

The right to choose: A comparative analysis of patient autonomy and body integrity dysphoria among Czech healthcare professionals

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Abstract

The bioethical principle of autonomy is of paramount importance within medical practice. The extent to which a patient's autonomy overlaps or conflicts with the physician's duty of beneficence and non-maleficence, however, is not so clear cut, especially for those cases in which the patient's request for medical intervention goes against the physician's advice, either because of personal belief or because there is uncertainty regarding the therapeutic approach. Body integrity dysphoria (BID) is a condition that has been included recently in the International Classification of Diseases, 11th edition (ICD-11). It may lead an affected individual to develop an intense desire to remove a specific body part in order to restore congruity between their body and their mind. Thus, its occurrence creates challenging moral and ethical dilemmas for the medical world (Loriga, 2023). The aim of this study was to investigate how Czech physicians understood, assessed and supported patient autonomy regarding requests for invasive body modifications. The objective was to produce a blueprint regarding how much a patient could influence the medical treatment they could gain within the Czech medical system and to develop a comparison with the ethical challenges of BID.

A five-section survey was designed and submitted to Czech physicians on topics relevant to the BID debate. On the surface, the results showed an apparent predisposition toward collaboration between doctors and patients. However, further investigation showed that this supposed collaboration crumbled as the physiological risk-reward ratio moved further toward risk, which caused physicians progressively to rely less on the patient's opinion and psychological needs. Moreover, a strongly authoritarian approach was evident, which became overwhelming in cases of amputation requests and removed, *a priori*, any collaboration. The results indicate that the Czech medical system does not accept or comprehend fully patients' psychological needs, and therefore the BID phenomenon is a long way from being understood, which requires a fundamental paradigm shift.

Keywords: body integrity dysphoria (BID), amputation, limb amputation, bioethics, autonomy, gender incongruence, gender dysphoria, sex reassignment surgery, Czech Republic, Czechia: survey

Introduction

Body integrity dysphoria (BID) is a medical condition that was added recently to the International Classification of Diseases, 11th edition (ICD-11), which is published by the World Health Organisation (WHO). The incidence of BID is unknown, but it is estimated to be in the thousands of people worldwide (Muller, 2007). This low number may be due to the nature of the condition, which creates a sense of stigma and self-guilt in the individual who experiences it, and therefore is likely to lead to few reports of cases (Bayne & Levy, 2005; First, 2005; Swindell & Lawrence, 2009). Many people who experience the condition interact through internet forums (Furth & Smith, 2000). Individuals who are recognised as having BID experience a deep sense of discomfort that is caused by the mismatch between their physical body and their perceived body sensations (First, 2005; First & Fisher, 2012), although the aetiology of BID is not yet entirely clear. Such discomfort can lead the individual to develop intense desires to remove the affected body part, either with medical assistance or through self-amputation attempts that employ various means (Bensler & Paauw, 2003; Berger et al., 2005; Blanchard, 1999; Brenner, 1999; Dyer, 2000; First, 2005; Parson, Brown & Sirota, 1981; Riddle, 1998; Sorene et al., 2006; Steward & Lowrey, 1980; Tvcar, Dernovsek & Zvan, 1999). So far, no therapies have been developed specifically to treat BID. There have been reports of a few cases in which amputation has been conducted and has

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demonstrated improvement in the quality of patients' lives (Blom et al., 2012, 2014; Noll & Kasten, 2014; Ryan, 2008; Turbyne et al., 2021). However, the granting of such requests creates ethically and morally challenging situations for both the legal and medical systems (Loriga, 2023), particularly because people whose requests are refused may attempt their own procedures, with disastrous results.

Limb amputation for BID is not a recognised procedure in the Czech Republic. This means that anyone who performed such a procedure would be charged with medical malpractice. Furthermore, clinicians are required to work *lege artis*, which means they must act according to relevant professional standards. Amputation in cases of BID would be considered medical malpractice as it would constitute unlawful amputation according to Section 122 of the Czech Criminal Code, which concerns bodily and grievous bodily harm:

...As bodily harm shall be understood such a state consisting in a disorder of health or sickness that by disturbing of regular physical and mental functions complicates, not only for a short period, the regular way of life of the injured person and that requires medical attention ... As grievous bodily harm shall be understood as a severe health disorder or a serious sickness. Under these conditions is grievous bodily harm considered disablement, loss or substantial limitation of working capability, paralysis of a limb, loss or substantial limitation of a sensual function, injury of a vital organ, mutilation, inducing abortion or killing a fetus, torturous suffering, or a long-lasting health disorder... (Chapter 8, Section 122, Czech Criminal Code).

Although the criminal code considers the concept of consent for similar cases in certain circumstances, which would make such an act lawful (Chapter 3, Section 30, Czech Criminal Code), this does not apply to consent to bodily harm or death. This issue of legality is found not only in the Czech Republic but in the rest of Europe and many other countries (Bridy, 2004; McKenzie & Cox, 2007; Nitschmann, 2007). Beyond the legal position, many physicians consider voluntary amputation a taboo topic.

The study discussed in this paper investigated the physician's understanding of patient autonomy in cases of body-modification interventions within the Czech medical system. The goal of this analysis was to identify ethically and morally relevant differences, rooted in personal or deontological belief, between requests for amputation in cases of BID and other similarly invasive practices such as sex reassignment surgery (SRS). The objective was to understand, from Czech physicians' perspectives, to what extent a person could influence the physician's decision on the medical treatment they would offer. The relevance of the study lay in the lack of literature that is devoted to ethical analysis of patient autonomy within the Czech national border and in the need to move away from the impasse in which BID sits today. BID is a condition recognised by the WHO but for which there is no practical therapeutic approach besides amputation (Blom et al., 2012, 2014; First, 2005; Ryan, 2008; Turbyne et al., 2021).

The methodologies that were employed to collect and analyse the data are explained in the next section after contextualising autonomy. Then, the results are presented, followed by an in-depth discussion, contextualisation, and consideration of study limitations. Finally, there is a comprehensive summary and conclusion.

Contextualising autonomy

The four-principles model of medical ethics, although not the only approach to ethical assessment in healthcare, holds significant influence and serves as a fundamental framework for understanding

ethical considerations in the field (Gillon, 2003; Beauchamp & Childress, 2012). While it has faced criticism from various scholars (Harris, 2003; Takala, 2001), the four-principles model remains widely used and debated in both practical and academic contexts. It is essential to acknowledge that the four principles—autonomy, beneficence, non-maleficence, and justice—are considered *prima facie*, meaning they are not absolute and can conflict in different moral situations. The foundational premise of the four-principles model is that no principle should be inherently privileged over others. Instead, a proper application of principlism necessitates an equal consideration of the unique circumstances of each ethical dilemma.

