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Body Integrity Identity Disorder Beyond Amputation: Consent and Liberty

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Abstract In this article, I argue that persons suffering from Body Integrity Identity Disorder (BIID) can give informed consent to surgical measures designed to treat this disorder. This is true even if the surgery seems radical or irrational to most people. The decision to have surgery made by a BIID patient is not necessarily coerced, incompetent or uninformed. If surgery for BIID is offered, there should certainly be a screening process in place to insure informed consent. It is beyond the scope of this work, however, to define all the conditions that should be placed on the availability of surgery. However, I argue, given the similarities between BIID and gender dysphoria and the success of such gatekeeping measures for the surgical treatment of gender dysphoria, it is reasonable that similar conditions be in place for BIID. Once other treatment options are tried and gatekeeping measures satisfied, A BIID patient can give informed consent to radical surgery.

Keywords Body integrity identity disorder · Informed consent · Radical surgery

Body Integrity Identity Disorder (BIID) came into the public eye in September of 1999 when it was discovered that surgeon Robert Smith amputated the healthy legs of two men who suffered from this rare condition (Dyer 2000). Since that time, numerous authors have written about the permissibility of allowing patients and doctors to amputate healthy limbs. Psychiatrist Michael First originally described the condition as "the intense longstanding desire to have an amputation" (2005, p. 919). However, this definition is too simplistic. A patient can possess a desire to have an amputation without wanting that desire to become effective. Also, it is now widely acknowledged that healthy limb amputation is just one possible desire of BIID sufferers. While some persons with BIID may wish to become amputees,

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others desire different disabilities. Common disabilities that BIID patients wish for include paraplegia, deafness and blindness. Because of this diversity, some authors have suggested that BIID is best characterized by a persistent desire to acquire a disability, not just an amputation (First and Fisher 2012). I would modify this definition slightly to add the stipulation that more than a persistent desire be necessary. This desire needs to be accompanied by a long-standing wish that the desire become effective.

Sufferers of BIID, often describe themselves as being transabled, drawing a parallel with transgendered individuals. Often BIID patients express that they desire to become disabled in order to feel complete or be the person they envision themselves to be. These patients often request surgery to help achieve a desired disabled state. While many BIID sufferers request amputation, some patients request surgeries traditionally thought to be even more disabling than amputation. Thus, the question of if a patient with BIID should be treated with radical surgery is even more pressing than when Robert Smith performed healthy limb amputations. This paper seeks to examine just one aspect in this debate: can a patient who suffers from BIID give proper informed consent to radical surgery?

Although BIID is thought to be uncommon, it's not a new condition. One of the first reported cases occurred towards the end of the eighteenth century when a French surgeon was forced at gunpoint to perform an amputation of a healthy limb by a patient. After the forced amputation, the patient sent money to the surgeon with a letter of thanks in which he claimed that the limb had become "an invincible obstacle" to his happiness (Sue 1785). A similar sentiment is often echoed by modern BIID patients. These patients often report great and unrelenting anguish as a result of the condition. Antidepressant medications and therapy might benefit sufferers in coping with their feelings, but doesn't seem effective at stopping them. Up until now, all treatment options, besides surgery, have been unsuccessful in alleviating the symptoms of BIID. Robert Smith acknowledged the severity of the condition. He said, "the more I saw these patients, the more I realized this was an extremely distressing and disabling condition" (Dyer 2000, p. 322). Persons with BIID are often anxious, depressed and sometimes even suicidal.

Without a safe surgical option available, BIID sufferers often attempt self-injury. There have been many case reports of patients attempting to harm limbs to the point where medical amputation is necessary (Bensler and Paauw 2003). Six of fifty-two participants in one study on BIID conducted by psychologist Michael First had found ways to amputate limbs themselves. These methods included using a wood chipper, shotgun and a chainsaw (First 2005). Other sufferers seek medical help outside of Western boundaries. For example, philosopher Carl Elliot wrote about a case where a BIID patient died of a gangrene infection after paying $10,000 for an amputation on the black market (Elliot 2000).

