

Prophylactic interventions on children: balancing human rights with public health

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J Med Ethics 2002;28:10–16

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Revised version received
26 April 2001
Accepted for publication
27 April 2001

Bioethics committees have issued guidelines that medical interventions should be permissible only in cases of clinically verifiable disease, deformity, or injury. Furthermore, once the existence of one or more of these requirements has been proven, the proposed therapeutic procedure must reasonably be expected to result in a net benefit to the patient. As an exception to this rule, some prophylactic interventions might be performed on individuals "in their best interests" or with the aim of averting an urgent and potentially calamitous public health danger. In order to invoke these exceptions, a stringent set of criteria must first be satisfied. Additionally, where the proposed prophylactic intervention is intended for children, who are unlikely to be able to provide a meaningfully informed consent, a heightened scrutiny of any such measures is required. We argue that children should not be subjected to prophylactic interventions "in their best interests" or for public health reasons when there exist effective and conservative alternative interventions, such as behavioural modification, that individuals could employ as competent adolescents or adults to avoid adverse health outcomes. Applying these criteria, we consider the specific examples of prophylactic mastectomy, immunisations, cosmetic ear surgery, and circumcision.

The use of prophylactic interventions in children has traditionally been justified on two grounds:

Best interest of the child. The benefits of the intervention to the child outweigh the harms to the child posed by the procedure.

Public health. The benefits of the intervention accrue primarily to the general society rather than to the individual, who is left with the burden of the harms generated by the intervention.

Some interventions are justified on both grounds, but, in every case, prophylactic medical interventions raise some difficult questions, pitting an individual's right to freedom from interference either against public health considerations or against often arbitrary assessments of his or her best interest. A number of interrelated criteria have evolved in response to the need to determine when prophylactic interventions will be permissible. We propose a formulation of these requirements, which we believe facilitates an analysis of all relevant factors and clarifies their interrelationship. These criteria are then applied to four illustrative examples taken from current practice: prophylactic mastectomy, immunisations, cosmetic ear surgery, and circumcision.

Children are uniquely vulnerable due to inability to provide informed consent

The issue of informed consent relative to the care of children has recently generated much discussion among ethicists.^{1–3} Children, and especially infants, are uniquely vulnerable in terms of prophylactic procedures because they are legally incompetent to give fully informed consent for medical procedures, are frequently unable to understand the implications of a proposed treatment, are more susceptible to coercion, and are often powerless to refuse treatment. Previously, doctors and parents were assumed to have the right to make all health care decisions for children. As society increasingly recognises that children have rights to autonomy and deserve special legal protections,⁴ the institutionalised medical routines and assumptions involving children have been called into question. For instance, according to current guidelines,⁵ proxy consent—that is, informed permission, of the parents of infants and young children is valid only in the

presence of immediate, life-threatening, clinically verifiable disease, deformity, or injury.

Conditions under which prophylactic medical interventions in "the best interest" of the child are permissible: we propose that medical interventions performed "in the best interest" of the child are permissible only provided that:

1. Clinically verifiable disease, deformity, or injury are present or are highly likely to be present in the future.
2. The proposed intervention must be the least invasive and most conservative treatment option.
3. Despite any harm that may be foreseen, there must be a reasonable expectation that the procedure will result in a net benefit to the patient while having at most a minimal negative impact on the patient's health.
4. The patient is competent to consent to the procedure and provides fully informed consent. Where a patient cannot provide informed consent, the procedure must be required by medical urgency, thereby excusing a lack of consent. Since reasonable and competent adults would normally refuse to give consent to medically unnecessary interventions (especially those that alter normal appearance and/or function), it must be assumed that children would also refuse if they had the capacity to understand their situation, formulate their wishes, and express them.^{6–8}
5. The intervention is part of standard practice, and its imposition is sanctioned by society for valid, urgent, and potentially calamitous health reasons that justify failure to obtain individual consent.
6. There is also a reasonable expectation that without the intervention the individual will be at high risk of developing the disease. A high risk for an untreated individual is not defined as a higher risk than a treated individual but an absolute vulnerability to disease—that is, an individual's chance of ever being diagnosed with the disease is close to 1 in 1. To put this in perspective, an American woman's chance of being diagnosed with breast cancer is 1 in 8 (12.6%), yet this figure is not said to justify prophylactic intervention—that is, routine neonatal mastectomy.

