



SPECIAL TOPICI

Prioritization for Plastic Surgery Procedures Aimed to Improve Quality of Life: Moral Considerations

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Background: Different health conditions are treated in a Plastic Surgery unit, including those cases whose main goal is to enable patients to feel and integrate better within society and therefore improving quality of life, rather then physical functions.

Methods: We discuss moral principles that can be used as a guide for health professionals to revise and create policies for plastic surgery patients presenting with non–life-threatening conditions.

Results: A specific anatomical feature is not always an indicator of patient's well-being and quality of life, and therefore it cannot be used as the sole parameter to identify the worst-off and prioritize the provision of health care. A policy should identify who preoperatively are the worst-off and come to some plausible measure of how much they can be expected to benefit from an operation. Policies that do not track these principles in any reliable way can cause discrimination.

Conclusions: A patient-centered operating system and patient's informed preferences might be implemented in the process of prioritizing health. In circumstances when the effectiveness of a specific treatment is unproven, professionals should not make assumptions based on their own values. (*Plast Reconstr Surg Glob Open 2017;5:e1437; doi: 10.1097/GOX.00000000000001437; Published online 3 August 2017.*)

INTRODUCTION

Different health conditions, with variable degree of mortality and morbidity, are treated in a typical Plastic Surgery unit. Cancers and burns might represent life-threatening conditions, whereas limb traumas and congenital malformations represent mostly conditions where the scope of the surgery is to restore the missing function and improve the quality of life (QoL). A distinctive situation is represented by those cases whose changing the underlying anatomy have the effect of enabling patients to feel better, to integrate within society, rather than restoring the physical function. Examples include trans-women seeking facial feminization surgery (FFS), trans-women and cis-women seeking breast augmentation, post-breast cancer women seeking breast reconstruction, post-bariatric (PB) patients seeking body contouring surgery, and pa-

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tients with body integrity identity disorder (BIID) seeking limb amputation. With the increased demand for these procedures (e.g., gender confirmation surgery¹ and bariatric surgery^{2,3}), and scarcity of resources, policy makers need to create or update policies to offer a "just care." This means, to do as much good as possible, primarily to give priority to life saving over life enhancing,^{4,5} then to give priority to the worst-off^{6,7}; therefore, policies that did better would have to be able to identify those who are worst-off preoperatively and come to some plausible measure of how much these can benefit from an operation.

To give examples of new policies, the Department of Health and Human Services in the United States (Patient Protection and Affordable Care Act⁸—Obama's health care reform), the National Health Service in the United Kingdom^{9,10} and Department of Health in Sweden¹¹ are writing documents with the aim to approve, or disapprove, specific procedures requested by transsexual patients. However, these policies are not specific enough on grading priority.

Current policies might be affected by the personal interest of various stakeholders, as for example patients' advocates, physicians, and politicians; the resources available within a specific context; the lack of knowledge on patient-reported

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measurements following a specific procedure; and, finally, the old paternalistic attitude of the caregivers, and the society in general, toward the individual requiring a specific care, who is usually a minority in comparison with the general population. Depending on the type of health system (e.g., insurance based, taxation based), these policies are both affecting, and similarly are affected by, the economy.

To date, approval policies for plastic surgery procedures vary by region and institution: (1) FFS might not be offered at all (United Kingdom, United States), or it might be offered for very selected cases (Sweden); (2) breast surgery in trans-women might not be offered at all (United Kingdom), or it might be offered only when the hormonal therapy has not given to the patient an "adequate" size, or the patient is presenting with a considerable size disproportion between breast and chest (this means that trans-women with a B/C breast cup and very large chest might be approved for surgery); breast surgery in cis-women might not be offered at all (United Kingdom), or it might be offered when the patient is presenting an "underdevelopment" of breast tissue (i.e., ciswomen with a B/C breast cup and very large chest are never approved for surgery); (3) PB patients are approved for abdominal skin excision, if the skin excess is more than 3cm but not if the same PB patients were requesting skin excision on flanks, thighs, or arms [Sahlgrenska University Hospital (SUH), Gothenburg, Sweden]; (4) BIID patients requesting limb amputation is matter of extensive ethical discussion, and no settled policy:¹² some institutions are approving patients for surgery after mental health screening, whereas other institutions are not allowing it, either because of the subsequent functional damage—amputation will cause a physical handicap despite the possible mental health improvement—or for lack of priority in circumstances of limited resources.