The causes of BIID are not well understood. Some authors have argued that BIID has multiple causes, including neurological elements (Giummarra et al. 2011). In support of a neurological component, some studies have found that patients have different neurological responses to stimulation in limbs they wish to have removed than other limbs (Hilti and Brugger 2010). In contrast, other authors have argued that BIID is the result of an erotic target location error (Lawrence 2009).

BIID is similar but distinct from disorders like body dysmorphic disorder (BDD). Unlike BDD, persons suffering from BIID are not delusional and do not imagine their bodies as ugly. Persons with BIID acknowledge that their bodies are perfectly normal and functional. There are close parallels between BIID and Gender Dysphoria. In both conditions, individuals express a discontent with their actual embodiment. Also in both conditions individuals often seek to become their ideal self. In fact, most BIID patients claim the chief reason they desire surgery is to correct what the subjects consider a discrepancy between their current body and their true self (First 2005). The response of BIID patients after surgery is also more similar to those who have undergone gender reassignment surgery than to those with other disorders.

Of the patients whose legs he amputated, Robert Smith claims that both are highly satisfied and have been fitted for artificial limbs (Dyer 2000). In a press conference, Smith stated, "At the end of the day I have no doubt that what I was doing was the correct thing for these patients" (Dyer 2000, p. 332). Andrew Becker, a BIID patient who was successful in securing an amputation, writes about the outcome of his surgery, saying: "If someone were to offer me all the money in the world to have my leg back, they could keep it. I'm finally comfortable in my skin even if I only have one leg to stand on" (Becker 2009, p. 105). This type of result sharply contrasts with outcomes from surgical interventions in cases of BDD. Most, greater than 90 %, of patients who suffer from BDD and seek cosmetic surgery to correct their perceived deficits, report no change or even a worsening of their symptoms associated with BDD after surgery (Cash and Smolak 2011). Also, in contrast to Munchausen Syndrome or other attention seeking disorders, patients with BIID usually do not seek future procedures after their initial desire has been achieved (Berger et al. 2005). While anecdotal evidence suggests a high satisfaction rate from those who have managed to realize their ideal disabled body, studies are on a very small scale. Given the general rarity of BIID and the small numbers of patients who have secured surgical treatment, the limits on this evidence are unlikely to change because of the small sample size available.

A vast majority of patients with BIID believe that only by aligning their current bodies with their ideal body will they be able to find relief from their condition (Blanke et al. 2009). Respect for autonomy is a fundamental principle in medical ethics. In general, it is usually argued that the informed and autonomous desires of patients be given great respect. Given this value placed on autonomy, especially in a liberal society, to justly ban BIID patients from seeking a surgical solution, a strong reason is needed to override the importance placed on self-determination. This reason has to be justified by more than mere paternalism as we regularly accept the competent decisions of others even when they appear to be unwise. A decision-maker's autonomy is often respected even in cases where the decision may seem irrational to an outsider (i.e., a Jehovah's Witness refusing a blood transfusion). Some authors have claimed that, in the case of surgical intervention for BIID, a sufficient reason to override the value of autonomy does exist. These authors question the ability of BIID patients to properly consent to radical surgery.

While surgery does seem to relieve the suffering of the majority of BIID patients, there is a question as to if anyone with BIID can autonomously give informed

consent to corrective surgery for BIID. The fact that those with BIID suffer from a psychotic condition that causes compulsions, which BIID is generally recognized as, should be reason alone to question the ability of sufferers to offer informed consent. Add to this the fact that many surgeries those with BIID request severely disrupt body integrity and leave the patient with a disability, and it's easy to understand how the ability of BIID patients to offer informed consent has been questioned. Understandably, many writers have cited the very fact that BIID sufferers have BIID as evidence that requests for surgery are not competent. Christopher Ryan writes "The most common response of the lay public, and some ethicists, upon first hearing of BIID is to confidently report that whoever wants to have a healthy limb amputated must be severely mentally disturbed and that therefore his request should obviously be ignored"(2009, p. 21). Dan Patrone expresses doubts that those with BIID can give informed consent. Patrone writes, "Those who have a disorder that causes them to desire to maim and disable their bodies cannot meet the standard of voluntarily accepting the burdens of choice that makes the practice of respecting autonomy acceptable" (2009, p. 545). On the other hand, Tim Bayne and Neil Levy have claimed that, "BIID sufferers meet reasonable standards for rationality and autonomy" (2005, p. 75).