PROPHYLACTIC INTERVENTIONS FOR PUBLIC HEALTH BENEFIT

Prophylactic medical interventions are frequently performed on healthy individuals who have given informed consent. Provided certain stringent requirements are satisfied, they may also be performed without consent on incompetent minors. Under this exception to the usual consent requirement, procedures that fail to satisfy both the informed consent and the medical emergency requirements may nevertheless be permissible because of a countervailing, urgent, and significant benefit to the public health, or if they are in the interest of the child.

The most common example arises when the patient is at significant risk of contracting a life- and public health-threatening illness for which the proposed prophylaxis is a proven preventive. In order to safeguard individual liberties, the situations in which such procedures may be undertaken for public health benefit must meet the following requirements:

1. The danger to public health must be substantial.
2. The condition must have serious consequences if transmitted.
3. The effectiveness of the intervention in safeguarding the majority of the public against the particular malady must be well established.
4. The intervention must be the most appropriate, least invasive, and most conservative means of achieving the desired public health objective.
5. The individual must be provided with appreciable benefit not dependent on speculation about hypothetical future behaviours of the patient.
6. The burden to the individual's human rights and health must be balanced against and found to be substantially outweighed by the benefit to society in helping prevent a highly contagious disease or other potentially calamitous condition from affecting the public health.

These requirements are a necessary but not a sufficient basis for intervening. Due to a general presumption in favour of protection of individual freedoms, there are situations in which interventions satisfying these criteria will not be implemented.

Specific applications

In order to illustrate the analysis of prophylactic interventions on children, we present four examples of the application of these principles to analyses of particular fact situations. These examples have been chosen because they are controversial and problematic.

Application 1: Prophylactic mastectomy in 'high-risk' females

While highly controversial,⁹ this category of prophylactic intervention falls under the rubric of procedures justified by an appeal to the "best interest of the individual". As far as we know, prophylactic neonatal removal of the breast buds has not yet been carried out on young girls, but as the trend in research today is towards developing genetic screening for "breast cancer genes",¹⁰ this situation may only be temporarily hypothetical. Also, the strong advocacy of prophylactic mastectomy being voiced by some doctors may put some women and genetically targeted families at high risk of coercion and undue influence.¹¹

1. Presence of clinically verifiable disease, deformity, or injury

Clearly, a procedure can only be considered prophylactic in the absence of disease, deformity, injury, or medical urgency. Thus, prophylactic interventions of this nature fail to meet the primary requirement for medical interference. Even if a young

girl were born into a family with a history of breast cancer, or if genetic testing were to reveal that she carried the "breast cancer gene" no prophylactic intervention would be permissible until the individual reached the age of majority and could decide for herself, unless, of course, the patient could be shown to be at high risk of developing a rare cancer of the breast while still a child. Nevertheless, it is a modern fallacy that complex human diseases such as cancer can be caused by a single gene and that environmental and behavioural factors play no role in either the production or the prevention of diseases. A genetic predisposition to any particular disease is not the same thing as being at high risk of developing that disease. All children deserve special protections against supposedly prophylactic procedures imposed as a result of assessments of genetic predisposition.

2. Least invasive and most conservative treatment option

Mastectomy is severely invasive. If, however, an effective and safe form of immunisation were invented to prevent breast cancer, its routine use in infant females might be justified on the grounds that breast cancer is common and affects women indiscriminately. If behavioural factors were eventually established in the aetiology of breast cancer, such as avoiding post-menopausal obesity and regular physical activity,¹² routine neonatal immunisation would lose its validity.

3. Net benefit to the patient and minimal negative impact on the patient's health

A woman genetically at high risk for developing breast or ovarian cancer can expect an extra 2.9 to 5.3 years of life following removal of her breast and ovaries.¹³ Given the evident, albeit marginal benefit to the patient, the operation is permissible after fully informed consent is obtained. Potential patients must be provided with the crucial information that such a gain comes at the expense of major surgery, with its side effects, mutilation, and risks. For most women, however, a lifetime of disfigurement is too high a price to pay for a chance of having a few extra years of life.

4. Competence to consent to the procedure

After providing fully informed consent, an adult female at high risk of breast cancer may agree to prophylactic mastectomy. The prophylactic removal of the breasts from a minor female, however, would be impermissible because a minor cannot provide informed consent. Proxy consent would be invalid because the breasts of the minor are healthy and no medical emergency justifies the procedure.