Over time, there has been a notable shift in the emphasis within the four-principles model which moved from beneficence and non-maleficence (Smith, 2005) to a growing recognition of the significance of autonomy as a central ethical principle (Gillon, 1994). This shift towards autonomy reflects an evolving understanding of the ethical landscape in healthcare. It recognises the importance of respecting individual autonomy and empowering patients to participate in healthcare decisions actively. While beneficence and non-maleficence remain essential ethical considerations, the increased emphasis on autonomy signifies a shift towards a more patient-centred approach that values individuals' unique perspectives and preferences. Similarly, in the elective body modifying surgeries literature, the four-principal approach is not given equal attention, with the principle of autonomy being far more present and discussed (Chung et al., 2009). The bioethical concept of autonomy describes a patient's right to self-determination and self-governance. Patient Autonomy is defined in terms of negative and positive freedoms, namely freedom from coercion (internal and external) and capabilities of self-determination, expression, and choice (Cohen, 2019; Pellegrino & Thomasma, 1987). Assuming the informed consent process is fulfilled, any legal person has the fitness to determine whether to endure any medical procedures or not (Grant, Modi & Singer, 2017). Once the patient is assessed to be capable of decision-making, their wishes and desire should be given the due weight in the patient healthcare negotiation for any addressed medical treatment. An individual's interpretation of beneficence should be regarded in medical decision-making contexts. The conceptual problem is epistemological when approaching the autonomy principle: assessing such individuals' capacity and autonomy. It might be that BID individuals suffer from monothematic delusion (Davies et al., 2001; Dudley et al., 1997), similar to Capgras delusion (Ellis & Lewis, 2001; Aziz & Warner, 2005) and Cotard delusion (Berrios & Luque, 1995a; 1995b; 1999) which would rise charges on decisional incapacity as the desire stems from an irrational state. Although the amputation beliefs arrive from an irrational state, the patient's considerations on what to do with it and how to act are rational and ought to be considered. This approach might create a never-ending loop where the undermined practical reasoning sustains irrational claims. In contrast, rationality claims are promoted by the logic that exceptionally few circumstances can be considered entirely rational.

Methods

Participants and procedure

A survey was submitted as part of a broader Omnibus survey on the opinions and attitudes of physicians in the Czech Republic to healthcare issues. This Omnibus survey has been carried out regularly in the country since 1995. A total of 1145 physicians picked by quota selection from all over the Czech Republic were included in the sample. The socio-demographic characteristics of the physicians were chosen to match the demographics of doctors in the country. The sample parameters were set based on data from the National Register of Health Workers that was valid as of the 19th of August 2021. Dentists were not involved in the research due to the nature of their specialisation. The original Omnibus sample comprised three primary groups of physicians in

terms of field of expertise: general practitioners (GPs) for adults, GPs for children and adolescents, and physicians of other disciplines. This latter group was later categorised into 14 subgroups, of which one was a residual category that amounted to 9.3% of the total sample. In the course of the field investigation, 1367 doctors were approached, of whom 1145 agreed to the interview. Therefore 222 doctors refused; a rejection rate of 16.2%. The data provided by the 1145 doctors who accepted the interview was utilised for data interpretation.

Survey design

The ad-hoc questionnaire that was submitted with the Omnibus survey was designed to inquire into physicians' understanding of patient autonomy. It consisted of five questions. Two of these entailed application of a Likert scale, and the remaining three were closed-ended, with one offering the possibility to justify the answer provided. All five questions were built by intertwining the ethical challenges presented by the BID phenomenon with matters of patient autonomy by considering topics that ranged from functioning bodies to patient suffering, medical authoritarianism and risk-reduction strategies.

The first inquiry was to ascertain Czech doctors' receptiveness to the concept of a person who identified their body to be "incorrect" or "wrong". The end goal was to test the openness of each respondent to the performance of putative medical interventions based on the person's psychological discomfort without necessarily having any input suggesting alteration at the physical level. The respondents were enabled to express their opinion through the use of a Likert scale.

The second question was designed to highlight the unclear aetiology of gender dysphoria by inquiring whether or not the respondent would support or be prepared to perform SRS at the time of answering, assuming that a less invasive procedure with the same benefit would be available ten years later. There were three aims to this question:

- to complement the previous question by introducing the topic of irreversible surgical treatment and thus create a comparison to identify possible changes in trends;
- to test the respondents' attitudes toward SRS; and
- to test the respondents' predisposition to prioritise patients' needs against a putative ideal medical approach.

This question was relevant to cases of BID because even though amputation has improved the quality of the lives of BID individuals (as seen in studies such as that by Blom et al., 2014), it is a procedure that carries a strong social stigma. Respondents were given the option to select closed-ended answers from a list of four: total support for SRS today; total rejection of SRS; rejection of SRS only with the patient's agreement; and abstention from support for SRS while waiting ten years for less invasive procedures to become available.

Questions three and four assessed the physician's understanding of a patient's autonomy regarding amputation requests. Question three considered a patient's request for amputation in order to avoid the physician's suggested painful medical treatment to recover an injured limb. The question prompted the respondent to contemplate the equilibrium between a patient's autonomy and a physician's conviction of what was ultimately in the patient's best interest. The respondent chose from three possible closed-ended answers: total support for the patient's request, total rejection of it, and a mid-point, which was mutually agreed between the doctor and the patient. The question also offered space in which the respondent could supply a short paragraph to justify the answer. These open-ended explanations were classified in codes and, subsequently, in themes (hereafter called nodes) to make them easily manageable for analysis and interpretation.

Question four provided a vignette that illustrated a scenario in which a patient was seeking irreversible medical intervention (such as amputation) to alleviate the psychological distress that

was caused by the rational but partially unfounded fear of developing a specific and potentially terminal disease (e.g. mastectomy for breast cancer). Through four closed-ended options, the respondent could support the patient's request, abstain, reject the patient's request entirely, or reject the request but recommend the patient to a colleague. The question was designed to identify the extent to which the physician would consider the patient's rational reasoning to justify the request against the scarce medical evidence available.

Question five diverged toward the legalisation of certain medical practices as a risk-reduction and damage-control strategy. All questions were translated from English to Czech before being distributed nationwide.

Data analysis

Seven respondent variables were considered in the original Omnibus survey, namely: sex (male or female); age; years of medical experience; medical field; field of employment (private or public); religious belief (differentiated into believers practising, believers non-practising and non-believers); and region.

For this study, four new variables were added to enable a deepened data analysis. First, the ages of the participants were categorised into groups (Table 1).

Table 1: Numbers of respondents according to age groups

Age group	Respondents (n)	%	Code number
up to 34 years	245	21.4	1
35 - 44 years	257	22.4	2
45 - 54 years	239	20.9	3
55 - 64 years	197	17.2	4
65 and over	207	18.1	5

The medical field variable was divided further than it had been in the original to understand better what had been initially included under other disciplines, which originally represented 51.5% of the sample (590 respondents). This latter category was split into 14 additional medical fields, which caused the incidence of other disciplines, renamed residual categories, to drop from 51.5% to 9.3% (107 respondents), thus making it more manageable.

Question three was the only query that permitted respondents to explain their response, and the two extra variables were linked exclusively to that question. To classify the 1145 answers obtained, first, codes were created to club together answers that showed similar motives. This resulted in 28 codes. Such motives and associated codes were subsequently grouped into six nodes (Table 2).

