Publishers.
- Gollaher DL (2000) *Circumcision: A History of the World's Most Controversial Surgery,* New York: Basic Books.
- Goodmann J (1999) Jewish circumcision: an alternative perspective. *BJUI*, 83 (Suppl. 1): 22-27.
- Hammond T (1997) Long-term consequences of neonatal circumcision: a preliminary poll of circumcised males. *Sexual Mutilations: A Human Tragedy*, Eds: Denniston GC & Milos MF, New York, Plenum: 125-129.
- Hammond T (1999) Preliminary poll of men circumcised in infancy or childhood. *BJUI*, 83: 85-92.
- Kirimli Y (2009) Yetişkinliğe ilk adım: Sünnet. *İğdiş, Sünnet, Bedene Şiddet Kitabı* Eds: Naskali-Gursoy E, Koc A: 151-163.
- Lalonde A (1995) Clinical management of female genital mutilation must be handled with understanding compassion. *Cand Med Ass J*, 152: 949 -950.
- Lynch MI & Pryor JP (1993) Uncircumcision: a one stage procedure. *BJUI*, 72: 257-261.
- Magoha GA & Magoha OB (2000) Current global status of female genital mutilation: a review. *East Afr Med J*, 77(5): 268-272.
- Maguire P & Parkes CM (1998) Coping with loss: Surgery and loss of body parts. *BMJ*, 316: 1086-1088.

36. Menage J (1999) Post traumatic stress disorder after genital medical procedures. *Male and Female Circumcision, Medical, Legal and Ethical Considerations in Pediatric Practice*. Eds: Denniston GC., Hodges FM & Milos MF, 215-219.
37. Moses S, Bailey RC, Ronald AR (1998) Male circumcision: assessment of health benefits and risks. *Sex Transm Infect*, 74: 368-373.
38. Naskali-Gursoy E (2009) Giriş. *Sünnet. İğdiş, Sünnet, Bedene Şiddet Kitabı* Eds: Naskali-Gursoy E, Koc A, 1-2.
39. Nunberg H (1947) Circumcision and the problems of bisexuality. *Int J PsychoAnal*, 145-179.
40. Öztürk O (2004) Kişilik gelişimi. *Ruh Sağlığı ve Bozuklukları*. 10th Edition, Ankara, 75-97.
41. Öztürk O (1973) Ritual circumcision and castration anxiety. *Psychiatry*, 36(1): 49-59.
42. Öztürk O (1964) Sünnetin Psikolojik Etkileri Üzerine Bir Araştırma. *Doçentlik Tezi*, Hacettepe University.
43. Poland RI (1990) The question of routine neonatal circumcision. *NEJM*, 322. 1312-1315.
44. Price C (1999) Male non-therapeutic circumcision. The legal and ethical issues. *Male and Female Circumcision. Medical, Legal and Ethical Considerations in Pediatric Practice*. Eds. Denniston GC, Hodges FM & Milos MF, 425-55.
45. Ramos S & Boyle G J (2001) Ritual and medical circumcision among Filipino boys: Evidence of post-traumatic stress disorder. Eds: Denniston GC, Hodges FM & Milos MF. *Understanding circumcision: A multi-disciplinary approach to a multi-dimensional problem*. New York, Plenum, 253-270.
46. Rhinehart J (1999) Neonatal circumcision reconsidered. *TAJ*, 29(3): 215-221.
47. Sari N, Buyukunal C & Zulfikar B (1996) Circumcision ceremonies at the Ottoman Palace. *J Pediatr Surg*, 920-924.
48. Schlossberger N, Turne R & Irwin C (1992) Early adolescent knowledge and attitudes about circumcision: methods and implications for research. *J Adolesc Health* 13(4): 293-297.
49. Schroeder P (1994) Female Genital Mutilation - A form of child abuse. *N Engl J Med*, 331: 739-740.
50. Shah G, Susan L, Furcroy J (2009) Female circumcision: history, medical and psychological complications, and initiatives to eradicate this practice. *Can J Urol*, 16(2):4576-4579.
51. Singh-Grewal D, Macdessi J & Craig J (2005) Circumcision for the prevention of urinary tract infection in boys: a systematic review of randomised trials and observational studies. *Arch Dis Child*, 90: 853-858.
52. Solomon LM & Noll RC (2007) Male versus female genital alteration: Differences in legal, medical, and socioethical Responses. *Gend Med*, 4(2): 89-96.
53. Sahin F, Beyazova U & Akturk A (2003) Attitudes and practices regarding circumcision in Turkey. *Child Care Health Dev*, 29(4): 275-280.
54. Toubia N (1994) Female circumcision as a public health issue. *N Engl J Med*, 331(11):712-716.
55. Tractenberg M (1999) Psychoanalysis of circumcision. *Male and Female Circumcision, Medical, Legal and Ethical Considerations in Pediatric Practice*. Eds: Denniston GC., Hodges FM & Milos MF, 209-214.
56. Veale D (1996) Body dysmorphic disorder. A survey of fifty cases. *Br J Psychiatry*, 169(2): 196-201.
57. Verit A (2003) Circumcision phenomenon in Turkey as a traditional country: From past to present. Uroweb; 2003. www.cirp.org/library/cultural/turkey1/
58. Watson CG, Juba MP, Manifold V et al. (1991) The PTSD interview: rationale, description, reliability, and concurrent validity of a DSM-III-based technique. *J Clin Psychol*, 47(2):179-88.
59. Weiss HA, Larke N, Halperin D et al. (2010) Complications of circumcision in male neonates infants and children: a systematic review. *BMC Urol*, 10:2.
60. WHO (2006) Male circumcision: global trends and determinants of prevalence, safety and acceptability. http://whqlibdoc.who.int/publications/2007/9789241596169_eng.pdf.
61. WHO (2008) Eliminating female genital mutilation: an interagency statement. UNAIDS, UNDP, UNECA, UNESCO, UNFPA, UNHCHR, UNHCR, UNICEF, UNIFEM, WHO Geneva, Switzerland. http://www.unfpa.org/webdav/site/global/shared/documents/publications/2008/eliminating_fgm.pdf.
62. Zoske J (1998) Male circumcision: A gender perspective. *J Mens Stud*, 6(2):189-208.