5. Standard practice

Prophylactic mastectomy fails to qualify as a standard practice because it is highly controversial. Furthermore, its prophylactic use has not been sanctioned by society. Mastectomy is usually only employed as an extreme form of treatment for established cases of breast cancer.

6. Individual at high risk of developing the disease

A high risk for an untreated individual is not defined as a higher risk than a treated individual but an absolute vulnerability to disease. An individual's chance of ever being diagnosed with the disease must be close to 1 in 1. To put this in perspective, an American woman's chance of being diagnosed with breast cancer is 1 in 8 (12.6%), yet this figure does not justify prophylactic intervention—that is, routine neonatal mastectomy. There must also be a net benefit to the patient or to public health, and, at most, a minimal negative impact.

Assessment

Prophylactic mastectomy is problematic and has a number of grey areas. The best one can say is that it may be acceptable for competent adults who have given informed consent, free of

any force, coercion, manipulation, or undue influence from any source. Prophylactic mastectomy cannot be sanctioned on infants or children who have not yet attained legal competence or the age of majority.

Application 2: Routine immunisation

As a prophylactic intervention performed in the interest of public health rather than in the “best interest” of the individual, routine immunisation may be urged by society under the belief that it prevents the transmission of contagious diseases. While somewhat controversial, the practice is none the less widely believed to be a legitimate prophylactic medical procedure.

1. *The danger to public health must be substantial*

Any programme of prophylactic immunisation must address a substantial public health danger. Practically speaking, this criterion will generally be satisfied only in the case of diseases that are highly contagious, are spread through the air or through casual, impersonal, non-sexual contact, and have high morbidity and mortality.

2. *The condition must have serious consequences if transmitted.*

This requirement is only satisfied in the cases of diseases that have a high rate of morbidity or mortality. There are, however, grey areas. Although administration of the varicella vaccine to minors has been recommended by professional societies, such as the American Academy of Pediatrics (AAP),¹⁴ one could question its advisability in light of the low morbidity and mortality of chickenpox and the unknown long term efficacy of the vaccine. The low acceptance rate of the varicella vaccine by both physicians and parents may reflect the impression that the minimal individual health benefits do not justify the trauma, immune system interference, and costs associated with an additional injection.

Also, in a majority of Western European countries, children are now routinely immunised against hepatitis B, a disease that is spread through sexual contact and intravenous (IV) drug use.¹⁵ Hepatitis B is the most important infectious occupational disease for health care workers,¹⁶ yet the high risk of being infected is proportional to the prevalence of virus carriers in the assisted population. Rather than immunise everyone in a population where hepatitis B is rare and concentrated in the small population of IV drug users and those who engage in unsafe sex, health and human rights can be better protected through focused intervention, that is, by offering immunisation to all health care workers in high-risk areas and by offering or even compelling immunisation to high-risk populations, such as IV drug users, prostitutes, and immigrants or refugees from areas where hepatitis B is either endemic or epidemic.¹⁷ Forcing immunisation on the majority of a population that is not at risk of acquiring or transmitting such sexually transmitted diseases (STDs) constitutes a human rights burden.

3. *Effectiveness of the intervention*

The effectiveness of many vaccinations in safeguarding the majority of the public against the diseases in question is well established. The vaccine against smallpox, for instance, was responsible for eradicating this disease from human populations on a global scale.

4. *Invasiveness of the intervention*

At present, immunisation is the least invasive and most conservative means of preventing the contraction and transmission of those highly contagious diseases for which children are routinely vaccinated. There are, however, recognised and much debated complications following measles immunisation, especially the combined mumps, measles, rubella (MMR) vaccine, which, although unusual, can be very serious.^{18 19} Still, immunisation does not normally result in the

loss, diminishment, alteration, or change in the appearance of any body part. Improvements in delivery and design of immunisation, however, is to be encouraged to reduce the risks.

5. *Appreciable benefit and speculation about hypothetical future behaviours*

Virtual immunity to the diseases for which children are vaccinated is an appreciable benefit. Still, this analysis will clearly bar involuntary neonatal prophylactic procedures calculated to prevent STDs, which are normally contracted only by adults as a result of lifestyle choices, because it is unethical to base decisions on a speculation about a child’s future lifestyle choices. For example, an immunisation against HIV for an adult who chooses to engage in high-risk sexual behaviour might permissibly be compelled, under certain circumstances. Yet, it would be impermissible to immunise forcibly an adult who is without a history of high-risk sexual behaviour based on a speculation that the adult might enter into such activities in the future. If, however, a very effective and safe HIV vaccine were developed, compulsory neonatal immunisation might be argued to prevent accidental exposures during childhood from needlestick injuries or from transfusion with HIV-infected blood. These situations, however, are rare and preventable. Improving standards of hygiene, waste disposal, and maintaining an HIV-free blood bank are all achievable goals, and, indeed, such standards are supposed to be maintained in all hospitals.