Table 2: Nodes per code

Node	Respondents (n)	%	Node number
Doctor's scope	373	32.6	1

Subjective stance (no justification provided for the answer given)	33	2.9	2
Patient's scope	169	14.8	3
Law standards	115	10	4
Conditional bargain between the parties ("if and only if", IFF)	290	23.3	5
Doctor and patient collaboration for successful treatment	165	25.3	6

Such elaboration resulted in 11 variables that were cross-tabulated with each other, first to establish a baseline of proportions and, subsequently, with the ad-hoc questionnaire that had been designed to inquire into the BID and patient autonomy topic.

Cross-tabulation was chosen as the preferred method for analysis to identify how different groups behaved in the face of different factors. The results and variables presented in the following passages were chosen to highlight common leitmotifs across all groups.

In the next section, the results and necessary context are shown. The focus is then moved to the correlation between BID and the principle of autonomy in bioethics through the discussion section. Lastly, the constraints of the study are examined before a conclusion is drawn.

Results

The results obtained from the survey are presented with ad-hoc cross-tabulations to highlight the most relevant findings.

Table 7 shows the results of the cross-tabulation of Table 6 with Table 2 to identify congruencies and incongruencies between the responses that concerned the idea of a "wrong" or "incorrect" body, with those that concerned the opinion of accepting the patient's request to perform limb amputation.

Table 3: Question 1. Respondents' opinions regarding surgically changing an "incorrect" but physiologically functional body

Q1 answers	Absolute frequency	Relative frequency	Relative frequency valid	Cumulative total	Cumulative relative total
I agree	128	11.2%	11.2%	128	11.2%
I mostly agree	433	37.8%	37.8%	561	49.0%
I mostly disagree	360	31.4%	31.4%	921	80.4%
I disagree	224	19.6%	19.6%	1145	100.0%
No answer	0	0.0%	0.0%	1145	100.0%

Table 3.1: Question 1. Responses split according to medical field

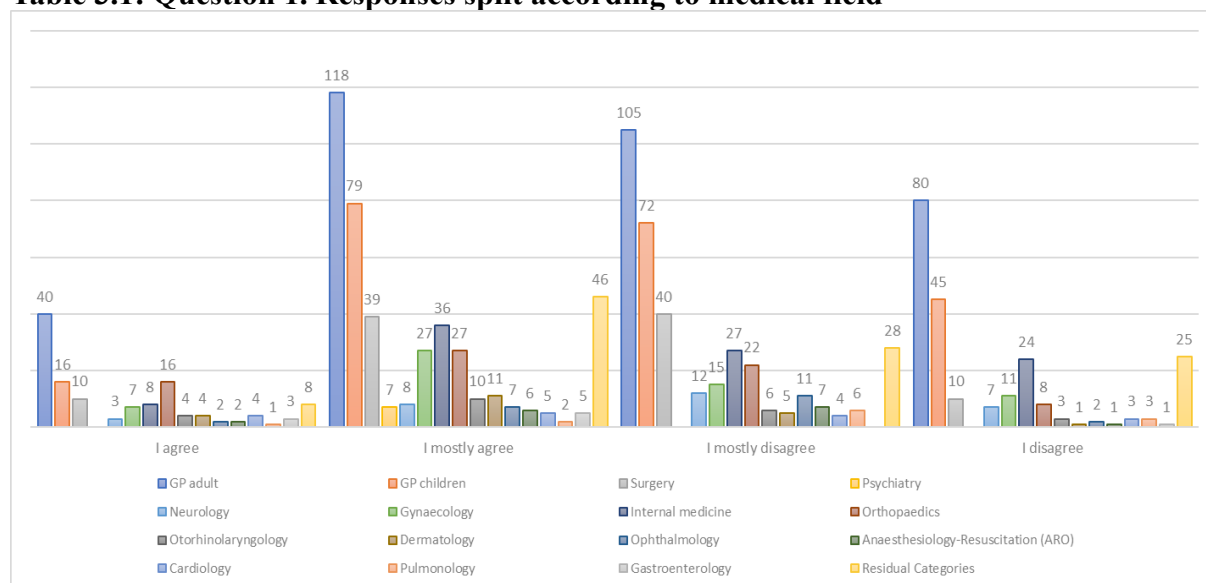


Table 4: Question 2. Respondents' opinions regarding the idea of performing or supporting SRS today or waiting for a less invasive, non-surgical procedure, with the same benefit as SRS, to be available in 10 years' time

Q2 answers	Absolute frequency	Relative frequency	Relative frequency valid	Cumulative total	Cumulative relative total
I will wait until a non-surgical method is available	158	13.8%	13.8%	158	13.8%
I will wait until a non-surgical method is available only if the patient agrees	367	32.1%	32.1%	525	45.9%
I will not wait for the availability of a non-surgical alternative method, as SRS is a well-documented therapeutic approach today	310	27.1%	27.1%	835	72.9%
I would not support SRS today or a non-surgical alternative method in 10 years	310	27.1%	27.1%	1145	100.0%
No answer	0	0.0%	0.0%	1145	100.0%
Total	1145	100.0%	100.0%	1145	100.0%

Table 4.1: Question 2. Cross-tabulation of answers with respondents' age groups

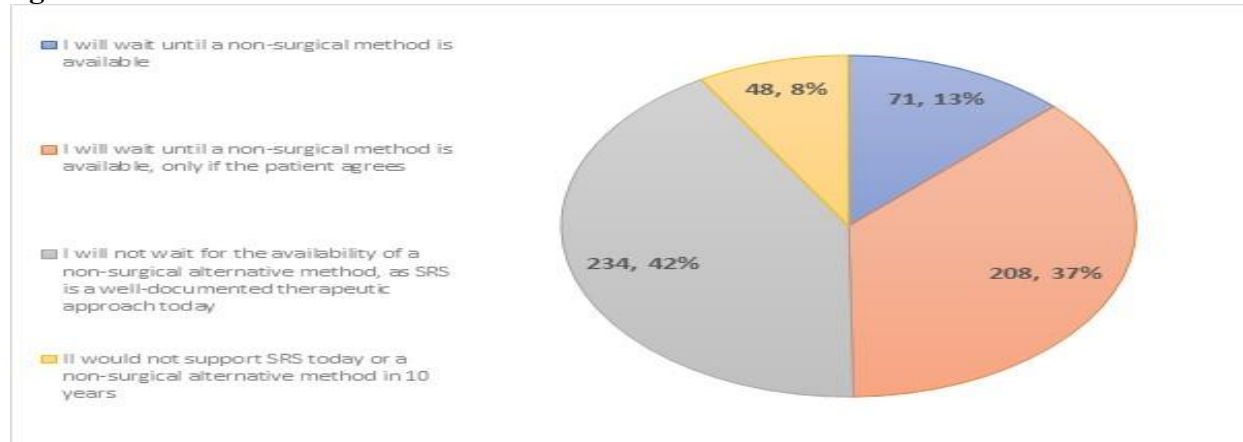
		Age group					Total
		up to 34 years	35-44 years	45-54 years	55-64 years	65 years and over	
I would wait for the non-surgical alternative	Count	28	38	28	37	27	158
	%	17.7%	24.1%	17.7%	23.4%	17.1%	100.0%
I would wait for the non-surgical alternative to be available, only if the patient agrees	Count	91	88	70	59	59	367
	%	24.8%	24.0%	19.1%	16.1%	16.1%	100.0%
I would not wait for the non-surgical alternative since SRS today is a well-documented therapeutic approach	Count	75	73	78	41	43	310
	%	24.2%	23.5%	25.2%	13.2%	13.9%	100.0%
I would neither support SRS today nor wait for a non-surgical alternative in 10 years	Count	51	58	63	60	78	310
	%	16.5%	18.7%	20.3%	19.4%	25.2%	100.0%
Total	Count	245	257	239	197	207	1145
	%	21.4%	22.4%	20.9%	17.2%	18.1%	100.0%

Table 4.2: Question 2. Cross-tabulation chi-square tests

Chi-square tests	Value	Degrees of freedom	Asymptotic significance (two-sided)
Pearson chi-square	34.452a	12	<.001
Likelihood ratio	33.888	12	<.001
Linear-by-linear association	5.256	1	.022
No. of valid cases	1145		

a. 0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 27.18.