Table 1 summarizes these conditions.

SCOPE OF THE ARTICLE

The scope of this article is to identify and discuss moral principles that can be used as a guide for health professionals to revise practices and create policies for plastic surgery patients presenting with non-life-threatening conditions.

First, we will discuss health states for plastic surgery patients. Second, we will discuss how to determine the worst-off, and we will criticize how existing practices and prioritization processes can cause discrimination. Finally, we will propose to implement a patient-centered operating system, highlighting the role of patient's informed preferences, and future opportunities when ranking well-being.

It is out of the scope of this article to discuss costs. Once moral principles have been discussed and accepted, it is up to each government to set its own threshold for providing care.

ASSESSING ANATOMICAL FEATURES VERSUS HEALTH STATE AND WELL-BEING

Questionnaires such as EuroQol 5 Dimensions Questionnaire, 36-Item Short Form Health Survey, Activities of Daily Living, or the Health Utilities Index can be used to assess QoL in non-life-threatening plastic surgery patients. However, most of these questionnaires are not specific to a given condition. Modern literature, instead, is proposing body part-specific questionnaires, as: Breast-Q and Breast-Related Symptoms Questionnaire for the breast; Face-Q for the face; Body-Q for the body; Sahlgrenska Excess Skin Questionnaire for skin excess after weight loss; Body Image Scale, and so on. An issue on validity remains: can the same breast questionnaire be used for, and to compare different groups of patients (e.g., trans-, cis-, and post-breast cancer women) presenting any breast anomaly? Currently, there is no scientific answer to this question; therefore, different groups of patients can only be compared by using non-condition-specific questionnaires on QoL.

To date, these questionnaires have been used mostly as evaluating methods for the outcomes of a procedure (including pain, psychosocial well-being, self-esteem, and perceived health), rather than instruments to determine priority. When approving the above-mentioned patients for surgery, in fact, physicians are adopting practices that are not taking into consideration general health states at all: common practice is instead to assess the anatomical features of the patient. Here are some examples.

Table 1. Some of the Medical Conditions Belonging to the Plastic Surgery Area, which Are Characterized by the Fact that the Requested Surgeries Are Not Aimed Uniquely (or at all) to Reduce a Physical Symptom or to Restore a Physical Function but, by Changing the Anatomy, Have the Effect to Improve QoL

Patients	Physical Symptoms/ Functional Disabilities	Psychosocial Impairment	Evidence-Based Efficacy of the Surgical Therapy
Trans-women FFS	No	Possible	To be determined, possible
Trans-women breast augmentation	No	Possible	To be determined, possible
Cis-women breast augmentation	No	Possible	Proven
Post-breast cancer women/breast reconstruction	No (apart for the ability to breast feed in some women, which cannot be restored	Possible	Proven
	by surgery)		
PB patients	Possible	Possible	Proven
BIID	No	Possible	Proven

A large subjectivity exists for all these conditions: different individuals presenting with the same diagnosis and health states might experience different well-beings. Within the conditions hereby considered, PB patients are the only ones that can present with physical symptoms.³⁶ Psychosocial impairment is possible in all.^{1-3,12,13,37,38} None of these conditions are life threatening, unless the patients are experiencing such bad QoL to the point of becoming suicidal, as reported for GD^{15,24,25} and BIID.¹² For all these procedures, improvement in QoL is possible, ^{1-3,12,13,36-38} in spite of the drawbacks of the surgery, which can extend from simple scarring or postoperative pain to more important issues such as urinary problems for GD patients¹³ or physical impairment as following limb amputation in patients affected by BIID.¹² Both post-breast cancer women and cis-women with inadequate breast development can present with bad well-being ("feeling of shame" because impossibility of the expression of their femininity), possibly preventing them from a full integration in social relationships.^{37,38} The efficacy of the surgical therapy has been proven in some, ^{1-3,12,13,36-38} but not all of these conditions.