When investigating the nature of informed consent, several conditions for an action to be considered informed reoccur in the vast literature surrounding the subject. These conditions can perhaps be traced back to John Stuart Mill's requirements for an action to be self-regarding. Regardless of origins, the conditions have been developed extensively in the medical ethics literature. Informed consent can be impaired in several ways. The most commonly cited possible means of impairment are: a) when an agent is coerced, b) when a patient is not informed or deceived and, c) when a patient is incapable of making a voluntary choice (Faden and Beauchamp 1986). In this section, I will examine each condition in regards to the ability of BIID patients to provide informed consent for radical surgery.

Consent can fail to be voluntary when persons are coerced. Coercion, although there is some debate as to its nature, can assume many forms. A person can be physically moved to do something. Also, a person can have their consent obliterated or weakened by threats or coercive offers. A person may also be part of a coercive environment that may limit his or her ability to give informed consent. Such an environment is one beyond most ordinary environments where social norms are observed. An example of a coercive environment is a person who is member of a manipulative religious cult. Even without any direct threats, such an environment could include stern disapproval of certain actions and the acknowledgment of unspoken consequences that may impair autonomy. Despite the multitude of ways that a person can be coerced, there is little evidence that BIID sufferers experience significant coercion. Actually, in this respect, current commonly performed cosmetic procedures are arguably more coercive.

Currently, patients give informed consent to cosmetic surgery procedures which offer very little therapeutic benefit. While it may be possible to argue that cosmetic surgery has benefits for mental health, most often these procedures are performed simply for a patient to come closer to a socially endorsed standard of beauty. This accepted standard of beauty arguably arises from a slightly coercive environment.

Because of media and social pressure to look a certain way, many people (especially young females) engage in dangerous behaviors or request unnecessary surgeries like breast augmentation or liposuction. Consider the rise in cosmetic genital surgeries like labia reduction. Women, possibly influenced by images from pornography, have their genitals mutilated simply because they desire to do so. Some theorists have argued that demand for such procedures are created by a coercive atmosphere and that female genital cosmetic surgeries should be illegal (Berer 2007). However, these views are in the minority and we certainly, within limits, accept that cosmetic surgery patients can give informed consent. As Bayne and Levy write, "We allow individuals to mold their body to an idealized body type, even when we recognize that this body image has been formed under the pressure of non-rational considerations, such as advertising, gender-norms and the like" (2005, p. 81).

While it may be difficult for an observer to initially perceive the rationality of the request for surgery from a BIID patient, such patients are surely less coerced than most patients requesting cosmetic procedures. BIID patients typically request surgeries that are far from beauty-enhancing. There is typically little outside pressure on a BIID patient to mold their body into a disabled form. However, coercion may involve more than just outside pressures. While there is external coercion, a patient may also feel internal pressure. It could be argued that the very nature of a psychological illness that causes obsessive thoughts creates an internal coercive environment for the BIID sufferer. This leads to the question as to if a BIID sufferer is capable of making a competent decision.

The question of who is a competent decision maker has been extensively debated and there are recognized gray areas in accessing competence. However, there are some common elements involved in competent decisional capacity. These elements include the ability to understand a decision, an appreciation of the impact of that decision, the ability to be able to communicate a choice and the ability to reason rationally (Buchanan and Brock 1989). For BIID sufferers who are adults and lack mental impairments, the first three conditions for sufficient decisional capacity are usually easily satisfied. However, it is the fourth element that is controversial.