Table 5: Congruencies and incongruencies between responses concerning the idea of a wrong or incorrect body, with responses concerning the possibility of postponing SRS in light of a future non-invasive alternative



The pie chart is designed to identify putative associations between the notion of wrong body and gender dysphoria, and at the same time, whether any preference toward physiological functionality or patient's psychological well-being is identifiable. Data is shown as numbers of respondents and percentages of total number of respondents

Table 6: Question 3. Respondents' opinions regarding the idea of supporting or performing limb amputation upon the patient's request to avoid going through painful and recurring medication to save the limb

Q3 answers	Absolute frequency	Relative frequency	Relative frequency valid	Cumulative total	Cumulative relative total
The final decision should be made by the doctor in the best interest of the patient	266	23.2%	23.2%	266	23.2%
The final decision should be made by the patient in their best interest	273	23.8%	23.8%	539	47.1%
The doctor and the patient must find a common position because the opinions of both must have equal weight when choosing a therapeutic procedure	606	52.9%	52.9%	1145	100.0%
No answer	0	0.0%	0.0%	1145	100.0%
Total	1145	100.0%	100.0%	1145	100.0%

Table 7: Question 3 justifications. Results of cross-tabulation of Table 6 with the nodes identified by coding the 1145 open-ended answers provided for the same question.

Node	Doctor's scope		The doctor should make the final decision	The patient should make the final decision	Doctor and patient need to find common ground	Total
			Count	Count	Count	Count
s		Count	246	81	46	373
		%	92.5%	29.7%	7.6%	32.6%
	Subjective stance (no justification provided for the answer given)	Count	10	12	11	33
		%	3.8%	4.4%	1.8%	2.9%
	Patient's scope	Count	10	136	23	169
		%	3.8%	49.8%	3.8%	14.8%
	Law standards	Count	0	21	94	115
		%	0.0%	7.7%	15.5%	10.0%
	Conditional bargain b/w the parties (IFF)	Count	0	23	267	290
		%	0.0%	8.4%	44.1%	25.3%
	Doctor and patient collaboration for successful treatment	Count	0	0	165	165
		%	0.0%	0.0%	27.2%	14.4%
	Total	Count	266	273	606	1145
		%	100.0%	100.0%	100.0%	100.0%

Table 7.1: Question 3. Cross-tabulation chi-square test

Chi-square test	Value	Degrees of freedom	Asymptotic significance (two-sided)
Pearson chi-square	1088.756a	10	<.001
Likelihood ratio	1136.029	10	<.001
Linear-by-linear association	702.819	1	<.001
No. of valid cases	1145		

a. 0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 7.67.

Table 8: Visualisation of node 5 representing the sub-categories included in the conditional bargain b/w the parties (IFF).

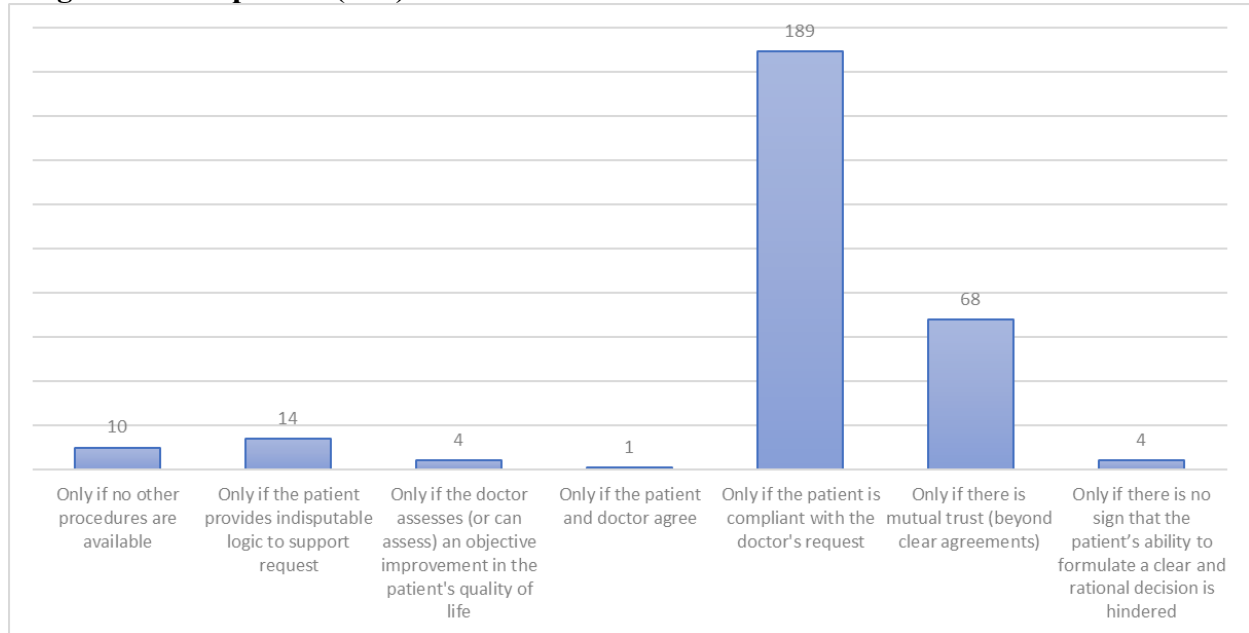


Table 9: Question 4. Respondents' opinions regarding the idea of performing irreversible surgical procedures upon the patient's request in order to alleviate a state of psychological distress that is caused by a rational and partially founded fear of developing a specific terminal illness

Q4 answers	Absolute frequency	Relative frequency	Relative frequency valid	Cumulative total	Cumulative relative total
No, I would not support irreversible surgery requested by the patient	207	18.1%	18.1%	207	18.1%
No, I would not support the irreversible surgical procedure requested by the patient, but I would understand his/her concerns and would recommend him/her to colleagues who could perform the requested procedure	317	27.7%	27.7%	524	45.8%
Yes, I would support the irreversible surgical intervention requested by the patient	275	24.0%	24.0%	799	69.8%