6. *Benefit to society must outweigh the individual’s human rights burden*

There is a definite human rights burden posed by compulsory vaccination. The targeted individual’s autonomy and right of refusal have been violated. Still, as vaccination does not alter the structure, appearance, or function of any body part, its human rights burden is minimal.

Assessment

Immunisation satisfies most of the requirements for intervention, but the infliction of risk on a minor is unacceptable when the disease in question can be reasonably avoided through behavioural choices. Educational programmes designed to assist adults to make choices that preserve them from contracting avoidable diseases are the most ethical means available for reducing the incidence of those diseases while simultaneously respecting human rights.

Application 3: Cosmetic ear surgery

Cosmetic surgery may be defined as surgery performed in compliance with personal motivations of the patient that are not based on any objective medical need. As there is no public health benefit to cosmetic surgery, this intervention falls into the category of procedures that are said to be in the “best interest” of the individual, although such a justification for intervention is difficult to prove in many cases.

1. *Presence of clinically verifiable disease, deformity, or injury*

A cosmetic procedure is permissible on an incompetent child only where intended for the correction of clinically verifiable disease, deformity, or injury, such as hare-lip, clubfoot, or any unequivocal congenital or trauma-related defect. For this reason, cosmetic surgery to “correct” the facial features of Down’s syndrome, which involves substantial surgery and no proven benefit, has drawn sharp criticism.²⁰

As in many ethical debates, however, there are a number of “grey areas” where absolute pronouncements are difficult to make. For instance, parents may seek surgery on behalf of their children for “bat ears”. Surgery of this type is often claimed as being “in the best interest of the child” because, allegedly, a child with protruding ears will be prone to teasing in school. This argument, however, is specious and represents

a projection onto the child of parental anxieties over conformity. Teasing is not a medical problem. Likewise, such surgery has no medical value, and, if performed, necessarily violates the human rights of the child.

It must be acknowledged that ears naturally come in a variety of shapes and sizes. They also stick out at a wide variety of angles. Furthermore, it cannot be predicted how a child will feel about his own ears. He may prefer ears that stick out. Similarly, there is no guarantee that a child with such ears will be teased and, in the event he is, that he will care. A child who suffers from the compulsion to tease will always find something to tease another child about. In any event, teasing is more appropriately handled by discipline and psychological counselling for the teaser rather than by ill-conceived attempts at pre-emptive surgery for the potential victim of teasing.

2. Least invasive and most conservative treatment option.

It is in the patient's best interest to be spared radical cosmetic surgical procedure when a more conservative surgical technique would accomplish the same goals. In the case of bat ears, the most conservative treatment option is to do nothing because the surgery can always be performed later, should a child with bat ears express a desire to undergo it and as long as he is made aware of the surgical risks involved.

Nevertheless, little can be said against parents taking matters into their own hands and handling the issue non-surgically by taping the infant's ears back to the scalp to encourage them to grow in a way that conforms to societal standards. This measure is effective, avoids the imposition of surgical risk on an unconsenting minor, does not violate bodily integrity, and respects human rights. Likewise, the alteration of the body resulting from this non-surgical intervention is minimal because the result is consistent with natural appearance and configuration of the ears of a significant number of people.

3. Net benefit to the patient and minimal negative impact on the patient's health

All surgery entails risks, drawbacks, and mutilation to various degrees. The replacement of bat ears by a scar may not be acceptable to many competent adults. Since it is difficult to predict how a child might feel, when he grows up, about having had a scar imposed on him in exchange for such a minor cosmetic gain, any decisions that can be delayed without endangering the health of the child should be delayed until the child can make a decision for himself upon attaining the legal age of consent or the age of majority.

4. Competence to consent to the procedure

Cosmetic surgery may be validly performed on adults who have freely given informed consent when the surgery may be reasonably expected to result in a net benefit to the patient, even though that benefit may be largely subjective. Parental permission on behalf of a minor or even an incompetent minor's own assent is clearly invalid in cases of non-therapeutic cosmetic surgery.