Some authors have indeed questioned if BIID compromises the decisional capacity of patients and makes them unable to consent. Because BIID causes obsessive thoughts, it has been argued that it may render patients irrational (Patrone 2009). What's more, offering surgery to persons with BIID has been compared to offering stomach stapling to persons with anorexia (Müller 2009). However, unlike anorexia, BIID does not cause false beliefs. A person with anorexia will believe they are overweight despite contrary evidence. Persons with BIID acknowledge that their bodies are healthy, they just identify as a disabled person. They believe that being an able-bodied person is not in accord with their idealized internal self-image. It is this mismatch that causes a BIID patient to suffer, not an alleged false belief.

Surely, there are some BIID patients that have impaired ability to consent and lack the ability to reason rationally; however, Michael First has argued that subjects with BIID are not delusional. BIID sufferers recognize that their desires are abnormal and don't invoke a delusional explanation for them (First 2005). Many case studies have centered on individuals who are not psychotic and whose BIID does not seem to arise from a paraphilia (specifically a sexual attraction to

amputees). In support of the rationality of those diagnosed with BIID, Michael First reported that 79 % of subjects in his study had no significant psychiatric symptoms except BIID. The other subjects only reported minor symptoms of depression and anxiety (2005). After First's research, several other studies on BIID have found that sufferers of BIID report a higher rate of depression and anxiety than the general public. A likely explanation of this finding is that the anguish caused by BIID creates depression and impacts the well-being of the subjects (Blom et al. 2012). Besides depression and anxiety, BIID patients appear relatively free of other severe psychological disturbances. Indeed, receiving a diagnosis of psychosis excludes one from being diagnosed with BIID (Sorene et al. 2006).

Despite the lack of other diagnosable conditions, it remains the fact that the wishes of persons with BIID may seem deeply irrational to an outsider. However, as aforementioned, the autonomy of individuals to make health care choices that seem irrational or go against medical advice is often respected (Charland 2001). Maybe it is not the decision that needs to be rational in accessing decisional capacity but the rationality of the thought process that cumulates in the decision. Some authors have suggested that rationality be evaluated by internal consistency. It could be that a person is competent to make a decision, if it is rational according to internal reasons that they recognize as their own (Freedman 1981). Internal rationality may also, as Allen Buchanan and Dan Brock suggest, be a matter of choices matching a subject's goals and values (1989). The ability to alter a patient's deeply held values is probably why many mental disorders are thought to impair capacity. Mental disorders can cause changes in values to the point that it becomes unclear if a choice that coincides with the patient's true desires can be made (Roberts 2002). Because of this, it is possible that a patient with a mental illness can lack internal consistency and be incompetent.

While internal rationality is important, not all theorists have discounted the idea that an action should appear rational from an external perspective. Perhaps some decisions a patient makes are so irrational from an external perspective that they can override any internal rationality (Culver and Gert 2004). If this is the case, even if a BIID patient can make the argument that his or her decision is internally rational, the action may still be considered externally irrational. Because the standard of competency for such a risky procedure as surgery to become voluntarily disabled must be very high, concerns about both external and internal rationality should be addressed. I believe that there are strong arguments that a person with BIID who requests surgery can be judged both rational from an internal and external perspective.

While at first glance voluntarily becoming disabled may seem completely irrational, from the perspective of a BIID patient, there is reason to believe that such decisions can be made with internal rationality. As aforementioned, BIID patients experience a disparity between their actual body and self-imagine. Faced with such a mismatch, it may appear that the most rational and least radical course of action is to try to change the self-image rather than the body. However, this is simply too quick, for several reasons. To date, non-surgical methods aimed to change the self-image of those with BIID have largely failed. Also, it must be considered that BIID is persistent and many patients have lived with this self -image for most of their

lives. Seeking to change this self-image is somewhat akin to asking a BIID patient to change who they are.