I would neither support nor reject the patient's request (other)	346	30.2%	30.2%	1145	100.0%
No answer	0	0.0%	0.0%	1145	100.0%
Total	1145	100.0%	100.0%	1145	100.0%

Table 10: Question 5. Respondents' opinions regarding the idea of legalising certain medical practices as a risk-reduction and damage-control strategy

Q5 answers	Absolute frequency	Relative frequency	Relative frequency valid	Cumulative total	Cumulative relative total
I agree	182	15.9%	15.9%	182	15.9%
I mostly agree	334	29.2%	29.2%	516	45.1%
I mostly disagree	272	23.8%	23.8%	788	68.8%
I disagree	357	31.2%	31.2%	1145	100.0%
No answer	0	0.0%	0.0%	1145	100.0%
Total	1145	100.0%	100.0%	1145	100.0%

Discussion

The willingness of Czech medical professionals to collaborate with their patients to determine suitable treatment plans is evident. However, upon closer inspection, it becomes clear that there is a strong authoritarian approach, particularly concerning high-risk situations such as amputation procedures, within the medical community. Such an approach covers more than just the BID phenomenon; it occurs in any discussion of on-demand amputation, even in instances in which the patient can clearly articulate the reasoning behind the request with an evidence-based approach (e.g. damaged limb). This finding highlights a medical ideology and approach that prioritises the physiological functionality of the individual to the detriment of their psychological well-being.

While the answers show widespread agreement regarding the performance of surgery to correct a “wrong” body (although the clarity of what it means to be wrong is not explicitly stated in the original formulation of the survey), further analysis reveals a split according to the respondents' medical fields. Notably, the disagreement arises primarily in fields with high-risk-reward ratios. Surgical correction of something “wrong” but functional is shown to be more acceptable in cases in which the procedure is unlikely to impact the patient's original physiological functionality, such as mole-removal surgery or minor, aesthetic practices. Conversely, surgical correction of something “wrong” but functional is shown to be less acceptable in cases that have a high chance of impacting the patient's physiological functionality, such as neurosurgery procedures or on-demand amputations. The weight placed on the patient's wishes in the physician's choice of medical procedure is directly related to the risk-reward ratio evaluation as interpreted by the physician. This assessment is focused exclusively on physiological functionality rather than psychological well-being. Applying this reasoning to BID, it becomes evident that the removal of a healthy limb does not satisfy the risk-reward ratio paradigm that is inferred from the results.

There are instances more common than BID in which, to restore the psychological functionality of the individual, it is necessary first to impact that person's physiological functionality. The most common of such instances are those surgeries or parallel medical treatments that are related to the containment or removal of degenerative illnesses, as might be the case for chemotherapy. There is

no doubt that chemotherapeutic treatments place a great deal of psychological and physiological burden on the individual (see, for example, Nerenz et al., 1984; Tope & Burish, 1992). Nevertheless, the risk of such invasive therapies is considered worth taking, as it enables the individual to fight a terminal disease.

The distinction between functional and non-functional, moreover, is less clear cut than is presented herein. Table 6 provides an example of the grey areas between these categorisations. In situations in which there is no optimal functionality (a damaged limb, for example) but there is the potential to restore optimal or nearly optimal functionality, one question that may arise is the extent to which it is acceptable to perform surgery. In other words, where shall the line be drawn between legitimate and illegitimate surgical intervention? Analysis of the data shown in Table 6 indicates that respondents prefer collaboration between doctor and patient, indicating their inclination toward shared decision-making in medical matters. However, examination of these inquiries in conjunction with the justifications provided by the respondents uncovers a different trend. The data reveals that the respondents' willingness to collaborate with the patient is subject to a conditional bargain that is represented by the logical, biconditional "if and only if" (IFF). This means that their willingness to collaborate with the patient depends on certain conditions being met. In the context of the 1145 responses that were analysed, this conditional stance suggests a *benevolent concession* from the physician's side.

In this context, *benevolent concession* refers to an authoritarian attitude that is adopted by physicians, wherein they are willing to accept the patient's autonomy only if the patient's request aligns with the physician's preconceived notions or beliefs. The representation of this conditional bargain, as depicted in Table 8, suggests an overbearing attitude rather than an acknowledgement of the equal authority of doctors and patients in medical therapy. Furthermore, the inclination to address the patient's psychological discomfort through surgical intervention, initially indicated by the data in Table 6, is once again called into question in Table 9. The responses show a significant incidence of abstention from commenting on a specific situation, which indicates a need for more consensus or clarity regarding how this issue should be addressed.

These findings shed light on the complex dynamics between doctors and patients regarding collaboration, decision-making, and the recognition of patient autonomy. While there is a general inclination towards collaboration, underlying conditions and paternalistic tendencies can influence the implementation of shared decision-making in medical practice. Let us return to the question, where shall the line be drawn between legitimate and illegitimate surgical intervention? The answer seems to be based on the respondent's conviction, which is grounded in medical authority. Within such a medical authority framework, the patient's opinion regarding their medical therapy is considered only when such an opinion is consistent with the physician's assessment, independent of whether or not the reasoning provided by the patient is considered valid.

Another significant factor related to surgical procedures is that they are not the preferred course of action for any respondent group, with minor exceptions, even in situations that are recognised at the legal and medical levels. Singularly, the data indicates that individuals hold specific beliefs regarding SRS compared with other surgical procedures. This raises the question of whether SRS is considered a non-elective or elective procedure. Based on the responses, for the physicians SRS falls into the latter category, as ten years is considered a reasonable waiting period to undergo the procedure. This also suggests that SRS is viewed not as a best practice but as an acceptable option due to the lack of available alternatives. It highlights the willingness of the respondents to accommodate and compromise in situations in which physicians and patients must make concessions. Physicians must be willing to make concessions when there are limited options, while patients should actively seek alternative paths to surgery and exercise their agency in decision-

making. The significance of choice and exploration of other options emphasise that physicians see SRS as an elective medical procedure rather than as a necessity to seek congruity between body and mind.

When the results are cross-referenced with the ages of the clinicians, it becomes apparent that the seniority of the physicians is another significant factor. The older the physician, the more likely they are either to perform the surgery immediately or to abstain from it entirely. This trend becomes identifiable from age 45 years onwards, with physicians older than 55 years being predominantly inclined towards abstention. This observation reinforces the notion that SRS is considered a standalone practice compared with invasive surgical procedures, and the idea of the “wrong” body that is presented in Table 3 does not entirely align with that of gender dysphoria, for which SRS is a therapeutic approach.

A final noteworthy point is the implicit faith of the respondents in the medical and legal systems, as can be inferred from Table 10. It is perceived as crucial to secure government approval before even considering a patient’s request for treatment in order to control damage and reduce risk. This approach, which is considered valid for issues such as female genital mutilation (FGM), indicates that on-demand amputation practices, such as those associated with BID, must enter the realm of medical discussion before they will be considered worthy of debate about legalisation.