5. Standard practice

There are a variety of surgical techniques for changing the angle at which ears protrude from the head. One technique may be best suited to a particular conformation of the ear. Clearly, it is in the patient's best interest to undergo the surgery that best corrects his particular condition and best achieves his cosmetic goals. For this reason, it is particularly important that an incompetent child's autonomy be respected until which time he can express an opinion on how he wants his ears to look following the surgery.

6. Individual at high risk of developing the disease

This is a potential grey area. Bat ears do not place the individual at risk of contracting any disease, but some

congenital malformations that cosmetic surgery can correct do cause health problems.

Assessment

In conclusion, cosmetic surgery is a grey area that requires specific application of the above criteria for individual cases. In all situations, however, heightened scrutiny must be placed on any decisions involving incompetent minors in order to protect them from needless interference stemming from the projected anxieties of parents. Any non-therapeutic cosmetic procedure must be delayed until the child can be involved in the decision making process. Issues of body-image, conformity, and self confidence are deeply personal and individualistic. Children are also especially susceptible to force, coercion, manipulation or undue influence. For this reason, children deserve special protections against anyone else, especially parents, projecting onto them anxieties and aesthetic preferences which the child may not necessarily share. Consequently, surgery to "correct" protruding ears should only be contemplated if the child has explicitly and freely expressed a desire for it.

Application 4: Neonatal circumcision

Another example of an allegedly prophylactic medical procedure is routine neonatal male circumcision. Despite the obvious ethical problems they pose, the ritual circumcision practices of Muslims, Jews, and various indigenous African tribes are not under consideration here, as these rituals neither have medical objectives nor usually take place within the provenance of the health care system. Where medical involvement does take place in these rites, or where medical justifications are proffered as an additional defence for religious blood rites, the following discussion must necessarily apply.

Despite its ubiquity in the US, routine neonatal circumcision is a highly controversial procedure that has drawn sharp criticism from ethicists and medicolegal experts.²¹⁻²⁸ Advocates of neonatal circumcision have claimed that the amputation of the healthy foreskin from male neonates is a legitimate prophylactic procedure that is akin to immunisation and is performed on public health grounds.²⁹ It is similarly claimed that circumcision is in the best interest of the individual affected. As a procedure whose supporting rhetoric bridges both categories of prophylactic intervention, it deserves special analysis. It also deserves special consideration because of its ubiquity in the US and because of the unbelievably long list of diseases it has traditionally been claimed to prevent.

Prophylactic circumcision: The 'best interest' of the individual argument

Since its introduction as a medical procedure in the 19th century, the orthodox medical profession has most frequently employed male circumcision as a cure and preventive for such "diseases" as masturbation, epilepsy, insanity, hip-joint disease, enuresis, involuntary nocturnal seminal emissions, phimosis, redundant prepuce, prolapse of the rectum, tuberculosis, feeble-mindedness, strabismus, convulsions, prostate cancer, and night terrors, to name just a few.³⁰ On these and similarly questionable grounds, it was introduced as a routine and quasi-compulsory procedure during the Cold War era. The allegedly medical rationale for mass circumcision are continuously shifting, and, as a reflection of this, the 1999 American Academy of Pediatrics policy report on circumcision lists urinary tract infection (UTI), penile cancer, and phimosis as being among the diseases for which circumcision is supposed to be preventive.³¹ Advocates of mass circumcision claim that the supposed decrease in the rate of these diseases among circumcised males renders circumcision as being in the best interest in the individual, irrespective of all other medical and ethical considerations.

1. Presence of clinically verifiable disease, deformity, or injury

Routine circumcision is, by definition, performed on a healthy organ in the absence of disease, deformity or injury. It is not in the best interest of the individual to undergo surgery for a disease he does not have and is not likely to develop. Therefore, routine circumcision fails to meet the primary requirement for intervention.

2. Least invasive and most conservative treatment option

Circumcision is attended by risks, disadvantages, dangers, and drawbacks. Although the complication rate from routine circumcision is low,³² the potential for these complications to be catastrophic, mutilatory, infective or haemorrhagic is very high.³³ The tragedy of death, gangrene, or total and partial amputation of the penis are some of the possible complications of routine circumcision that cannot be justified on any grounds, either in terms of public health gains or the best interest of the child.