- 1) FFS: the Swedish Department of Health and Welfare, which has recently allowed government hospitals to offer FFS,¹¹ does not indicate which patients to approve for surgery: surgeons should build up their own criteria to approve patients for surgery. However, surgeons have no validated instruments to assess transsexual patients' faces to determine how a specific face is affecting the patient's well-being and to foresee improvement postoperatively. For other gender confirmation surgeries (such as vaginoplasty and phalloplasty), surgeons are relying on the assessment of the mental health professionals.^{1,13}
- 2) For trans-, cis-, and post-breast cancer women requesting breast surgery, only anatomical measurements, such as breast size and disproportion between breast and chest wall, are taken into account. No instrument is used to assess how a specific breast is affecting patients' well-being or to predict how surgery will improve patient's QoL.
- 3) When assessing PB patients for approving abdominoplasty, surgeons commonly measure the skin excess and, if it is over a certain minimum (e.g., 3cm at SUH), surgery is approved. When, instead, the skin excess relates to other parts of the body (e.g., arms, flanks, thighs), surgery is denied, because surgery to these specific body parts is not providing any functional improvement, nor a reduction of physical symptoms, but simply a "cosmetic" advantage. This approach appears to be paternalistic, 14 and it leads to a mistaken judgment: surgeons are making assumption on patients' well-being simply accordingly to the amount and location of the skin excess, without considering which specific skin excess matters to patients. At SUH, we are planning to implement the Sahlgrenska Excess Skin Questionnaire (SESQ),3 which can verify discomfort from the patient perspective regarding all body parts, into
- 4) For BIID, some centers might attempt to measure the degree of dysphoria during the patient assessment and do their own ethical evaluations when approving, or not, for surgery.¹²

If we use the EuroQol 5 Dimensions questionnaire¹⁵ (which has 5 dimensions: mobility, self-care, usual activity, pain/discomfort, and anxiety-depression) to make comparisons among these conditions, the following considerations can be made: mobility and self-care seem to be good in all groups, with a possible reduction in PB patients^{2,3}; pain and discomfort are absent in all groups, with the exception of some PB patients^{2,3}; anxiety and depression seem to be relevant in all groups, with possible consequences in daily activities. ^{1-3,12} Therefore, it results that key aspects are the possible physical morbidity in PB patients and the mental health (anxiety-depression) state in all these groups.

Many authors¹⁶⁻¹⁸ advocate a comprehensive view of the patients' well-being, not simply a measurement of health states, and therefore all the factors affecting QoL (independently by health), such as tastes, prevailing individual

and social values, economic situations, lack of access to education, autonomy, personal relationships, knowledge, physical coercion should all be considered. Indeed, this comprehensive view of patient's well-being is not as measurable quantitatively as health states are. Hausman^{19–21} highlights how the environment, nature, patients' choices, and social factors strongly influence well-being, whereas Kaplan and Anderson²² focus on preferences or quality judgments associated with one's own function level and adjusted for symptoms or problem. Regardless of the terminology we use, our aim is to do good for people, and to do so we need to have a way to measure people's health-related well-being or "what makes someone's life go best."²³

It follows that, when assessing health with the aim of prioritizing health care provision, professionals should focus on questionnaires that are taking into account tastes, individual and social values, environment, patients' choices, and so on.

Differently, a practice limited to assess only specific anatomical features is likely to miss the worst-off, and therefore it might cause discrimination.

Prioritization: The Worst-Off and the Plurality of the Disadvantage

At a first examination of the conditions presented, gender dysphoria (GD) and BIID are the only 2 conditions that can be life-threatening because of the suicidal risk. ^{12,13,24,25} As such, according to the opinion of many professionals, ^{4,5} these conditions should be prioritized: as "we ought to give priority to life saving over life enhancing," followed by giving priority to the worse-off. ^{6,7}

For BIID patients, the improvement of the mental status following the amputation massively outweighs the functional disability that will make the patient physically less adaptable to the society. Similarly, GD patients might become less useful to the society, even resulting in a socio-economic burden, due to the continuous care needed (including surgeries); instead, they regard the long therapeutic process as more than compensated for by the psychological gain of having their body matching their identity. Contrarily, PB patients following abdominoplasty can function better at physical level and therefore adapt better to the society (e.g., by working).