The rationality of a person with BIID seeking surgery parallels an argument for the rationality of a person with gender dysphoria seeking gender reassignment surgery. When gender dysphoria began to be recognized, the possibility of a patient requesting surgery to align a self-image with their actual body seemed irrational. Doctor Michael First is quoted comparing BIID with gender dysphoria. He says, "When the first sex reassignment was done in the 1950s, it generated the same kind of horror." One of the first things surgeons asked themselves was, "How can I do this to someone that's normal" (Henig 2005). Because of the great investment of time, money and health consequences related to gender reassignment surgery and hormone therapy, it could be argued that a person with gender dysphoria should also focus on trying to change their self-imagine to reflect their biological gender. This argument surely fails as it denies the encompassing nature and aspects of identity that are involved in gender dysphoria. BIID is encompassing and also involves a strong sense of identity. This makes the decision to undergo surgery as internally rational as the decision to request sexual reassignment surgery made by a patient with gender dysphoria. This is especially true as gender reassignment surgery is also a major surgery that is not reversible and requires removing perfectly healthy body parts.

Most of the time, those who suffer from BIID start to develop the desire to be disabled as a child. In Michael First's extensive study on BIID he found that 65 % of patients experienced onset of BIID before age eight and 98 % of patients before age sixteen (First 2005). Several subsequent studies have reported that most individuals with BIID experience early onset. In one study of BIID patients the mean age of onset was 11.6 years (Blanke et al. 2009). This shows that, often times, those with BIID have imagined themselves as disabled for many years. This condition has become part of their identity. The desire to hold on to a person's identity can surely be thought rational and, if surgery is the only treatment for BIID that preserves a patient's identity, the internal rationality behind a request for surgery is clear.

The internal rationality of a request for surgery because of the preservation of identity has been noted by several authors (Craimer 2009). The rationality derived from preserving identity is expressed powerfully by Michael Gheen. Gheen is a physician who suffers from BIID. He writes, "When something has been part of one's psyche for as many years as BIID has been part of mine—since my childhood—asking me to be cured of it is tantamount to asking me to change who I am" (2009, p. 98). Surgery may be the only method a sufferer of BIID may have to realize their identity. If this is the case, treatment apart from making the sufferer disabled may not be desirable as it would be a threat to a part of a sufferer's identity. Again, there are parallels to gender dysphoria to be made. Gender dysphoria is also usually only successfully treated by employing surgical methods.

A few possible differences exist between surgery for BIID and gender reassignment surgery. It could be objected that these differences undermine the parallels I have drawn between sexual reassignment surgery and surgery for BIID. It could be argued that, unlike surgery to treat gender dysphoria, surgery for BIID will

leave sufferers disabled and possibly unable to perform many actions. Also, surgeries like amputations often are risky and prone to complications. Given the severe limitations that many sufferers may have after surgery for BIID, they could be dependent on others and even receive governmental support because of their chosen disability. On the other hand, after surgery for gender dysphoria, a patient still can perform most of the actions they could before surgery; they are simply a different sex. These objections ignore the fact that sex reassignment surgery leaves a patient sterile and often results in complications. Furthermore, maybe more damning, the objections presuppose that there is something negative about having a disability. Patients with BIID, however, don't seem to view disability in this way.

While a person without BIID might suppose that a disability would negativity impact his or her life, a person with BIID may not share this view. BIID patients who have had surgery, such as the patients of Robert Smith, or those who have resulted to making themselves disabled, report feeling more whole and better able to function without the mental suffering from BIID (Elliott 2009). Along these lines, Robert Smith writes, "The general public and most medical practitioners regard an amputation as a devastating and mutilating procedure and for most patients this is true. For the BIID patient however, amputation is a doorway to a new and enriched life in which their perceived body image matches their ideal" (Smith 2009, p. 41). Given the reasons offered by Smith and others, it can plausibly be argued that BIID patients are actually less disabled after surgery than before. Moreover, in one study of subjects with BIID, those who had found ways to alter their bodies to their desired form scored significantly lower on the Sheehan Disability Scale than those who had not undergone alterations (Blom et al. 2012). As noted in the study, "surgery appears to result in permanent remission of BIID and an impressive improvement of quality of life" (Blom et al. 2012). Yes, surgery may physically cause a disability to a healthy body but may also restore mental health.