3. Net benefit to the patient and minimal negative impact on the patient's health

Cost-utility analyses have determined that neonatal circumcision results in an overall negative impact on health.^{34–35} Also, circumcision advocacy has traditionally been based on ambiguous and unimpressive data, opinions, and the exclusion of contrary evidence. It ignores the large literature demonstrating the unique anatomical and physiological benefits offered by the prepuce and intact penis. For instance, anatomical investigations have confirmed the rich erogenous innervation and concomitant sexual functions of the prepuce.^{36–38} Thus, because of the loss of a protective, sensory, and functional structure, the impact on the individual's health and human rights is significantly negative.

4. Competence to consent to the procedure

An infant is unable to provide informed consent. Proxy consent is invalid because of the lack of medical necessity. Also, the US Department of Health has stated that a competent "patient has a fundamental right to grant or withhold consent prior to examination or treatment" and "refusal must be respected".³⁹ As an infant's state of incompetence is temporary, it is unethical to take advantage of his inability to refuse and to submit him to a medically unnecessary surgery that a competent adult might refuse.

Parental anxieties that a genitally intact son may be teased by his peers in school are illegitimate grounds for overriding the individual's right to autonomy. Parents are usually projecting onto their children their own remembered traumas suffered as a result of obsolete institutionalised humiliations, such as compulsory communal showering in school—a practice that has largely been abandoned, even though parents may be unaware of this change. Parents have responsibilities towards, not rights over, their children.⁶ Thus, in the absence of urgent medical necessity, they have no right to arrange the amputation of a healthy part of their child's body. As the one who must live with the consequences of the surgery, the child must be accorded the dignity of a choice over the appearance and function of such an intimate part of his body. Also, since there is no guarantee that an individual would be glad that his foreskin had been amputated during infancy or childhood, the ethical default position must be to protect him from circumcision until he reaches adulthood, when he can make an informed and uncoerced decision for himself. A genitally intact adult can always elect to be circumcised: a circumcised individual, however, has had his autonomy and sovereignty violated in this respect and has been left without any options.

5. Standard practice

Routine neonatal circumcision may be common practice in the US, but it is not a standard practice, as it is highly controversial, and has been rejected by the health care systems of all

other Western countries. It is not a standard of practice to subject healthy patients to surgeries for diseases they do not have or cannot be reasonably expected to contract. The standard of optimal health goals must be derived from the natural and intact human body and not from a body that has been artificially reconfigured, surgically diminished, or structurally altered in any way.

6. Individual at high risk of developing the disease

Failure to obtain individual consent cannot be warranted because an individual who has been protected from circumcision is at extremely low risk of developing the diseases in question. Even according to the controversial studies used to rationalise neonatal circumcision as a means of reducing the incidence of UTI, the rate of UTI for intact infants is only 0.154% as opposed to 0.034% for circumcised infants.⁴⁰ Although the difference in rates is only 0.12 percentage points, it has been made to appear significant by being stated in terms of a 3.7% increase. Objective studies, however, have established causative links between UTI and poor perineal hygiene,⁴¹ lack of breast feeding,⁴² forced retraction of the immature foreskin,⁴³ and use of soap in the preputial pouch.⁴⁴ Thus, UTI can be more conservatively prevented by improvements in parenting skills. The standard of care is to treat UTI with readily available antibiotics. Allegedly prophylactic surgery cannot be justified.

Phimosis, defined as a juvenile prepuce that is not yet developmentally ready to retract, is not a disease at all, and its effect on health has been greatly exaggerated, deriving from 19th century phobias about masturbation.⁴⁵ Genuine cases of balanitis xerotica obliterans (BXO) that cause non-retractability due to cicatricial preputial stenosis are exceedingly rare, affecting only 0.6% of boys by their 15th birthday.⁴⁶ Most importantly, these can be pharmacologically treated with a high rate of success.⁴⁷ Circumcision, thus, is an inappropriate treatment for BXO/phimosis.