The role of a subject within the society, described as the socio-economic status, for many health economists and policy makers, is as relevant as physical morbidity and mental health status when prioritizing care. Although the patients' socio-economic status has been taken into consideration in Sweden when approving patients for some medical treatments for heart disease, for the susually not considered when assessing non-life-threatening plastic surgery conditions.

In the patient groups presented, social roles and inequalities, before and after surgeries, may vary a lot on individual basis even in the same patient group. Apart from those transsexual patients who, in Sweden, are being assessed by a social worker, none of the other groups are ever being evaluated for their socio-economic status.

As explained by Sharp and Millum¹⁶ and Broome et al.,¹⁸ the patient's disadvantage is caused by a plural-

ity of factors (e.g., social, economic, physical, and so on). Should these disadvantages be considered when allocating health resources? Does the fact that a person is worse-off than another on a "non-health dimension" give a greater claim to health resources? ^{16,17}

We take here the same view as Broome et al. 18 against health exceptionalism (according to which, only health should be considered when making health allocations). 28 We agree in fact that health policy makers ought to be concerned not just with the amount of health people have but also with the valuable contribution their health states make to their lives as a whole and which requires taking into account other aspects of a person's life. 16

Because none of the policies currently in place takes into consideration the plurality of the disadvantage, and its impact on QoL after surgery, it follows that the people whose health apparently deserves priority might not be the people with the worst well-being; therefore, current practices might exclude the real worst-off and subsequently generate discrimination.

DISCRIMINATION

We are going to give some examples (real cases) on how current practices and policies can promote discrimination.

- 1) Two PB patients are presenting with skin excess. Patient A is presenting with 3-cm skin excess to the abdomen, no depression: surgery is approved; his physical symptoms and daily functions might be slightly improved following surgery. Patient B is presenting with skin excess to arms and thighs, and depression due to lack of self-esteem and discomfort during social events (e.g., at the beach or swimming pools); therefore, she is requesting surgery to improve her body-image and psychosocial well-being. It is plausible that patient B well-being is worse than that of A. According to the current policy, surgery to patient B is denied, and therefore she stays the worse-off.
- 2) For many GD patients, FFS might be more important than genital surgery because it permits a better integration into the society; however, in many countries, the patient must privately fund FFS, while genital surgery is approved by insurances or government-based health-care systems. Contrarily, patients requesting any facial reconstruction being disfigured after trauma or for congenital reasons get approved for surgery nearly everywhere, even if presenting with no physical symptoms or functional disabilities. GD patients requesting FFS might stay the worst-off.
- 3) Nearly everywhere breast reconstruction after cancer is approved with the purpose to restore self-image and femininity; contrarily, trans- and cis-women, whose aim is also to improve self-image and femininity, might have their requests for breast augmentation denied, and stay the worst-off.

According to Harris, to discriminate between people on the ground of QoL is as unwarranted as it would be to

discriminate on the grounds of race or gender.⁴ Patient-centered care might be helpful to reduce discrimination.

PATIENT-CENTERED CARE AND INFORMED PREFERENCES

When assessing QoL, modern health care emphasizes the patient reporting his personal outcomes (Patient-Reported Outcome Measurements, or PROM) following a specific treatment.^{29,30} In clinical practice, a patient-centered care operating system,³¹ where patients choose the treatment option that most closely aligns with their unique and personal beliefs, has been proposed, in contrast with the past dominant paternalistic form of medicine,¹⁴ where physicians were telling the patient what to do.

We also take a libertarian view—seeking to respect autonomy and freedom of choice, and emphasizing the primacy of individual judgment. It is within the patient's right to be judge of one's own life and priorities. Therefore, any health policy not taking into consideration individual patient's priorities would present elements against patient's autonomy, be unjust and discriminatory.

Nevertheless, patients' preferences may reflect mistaken beliefs and cognitive deficiencies;¹⁹ therefore, patients should express preferences, and well-being should be ranked, after they have been informed. Who is capable to assess patients' well-being? According to Brock,⁶ health professionals are expert in the evaluation of people's health, not their overall well-being.