In conclusion, the data analysis reveals both a willingness to collaborate and an authoritarian approach among Czech medical professionals. While there is a general inclination toward shared decision-making, this willingness is subject to conditions and depends on the physician’s preconceived notions. The study also highlights the complexity of addressing psychological discomfort through surgical intervention and emphasises the significance of choice, exploration of options, and recognition of patient autonomy. Furthermore, the data suggests that physicians have implicit faith in the medical and legal systems, which leads them to focus on government approval of their actions to ensure risk reduction.

Interpreting autonomy

The present section will address an empirically informed definition and interpretation of autonomy based on the survey results. Before proceeding, it is necessary to establish a functional baseline. Autonomy is self-determination and self-governance.

[A]t minimum, self-rule that is free from both controlling interference by others and from limitations, such as inadequate understanding, which prevents meaningful choice ... a person of diminished autonomy, by contrast, is in some respect controlled by others or incapable of deliberating or acting on the basis of his or her desires and plans... (Beauchamp & Childress. 2012, pp. 101–102).

Although there are several ways to interpret personal autonomy, the above definition will be a starting point to inquire into the respondents’ feedback as it provides at least a bare minimum of what being an autonomous agent means; freedom from controlling interferences and adequate understanding.

Despite the apparent moderate survey feedback spurring joint collaboration, the analysis revealed a strong propensity for preserving bodily integrity based on an almost unidirectional doctor’s perspective. Such results elicit three possible interpretations; the bodily integrity of the individual must be preserved *a priori* despite the patient’s requests. The discomfort state of the individual is considered sufficient reason to infer internal constrictions, thus ruling out the autonomy requisite. The short contextualisation of each question was insufficient to provide

alternative answers; hence, the respondents kept a safe ground. Such interpretations are not mutually exclusive. The first two readings of the survey results will be addressed in the following sections by highlighting the idea of controlling influences and the idea of the patient's best interest framed against the definition provided above of autonomy. The third interpretation will be addressed when discussing the limitations of the study.

Motivation and obsession

The idea of controlling influences can be interpreted in various ways; controlling influences are internal, such as a delusion or obsession (and compulsion), which clouds the best judgment or forces the individual to move in a given direction, or the controlling influences can be external. This is the case of individuals forced to make specific choices under coercion or manipulation. The topic of internal influences and personal autonomy is particularly relevant to the BID case. In this regard, the concept of the *window of tolerance* comes useful. The window of tolerance idea implies a fictitious perimeter within which "various intensities of emotional arousal can be processed without disrupting the functioning of the system" (Siegel, 1999, p. 253). In other words, the individual can experience diverse altered states of consciousness (such as emotional and cognitive) while maintaining one's autonomy. Only when the individual moves outside such a perimeter is the autonomy lost due to intense and unfamiliar states of altered consciousness (traumatic events, drugs, alcohol, temporary or permanent states of distress, both physical and psychological). It follows that an obsession, namely "recurrent and persistent thoughts, impulses or images that are experienced as intrusive and inappropriate and that cause marked anxiety or distress" (APA, 2013, p. 237) and delusions, which are "fixed beliefs that are not amenable to change in light of conflicting evidence" (APA, 2013, p. 87) position themselves outside the window of tolerance.

The first question to pose when addressing issues of controlling influences in relation to an altered state is how to trace the dividing line in any state of discomfort, after which the autonomy of the individual is lost. Such reasoning can be applied to any type of discomfort state experienced by the individual. For BID, the wish for bodily impairment is neither an obsession nor a delusion, according to the ICD-11 (code 6C21). Nevertheless, the individual's motivation to pursue such a path is persistent over time despite understanding the oddness of the request. The underlying idea of such elaboration is that, given the right reasons, any motivation is a good drive to obtain a change in the status quo. Within the BID debate, the proper reason is an altered body image which negatively affects the Quality of Life of the individual (First, 2005; First & Fisher, 2012). In this light, motivation is not a controlling influence but rather the outcome of a pondered decision which led the individual to wish for a change for the better. Such analysis would ideally satisfy the first requirement for being an autonomous agent identified previously.

Assuming such a requirement is fulfilled for BID (which is widely open for debate), the idea of adequate understanding of what it actually means to undergo an amputation procedure and consequently live in a perpetual state of impairment remains. A good starting point to touch on such an issue is the informed consent process which is the practice through which a medical professional illustrates the diagnosis, therapy, risk, benefits, recovery, aftercare and all related topics to the patient. A patient can only be considered autonomous if provided with proper and enough information to make a meaningful choice about one's medical future. In this context, proper information is intended as information subject-specific to the patient, such as information tailored to the patient's condition. Enough information is intended as the minimum amount to make an original opinion on the topic without necessarily being bound by the lack of medical background to understand future implications. Leveraging on the idea that the BID individual would need, allegedly, a higher degree of information elaboration capabilities to ponder all possible

eventualities which would occur in case of limb removal positions itself as a utopic requirement in the same fashion as lingering on speculations concerning the extent to which any individual can fully comprehend any therapeutic output or the extent any individual can fully comprehend one's pathogenesis. Assuming the right conditions are met and an adequate understanding of the information received is demonstrated, any individual who acts autonomously and is recognised to have the decisional capacity (Darby & Dickerson, 2017; Appelbaum & Grisso, 1988; Ganzini et al., 2004; Appelbaum, 2007) ought to have one's decisions and wishes given due weight essentially if there are precedents that demonstrate that they are likely to relieve the subject from a state of suffering.

Beneficence, non-maleficence and the patient's best interests

A further element emerged from the survey results, which needs to be addressed; the thin line that separates the patient's self-determination from the patient's best interest. These two concepts are not mutually exclusive and can coexist simultaneously or as a standalone. The idea of self-determination also means delegating one's choices to someone who acts in the individual best interest, namely the curing physician. This is because the curing physician might obtain the patient's sought results by leveraging medical knowledge that the patient does not have. At the same time, however, focusing on the physician's perspective of what is in the patient's best interest might hinder what is beneficial for the patient, such as respecting one's choices. The idea of best interest is implicitly present in all the questions submitted through the survey and touches on ideas of beneficence and non-maleficence simultaneously.

Beneficence implies the physician's obligation to promote the patients' physical, psychological and moral health by promoting their best interest and removing any possible harm. Evenly essential is the duty to estimate the risk-benefit ratio, which leads the principle of beneficence to branch out into two other principles: the principle of positive beneficence and the principle of utility. The principle of positive beneficence requires the provision of benefits, including preventing and removing harm from others. The principle of utility requires a risk-benefit analysis to evaluate and promote behaviour in the interest of patients and the general public. This leads the principle of beneficence to be a *prima facie* moral obligation for the medical world, which, however, does not promote its universal and unconditional applicability; in other words, the principle of beneficence is not absolute and can be overridden when it conflicts with an equal or a more vital obligation.

When such acceptance is used to frame the BID phenomenon can lead to seeing the indulgence to accept amputation requests as a way to create a precedent that might be used to escalate new claims of similar nature. This is to remark that justifying BID by promoting the patient's psychosomatic well-being is not convincing enough. No narrative, either BID, Gender Dysphoria, Cosmetic or Plastic surgery, will suffice if analysed only from a patient-centred perspective (Sutrop, 2011). In other words, biomedical cases should be deliberated case-by-case based on the circumstances, including geographical, social and political context.