The medical profession has already accepted that some patients can request that their healthy bodies be operated on for a broader conception of health. Such common practices include living organ donations and sex reassignment surgery. This wider conception of health includes both mental and social components. To claim that a BIID patient is not competent to request surgery is not only taking a narrow view of harm but may be imposing a particular conception of the good upon others. As Jozsef Kovacs suggests, "Our paternalistic prohibition to provide surgery for BIID patients mirrors our own aversion of physical disabilities and our deep ignorance of the psychic suffering that a psychiatric disorder may mean for the person who has it" (2009 p. 44). This is further reflected in the words Sean O'Conner, a BIID patient who writes about potential surgical solutions. "This is a case where the negative physical impact would be smaller than the positive emotional impact of finally being in the body I have needed to be in all my life," O'Conner writes (2009, p. 89). Given the feelings of identity involved in BIID and the sufferer's view of disability, a strong case can be made for the internal rationality of a BIID patient's request for surgery.

The external rationality of the decision to request a surgical solution can also be seen when the options for treatment of BIID are considered. In the literature, an argument is often made that in many cases, provided there are no less drastic

treatments available, BIID sufferers are rational and competent to request surgery (Bayne and Levy 2005). This argument's strength is mostly due to the rational desire to reduce suffering and the lack of alternatives for reducing suffering. As previously mentioned, BIID can cause extreme suffering. This suffering has been documented in the writings of many BIID patients. Sebastian Schmidt, a BIID patient who yearns to have his left leg amputated writes, "I have been suffering for many years from a discrepancy between my real life and my secret desires" (2009, p. 81). Another BIID sufferer, Sean O'Connor writes, "Neither psychotherapy nor pharmacotherapy have been able to help. I am experiencing intense suffering because I am not in the body I need" (2009, p. 93). Given that the only currently effective way to eliminate the suffering caused by BIID is through surgery, and that reduction of suffering is a rational good, this argument can be given in support of the external rationality of a request for surgery to treat BIID. I have argued that there is a strong case to be made for the internal and external rationality of a BIID patient's request for surgery. Along these lines, there is no reason to conclude that a patient with BIID cannot make a competent request for radical surgery. However, there remains one element to be considered in the question of if a BIID patient can offer informed consent.

It has been claimed that persons suffering from BIID may lack all the necessary information to make a truly informed choice regarding surgery (Patrone 2009). After all, these are patients who are able-bodied and don't know what it would be like to be disabled. Possibly the only way to fully be informed about what it is like to be disabled is by being disabled. Of course, using this argument, informed consent would be impossible for almost any medical procedure a person wishes to undergo. Even if a patient can't know completely what it is like to be disabled, it does not follow that their choice would not be informed. With many surgical procedures, it is impossible to know exactly how life will change after surgery. All we can realistically hope for when evaluating if a patient is informed is if they can truly understand and comprehend the procedure they are undergoing and the possible consequences that can result from the procedure. Given this, it is likely that BIID patients are actually more informed than most patients requesting medical procedures.

Most studies focused on BIID have found that subjects tend to be more educated than the general population. In First's study, ninety percent of subjects had some education beyond high school and 65 % had at least attended graduate school (First 2005). Therefore, the intellectual capacity of BIID sufferers to understand the procedure they are requesting is quite high. In addition, persons with BIID often spend time pretending to be disabled. Current research suggests that over 90 % of people with BIID practice being disabled (Giummarra et al. 2011). Ninety-two percent reported this behavior in Michael First's study (2005). Those who practice being disabled have been labeled "pretenders." Pretenders have several techniques by which to mimic disability. They may bind their legs, sit on them while utilizing a wheelchair, use tourniquets to reduce sensation in their limbs, use body braces, or just refuse to use certain limbs or body parts. Pretending often temporarily eases the suffering from BIID. It has also been suggested that such pretending might contribute, given brain plasticity, to the changes observed in the brains of those with

BIID (Giummarra et al. 2011). By engaging in pretending, a person with BIID may gain an understanding of what it is like to live with the disability that he or she desires. Sometimes this pretending is continuous and long term. Robert Smith documented a case where a patient, who desired an amputation of both his arms, lived as an armless man for 12 years by never using his arms and keeping them tucked into clothing (Smith 2009). By pretending, BIID patients may become better informed as to the outcome of requested surgical interventions than the general public. Most people with BIID are very clear on the options available to them. To ensure that a request for surgery from a BIID patient is informed, pretending could be a prerequisite for surgery. Again, this would mimic sexual reassignment surgery, where assuming the role of the opposite sex is often a requirement to qualify for surgery to treat gender dysphoria (Lawrence 2006).