The Role of the Mental Health Professionals, Social Workers, and Surgeons

The plastic surgery procedures hereby mentioned are affecting the patients' psychosocial well-being; subsequently, the role of both mental health professional and social worker in assessing preoperatively the patients is paramount. The role of the mental health professionals for GD patients has already been emphasized,13 but probably not sufficiently stressed when structuring health processes for other plastic surgery procedures aiming to improve the psychosocial well-being rather than physical symptoms. Following a preoperative conversation with the experts (mental health professionals, social workers, and surgeons), patients might reassess initial preferences and expectations, possibly "shifting to informed preferences"19,32; therefore, both the health measurement at the status quo, the expectations for future well-being, and patient's requests might change.

A multidisciplinary approach should be adopted: mental health professionals and social workers should evaluate the patient's well-being and set indications for surgery, while surgeons should evaluate anatomical aspects, physical symptoms, medical risks, and provide patients with technical information regarding the surgical options, and the physical and functional outcomes of the surgery. All these professionals should compensate for the patient's cognitive deficiencies.

In relation to health-care costs, it must be stressed that many of the patients hereby considered (e.g., transsexual patients, breast reconstruction patients) are already being counseled by a mental health professional. We leave to health economists the calculation of the extra costs necessary for implementing a multidisciplinary approach, versus the economic advantage of having the individual rehabilitated, for example, to work, and the economic advantage of not providing surgery, instead, to the individual who would not improve his QoL, and possibly would not return to work, despite surgery he would have potentially received if not screened out following the multidisciplinary approach.

Mental health professionals, social workers, and surgeons can together identify the worse-off and assess opportunities for each individual case. According to most theories of justice,⁶ in fact, priority should be given to the worse-off^{6,7} and, as suggested by Brock⁶ and Daniels,^{33,34} focus should be put on the impact disease has in limiting people's function and in turn opportunity.

TURNING ON OPPORTUNITIES

According to Wolman,³⁵ policy formulation consists of 5 sequential stages: problem conceptualization, theory evaluation and selection, specification of objectives, program design, and program structure.

It is beyond the purpose of this article to formulate specific health policies on these patients' groups or to design a flow chart illustrating authorities and medical personnel responsible for the decision making process, since local legislation, and health-care systems are variable for different countries. Nevertheless, we offered some moral considerations that can be used by policy makers to better conceptualize the problem, which results not to be the anatomical measurement of a patient's specific body part, but it is the patient's well-being.

If opportunities were only turned on by good physical functioning, then only some of the PB patients would fulfill the criteria to be approved for surgery; however, opportunities for GD patients are likely to be turned on by the improvement in their psychosocial well-being following any of the demanded surgeries. Nevertheless, scientific evidence on specific surgery, as FFS, is absent, and a research plan, more than a policy, is needed. Similarly, there is no evidence confirming whether transsexual patients seeking for a specific surgery, cis-women seeking for breast surgery, and PB patients seeking for skin excision, will better turn on opportunities following treatments. Therefore, conclusions cannot be taken, and a policy comprehending all these groups cannot be created.

To date, as according to the recent American Patient Protection and Affordable Care Act,⁸ or to the Swedish "Good Care for Adult with Gender Dysphoria,"¹¹ the politicians' documents are leaving the health-care professionals open to organize the health prioritization process according mostly to their beliefs, with large margins for conflicts of interest and discriminations.

It follows that, when assessing health with the aim of prioritizing health-care provision, besides taking into considerations, among other factors, the status quo of the patient's tastes, values, environment, and so on, professionals should also assess the impact that a specific procedure will have on each patient's life and social context. Therefore, newly designed questionnaires to be used to prioritize health care should not be limited to the assessment of the well-being at the status quo, but these instruments should also present an index of improvement in psycho-social well-being following the surgery.

CONCLUSIONS

- A specific anatomical feature is not always an indicator of patient's well-being; therefore, it cannot be used as the sole parameter to identify the worstoff and prioritize the provision of health care.
- 2) Good policies should identify the worst-off, and those who can mostly benefit from surgery. Otherwise, the policies may be discriminatory.
- 3) A patient-centered operating system, and patient's informed preferences should be implemented.

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