Penile cancer is one of the rarest male cancers and is strongly associated with lifestyle choices, such as smoking, poor hygiene, a history of STD infection, human papilloma virus, and multiple sex partners.⁴⁸ Furthermore, the lifetime risk of a US male, who is likely to be circumcised, ever being diagnosed with penile cancer is 1 in 1,437,⁴⁹ yet the rate is even lower in Denmark (1 in 1,694),⁵⁰ where neonatal circumcision is not practised. These risks are strikingly smaller than the 1 in 8 lifetime risk for breast cancer among US females. Thus, only an insignificant fraction of adult males are at risk of developing the diseases for which circumcision is either supposed to be preventive (penile cancer) or for which circumcision is wrongly considered to be the best means of treatment (BXO/phimosis). Finally, the proven behavioural factors involved in the aetiology of penile cancer indicate that this disease can be reasonably avoided by cultivating healthful behaviours, such as avoiding smoking, multiple sex partners, poor hygiene, and STD infections.

Prophylactic circumcision as a public health measure

Here, we will only consider those infectious and contagious diseases associated with circumcision that concern public health, such as HIV and other STDs, listed by the AAP policy report.³¹

1. The danger to public health must be substantial

The danger to public health posed by the STDs for which circumcision is supposed to be useful is insubstantial. Because the sexual transmission of HIV and other STDs is usually dependent upon adult lifestyle choices, a programme of amputating a healthy part of the penis from an unconsenting minor as a means of reducing the incidence of STDs is unethical. In marked contrast, the contraction of the diseases for which children are routinely immunised, such as polio and

measles, is independent of lifestyle choices and is determined by such accidental, unforeseeable, and casual situations as unknowingly breathing the same air as an infected person.

2. The condition must have serious consequences if transmitted
With the current exception of HIV, the STDs whose incidence circumcision is supposed to reduce have few serious consequences if transmitted. Antibiotics are very effective at treating most STDs. Genital herpes, may be incurable, but its morbidity is negligible at best, and it is more common among circumcised than genitally intact US males.³¹

3. Effectiveness of the intervention

The effectiveness of circumcision in safeguarding public health is either negligible or non-existent. The routine circumcision experiment, which has been conducted since the 1950s in the US has failed to prevent the US from achieving the dubious distinction as the developed country with the highest rates of STDs³² and HIV.³³ The allegations of efficacy are based on poorly designed and poorly executed ad hoc studies performed by circumcision advocates whose bias and conflict of interest alone should disqualify such "studies" from serious consideration. Moreover, objective scientists have also cast serious doubts upon the genuineness of the surgery's alleged medical benefits.⁵⁴⁻⁵⁸

4. Invasiveness of the intervention

Amputating part of the penis is the most invasive method of attempting to achieve the desired public health objective. Circumcision desensitises the penis and immobilises whatever shaft skin remains, thereby destroying the natural and normal means of erotic stimulation.³⁹ The stated public health objectives could be achieved by more conservative means, such as improved sex education, making condoms freely available, or regulating prostitution.

5. Appreciable benefit and speculation about hypothetical future behaviours

The alleged benefits of circumcision are not appreciable to the individual because to reap the alleged benefits of the procedure, the individual would have to disregard safe sex warnings and deliberately engage in unsafe sexual practices with infected individuals. Even then, because the claimed benefit of circumcision under these circumstances is not statistically significant,⁶⁰ there is no meaningful way to calculate the alleged benefits from circumcision to an irresponsible individual. Most importantly, the public health rationale for neonatal circumcision is rooted in the unjustifiable speculation that the child will grow up to be sexually irresponsible.

6. Benefit to society must outweigh the individual's human rights burden

No substantial benefit to public health has been demonstrated for neonatal circumcision. Also, the human rights burden to the individual posed by circumcision is severe because it violates the human right to autonomy and bodily integrity, entails the loss of a normal part of the body, alters the appearance of the penis, and impairs sexual, protective, and immunological functions.

Assessment

Routine circumcision fails to satisfy the criteria necessary to justify it either as a public health measure or a procedure performed in the best interest of the individual. The human rights burden posed to the individual is severe and is not outweighed by any appreciable public health gain.

CONCLUSION

Prophylactic procedures may be permitted where the danger to public health is substantial, the condition has critical

consequences if transmitted, the proposed procedure's effectiveness is well established, the proposed procedure is an appropriate means of achieving the desired public health objective, some tangible and non-speculative health benefit is provided to the individual patient by the treatment, and the public health benefit outweighs the individual burden posed by the procedure. Allegedly prophylactic interventions therefore are impermissible if they are performed on minors without informed consent or when the human rights burden of the intervention clearly exceeds the risk to public health posed by an untreated individual. Furthermore, prophylactic interventions on children are unethical when contraction of the disease in question can be reasonably avoided through appropriate adult behavioural choices.

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