In this article, I have argued that people suffering from BIID can give informed consent to surgical measures designed to treat BIID. This is true even if the surgery seems radical or irrational to most people. The decision to have surgery made by a BIID patient is not necessarily coerced, incompetent or uninformed. However, this paper does ignore the question as to whether a doctor should ethically perform such surgeries. Also, if surgery for BIID is offered, there should certainly be a screening process in place to ensure informed consent. It is beyond the scope of this work to define all the conditions that should be placed on the availability of surgery. In spite of this, I believe, given the similarities between BIID, gender dysphoria and the success of such gatekeeping measures for the surgical treatment of gender dysphoria, it is reasonable that comparable conditions be in place for BIID. Hence, starting with something like the Harry Benjamin criteria, may be appropriate. Also, to make sure a decision is informed, while generally not considered effective at this time, less radical treatment options for BIID should utilized before a surgical intervention. One possible new treatment option is high and sustained doses of psychotropic medication (First 2005). However, once other treatment options are tried and gatekeeping measures satisfied, A BIID patient can give informed consent to radical surgery.

References

Bayne, T., & Levy, N. (2005). Amputees by choice: Body integrity identity disorder and the ethics of amputation. *Journal of Applied Philosophy, 1*, 75–86.

Becker, A. (2009). Body integrity identity disorder (BIID) and Me. In A. Stirn, A. Thiel, & S. Oddo (Eds.), *Body integrity identity disorder: Psychological, neurobiological, ethical and legal aspects* (pp. 103–106). Miami: Pabst Science Publishers.

Bensler, J. M., & Paauw, D. (2003). Apotemnophilia masquerading as medical morbidity. *Southern Medical Journal, 96*(7), 674–676.

Berer, M. (2007). It's female genital mutilation and should be prosecuted. *British Medical Journal, 7608*, 1335.

Berger, B. D., Lehrmann, J. A., Larson, G., Alverno, L., & Tsao, C. I. (2005). Nonpsychotic, nonparaphilic self-amputation and the internet. *Comprehensive Psychiatry, 46*(5), 380–383.

Blanke, O., Morgenthaler, F. D., Brugger, P., & Overney, L. S. (2009). Preliminary evidence for a fronto-parietal dysfunction in able-bodied participants with a desire for limb amputation. *Journal of Neuropsychology, 3*(2), 181–200.

Blom, R., Hennekam, R., & Denys, D. (2012). Body integrity identity disorder (BIID)—Is the amputation of healthy limbs ethically justified? *PLoS ONE*. 4, http://www.plosone.org Accessed 23 February 2014.

Buchanan, A., & Brock, D. (1989). *Deciding for others: The ethics of surrogate decision making*. Cambridge: Cambridge University Press.

Cash, T. F., & Smolak, L. (2011). *Body imagine: A handbook of science, practice and prevention*. New York: The Guilford Press.

Charland, L. (2001). Mental competence and value: The problem of normativity in the assessment of decisional capacity. *Psychiatry, Psychology, and Law, 2*, 135–145.

Craimer, A. (2009). The relevance of identity in responding to BIID and the misuse of causal explanation. *American Journal of Bioethics., 1*, 53–55.

Culver, C. M., & Gert, B. (2004). Competence. In J. Radden (Ed.), *The philosophy of psychiatry: A companion* (pp. 258–270). Oxford: Oxford University Press.

Dyer, C. (2000). Surgeon amputated healthy legs. *British Medical Journal, 320*(7231), 332.

Elliott, C. (2000). A new way to be mad. *Atlantic Monthly, 286*(6), 72–84.