Limitations

It should be noted that it was impossible to address BID directly through the survey due to its secretive nature. However, this constraint could be perceived as an advantage, as it enabled respondents to collect feedback on related topics without any potential influence on their pre-existing beliefs.

The generalisation of specific terminology that was used to construct the questions was an area that could have been improved. Inclusion of paired phrases such as surgical intervention, functional body, wrong body, and similar (e.g. in Table 3), left too much room for subjective interpretation

without any possibility for the researcher to address such topics in more detail. Stating the idea of “wrong body” may have had various meanings for the respondents that ranged from personal interpretation of minor physical defects to an entirely psychological construct without physical evidence. Similarly, as may be the case for the data shown in Table 3, the idea of surgical intervention was too broad and might have been interpreted as reversible or irreversible. The discussion and analysis may have been significantly different depending on which of these two variables was used as a baseline for further interpretation. Similar reasoning is possible concerning the idea of functionality, functional body and personal preference, which may have transmitted a sense of electiveness rather than a need to relieve unbearable suffering.

The inability to convey correctly any differentiation between elective and non-elective medical treatment was another limitation of the study. Depending on the interpretation of these two terms, the whole paradigm of medical intervention and subjective and deontological stances can change drastically.

Finally, mention must be made of the technical difficulties that might have altered the data obtained, such as the need to opt for closed-ended questions, which might have diverted respondents’ attention toward one specific answer rather than another, depending on wording and syntax.

Despite its limitations, the data that was collected and analysed in this study provides crucial insights into how Czech doctors perceive, interpret, and either endorse or oppose patient autonomy in various circumstances. Further research is required to comprehend the intricacies and variations that have arisen from the study. Direct comparison of SRS and BID at the national level and exploration of the requirements for BID to be acknowledged and accepted in the Czech Republic is necessary. This will yield valuable insights into the ethical and legal aspects of the BID phenomenon.

Conclusion

The study discussed in this paper addressed several topics, all of which were deemed relevant to inquire into the physician’s understanding of patient autonomy with implicit reference to the BID phenomenon and its ethical challenges. An initial assessment showed that clinicians were open to the idea of performing surgery to correct a wrong but functional body. However, a more in-depth analysis showed that such predisposition was valid only for those instances in which the surgical intervention that was considered did not present significant risks regarding impacts on the original physiological functionality of the individual. Such an idea of functionality seemed to be transposed when the respondents were asked to consider SRS; the majority of the responses identified a non-surgical method as the best way to address (implicitly) cases of gender dysphoria, thus highlighting the preference for the practice.

Upon closer examination of the autonomy discussion, it became evident that the doctor’s acceptance of a patient’s request was influenced by preconceptions and a desire to act benevolently rather than out of genuine respect for the patient’s autonomy. The limits of collaboration between the doctor and patient were thus apparent, and the survey showed that a doctor’s decision was biased. A request backed by solid physical evidence stood a higher chance of being approved than one that relied solely on the patient’s psychological distress.

Finally, the survey showed that respondents unanimously rejected the legalisation of practices such as FGM and similar instances because this rejection was seen as a risk-reduction and damage-control strategy. This finding highlighted general agreement with national policies and thus demonstrated unanimous compliance with the governmental approach.

Amputation can be utilised as a pivotal point through which to interpret the answers. From this viewpoint, it can be seen that although there is general agreement among the respondents regarding the weight that should be placed on patients' wishes regarding their medical future, such weight is seriously diminished when there is an impact on the original physiological functionality of the individual, and wholly banished for requests that originate from psychological discomfort. This assessment indicates that the idea of surgical intervention to correct a wrong but functional body is progressively more accepted in those instances in which the surgical intervention does not present significant risk to the original physiological functionality of the individual. The more such functionality is put at risk, the less likely it is that the physician will entertain the idea of performing surgery for something deemed elective. In cases of BID, surgery to correct the wrong body alters, irreversibly, the original functionality of the individual through amputation. In order to overcome such an impasse, the emphasis on the idea of functionality in cases of BID must be moved from the physiological to the psychological level, and from the idea of disability to that of impairment. Disability is a social condition, but such a definition does not necessarily apply to BID.

Further, more comprehensive investigations are necessary to comprehend the ethical challenges of BID and its putative therapeutic aspect, while close attention is paid to the declination of the patient's autonomy. It is only through the application of this method that BID will become medically recognised.

References

- AMERICAN PSYCHIATRIC ASSOCIATION. (2013): *Diagnostic and statistical manual of mental disorders (5th ed.)*.
- APPELBAUM, P. S. (2007): Clinical practice. Assessment of patients' competence to consent to treatment. In: *New England Journal of Medicine*, 357(18), pp. 1834–1840.
- APPELBAUM, P. S. & GRISSO, T. (1988): Assessing patients' capacities to consent to treatment. In: *The New England Journal of Medicine*, 319(25), pp. 1635–1638.
- AZIZ, V. M. & WARNER, N. J. (2005): Capgras' Syndrome of Time. In: *Psychopathology*, 38(1), pp. 49–52.
- BAYNE, T. & LEVY, N. (2005): Amputees by choice: Body Integrity Identity Disorder and the ethics of amputation. In: *Journal of Applied Philosophy*, 22(1), pp. 75–86.
- BEAUCHAMP, T. L. & CHILDRESS, J. F. (2012). *Principles of biomedical ethics, 7th ed.* New York: Oxford University Press.
- BENSLER, J. M. & PAAUW, D. S. (2003): Apotemnophilia masquerading as medical morbidity. In: *Southern Medical Journal*, 96(7), pp. 674–676.
- BERGER, B. D. & LEHRMANN, J. A. et. al. (2005): Nonpsychotic, nonparasitic, self-amputation and the internet. In: *Comprehensive Psychiatry*, 46, pp. 380–383.
- BERRIOS, G. E. & LUQUE, R. (1995a): Cotard's delusion or syndrome? In: *Comprehensive Psychiatry*, 36(3), pp. 218–223.
- BERRIOS, G. E. & LUQUE, R. (1995b): Cotard Syndrome: Clinical Analysis of 100 Cases. In: *Acta Psychiatrica Scandinavica*, 91(3), pp. 185–188.
- BERRIOS, G. E. & LUQUE, R. (1999): Cotard's On Hypochondriacal Delusions in a Severe form of Anxious Melancholia. In: *History of Psychiatry*, 10(38), pp. 269–278.
- BLANCHARD, R. (1999): Clinical observations and systematic studies of autogynephilia. In: *Journal of Sex and Marital Therapy*, 17(4), pp. 235–251.
- BLOM, R. M. & BRAAM, A. W. et. al. (2014): Body integrity identity disorder, relief after amputation. In: *Tijdschrift Psychiatrie*, 56(1), pp. 54–57.