Elliott, T. (2009). Body dysmorphic disorder, radical surgery and the limits of consent. *Medical Law Review, 17*, 149–182.

Faden, R., & Beauchamp, T. (1986). *A theory and history of informed consent*. New York: Oxford University Press.

First, M. (2005). Desire for amputation of a limb: Paraphilia, psychosis, or a new type of identity disorder. *Psychological Medicine, 35*, 919–928.

First, M., & Fisher, C. (2012). Body integrity identity disorder: The persistent desire to acquire a disability. *Pschopathology, 45*(1), 3–14.

Freedman, B. (1981). Competence: Marginal and otherwise. *International Journal of Law and Psychiatry, 4*(53–72), 53–72.

Gheen, M. (2009). Clear definitions and scientific understanding: Thoughts of an academic physician with BIID. In A. Stirn, A. Thiel, & S. Oddo (Eds.), *Body integrity identity disorder: Psychological, neurobiological, ethical and legal aspects* (pp. 94–102). Miami: Pabst Science Publishers.

Giummarra, M., Bradshaw, J., Nicholls, M., Hilti, L., & Brugger, P. (2011). Body integrity identity disorder: Deranged body processing, right fronto-parietal dysfunction, and phenomenological experience of body incongruity. *Neuropsychological Review, 4*, 320–333.

Henig, R. M. (2005). At war with their bodies, they seek to sever limbs. *New York Times*, *22*, F6.

Hilti, L., & Brugger, P. (2010). Incarnation and animation: physical versus representational deficits of body integrity. *Experimental Brain Research, 204*, 315–326.

Kovacs, J. (2009). Whose identity is it anyway? *The American Journal of Bioethics, 1*, 44–56.

Lawrence, A. (2006). Clinical and theoretical parallels between desire for limb amputation and gender identity disorder. *Archives of Sexual Behavior, 3*, 263–278.

Lawrence, A. (2009). Parallels between gender identity disorder and body integrity identity disorder: A review and update. In A. Stirn, A. Thiel, & S. Oddo (Eds.), *Body integrity identity disorder: Psychological, neurobiological, ethical and legal aspects* (pp. 154–172). Miami: Pabst Science Publishers.

Müller, S. (2009). Body integrity identity disorder (BIID)—Is the amputation of healthy limbs ethically justified? *The American Journal of Bioethics, 9*(1), 36–43.

O'Connor, S. (2009). My life with BIID. In A. Stirn, A. Thiel, & S. Oddo (Eds.), *Body integrity identity disorder: Psychological, neurobiological, ethical and legal aspects* (pp. 88–93). Miami: Pabst Science Publishers.

Patrone, D. (2009). Disfigured anatomies and imperfect analogies: Body integrity identity disorder and the supposed right to self-demanded amputation of healthy body parts. *Journal of Medical Ethics, 35*(9), 541–545.

Roberts, L. W. (2002). Addiction and consent. *American Journal of Bioethics, 2*, 58–60.

Ryan, C. J. (2009). Out on a limb: The ethical management of body integrity identity disorder. *Neuroethics, 2*, 21–33.

Schmidt, S. (2009). My life with BIID. In A. Stirn, A. Thiel, & S. Oddo (Eds.), *Body integrity identity disorder: Psychological, neurobiological, ethical and legal aspects* (pp. 79–81). Miami: Pabst Science Publishers.

Smith, R. C. (2009). Body integrity identity disorder: The surgeon's perspective. In A. Stirn, A. Thiel, & S. Oddo (Eds.), *Body integrity identity disorder: Psychological, neurobiological, ethical and legal aspects* (pp. 41–48). Miami: Pabst Science Publishers.

Sorene, E. D., Heras-Palou, C., & Burke, F. D. (2006). Self-amputation of a healthy hand: A case of body integrity identity disorder. *Journal of Hand Surgery, 31*(6), 593–595.

Sue, P. (1785). *Anecdotes Historiques, Literaires et Critiques sur la Medecine, la Chirurgie et la Pharmacie*. Paris: Le Boucher.