- BLOM, R. M. & HENNEKAM, R. C. et. al. (2012): Body integrity identity disorder. In: *PLoS One*, 7(4), pp. 1–6.
- BRENNER, I. (1999): Upper-extremity self-amputation in a case of dissociative identity disorder. In: *Journal of Clinical Psychiatry*, 60(10), pp. 705–706.
- BRIDY, A. (2004): Confounding extremities: Surgery at the medico-ethical limits of Self-Modification. In: *The Journal of Law, Medicine & Ethics*, 32(1), pp. 148–158.
- BURISH, T. G. & TOPE, D. M. (1992): Psychological techniques for controlling the adverse side effects of cancer chemotherapy: Findings from a decade of research. In: *Journal of Pain and Symptom Management*, 7(5), pp. 287–301.
- CHUNG, K. C. & PUSHMAN, A. G., et. al. (2009): A systematic review of ethical principles in the plastic surgery literature. In: *Plastic and Reconstructive Surgery*, 124(5), pp. 1711–1718.
- COHEN, S. (2019). The logic of the interaction between beneficence and respect for autonomy. In: *Medicine, Health Care and Philosophy*, 22(2), pp. 297–304.
- DARBY, R. R. & DICKERSON, B.C. (2017): Dementia, Decision Making, and Capacity. In: *Harvard Review of Psychiatry*, 25(6), pp. 270–278.
- DAVIES, M. & COLTHEART, M. et. al. (2001): Monothematic delusions: Towards a two-factor account. In: *Philosophy, Psychiatry and Psychology*, 8(2), pp. 133–158.
- DUDLEY, R. E. & JOHN, C. H. et. al. (1997): Normal and abnormal reasoning in people with delusions. In: *British Journal of Clinical Psychology*, 36(2), pp. 243–258.
- DYER, C. (2000): Surgeon amputated healthy legs. In: *British Medical Journal*, 320, p. 332.
- ELLIS, H. D. & LEWIS, M. B. (2001): Capgras delusion: a window on face recognition. In: *Trends in Cognitive Sciences*, 5(4), pp. 149–156.
- FIRST, M. B. (2005): Desire for amputation of a limb: Paraphilia, psychosis or a new type of identity disorder. In: *Psychological Medicine*, 34(6), pp. 919–928.
- FIRST, M. B. & FISHER, C.E. (2012): Body integrity identity disorder: The persistent desire to acquire a physical disability. In: *Psychopathology*, 45(1), pp. 3–14.
- FURTH, G. & SMITH, R. (2000): *Apotemnophilia: Information, questions, answers and recommendations about self-demand amputation*. Bloomington: 1st Book Library.
- GANZINI, L. & VOLICER, L. et. al. (2004). Ten myths about decision-making capacity. In: *Journal of the American Medical Directors Association*, 5(4), pp. 263–267.
- GILLON, R. (1994). Medical ethics: Four principles plus attention to scope. In: *British Medical Journal*, 309(5), pp. 184–188.
- GILLON, R. (2003). Ethics needs principles – four can encompass the rest – and respect for autonomy should be first among equals. In: *Journal of Medical Ethics*, 29(5), pp. 307–312.
- GRANT, S. B. & MODI, P. K. et. al. (2017). *The surgical informed consent process*. In: A. R. Ferreres, P. Angelos, E. A. Singer, (eds.): *Ethical Issues in Surgical Care*. Chicago: American College of Surgeons, pp. 137–163.
- HAGE, J. J. & KARIM, R. B. (2000): Ought GIDNOS get nought? Treatment options for Non-transsexual gender dysphoria. In: *Plastic and Reconstructive Surgery*, 105(3), pp. 1222–1227.
- HARRIS J. (2003): In praise of unprincipled ethics. In: *Journal of Medical Ethics*, 29(5), pp. 303–306.
- LORIGA, L. (2023): Body integrity dysphoria and ‘just’ amputation: State-of-the-art and beyond. *Human Affairs* [Preprint]. Available at: <https://doi.org/10.1515/humaff-2022-1005>.
- MCKENZIE, R. & COX, S. (2007): Transableism, disability and paternalism in public health ethics: Taxonomies, identity disorders and persistent unexplained physical symptoms. In: *International Journal of Law*, 2(4), pp. 363–375.

MULLER, S. (2007): Body Integrity Identity Disorder (BIID) – Ist der Amputationswunsch eine autonome Entscheidung oder Ausdruck einer neuropsychologischen Störung? In: D. Gross (ed.): *Normal – anders – krank?* Berlin: Medizinisch Wissenschaftliche Verlagsgesellschaft, pp. 229–266.

NERENZ, D. R. & LEVENTHAL, H. et. al. (1984): Psychological aspects of cancer chemotherapy. In: *International Review of Applied Psychology*, 33(4), pp. 521–529.

NITSCHMANN, K. (2007): Chirurgie für die Seele? Eine Fallstudie zu Gegenstand und Grenzen der Sittenwidrigkeitsklausel. In: *Zeitschrift für die gesamte Strafrechtswissenschaft*, 119(3), pp. 547–592.

NOLL, S. & KASTEN, E. (2014): Body integrity identity disorder (BIID): How satisfied are successful wannabes? In: *Psychology and Behavioural Sciences*, 3(6), pp. 222–232.

PARSON, J. & BROWN, W., et. al. (1981): Inappropriate computational request. In: *Psychosomatics*, 22, pp. 822–823.

PELLEGRINO, E. D. & THOMASMA, C. D. (1987): The Conflict between Autonomy and Beneficence in Medical Ethics: Proposal for a Resolution. In: *Journal of Contemporary Health Law & Policy (1985-2015)*, 3(1), pp. 23–46.

RIDDLE, G. C. (1998): *Amputee and Devotee: Made for each other?* New York: Irvingstone Publisher.

RYAN, C. J. (2008): Out on a limb: The ethical management of body integrity identity disorder. In: *Neuroethics*, 13, pp. 21–33.

SIEGEL, D. J. (1999). *The developing mind: Toward a neurobiology of interpersonal experience*. New York: Guilford Press,

SMITH, C. M. (2005): Origin and uses of Primum Non-Nocere: Above all, do no harm! In: *The Journal of Clinical Pharmacology*, 45(4), pp. 371–377.

SORENE, E. D. & HERAS-PALOU, C. et. al. (2006): Self-amputation of a healthy hand: A case of body integrity identity disorder. In: *Journal of Hand Surgery (British and European Volume)*, 31(6), pp. 593–595.

STEWART, D. & LOWREY, M. (1980): Replantation surgery following self-inflicted amputation. In: *Canadian Journal of Psychiatry*, 25(2), pp. 143–150.

SUTROP, M. (2011). How to avoid a dichotomy between autonomy and beneficence: from liberalism to communitarianism and beyond. In: *Journal of Internal Medicine*, 269(4), pp. 375–379.

SWINDELL, M. & LAWRENCE, J. S. (2009): Body Identity Integrity Disorder: An Overview. In: A. Stirn, A. Thiel & E. Oddo (eds.): *Body Integrity Identity Disorder: Psychological, neurobiological, ethical and legal aspects*. Lengerich: Pabst Science Publishers, pp. 154–175.

TAKALA, T. (2001): What is wrong with global bioethics? On the limitations of the four principles approach. In: *Cambridge Quarterly of Healthcare Ethics*, 10, pp. 72–77.

TURBYNE, C. & DE KONING, P. et. al. (2021): Body integrity identity disorder using augmented reality: A symptom reduction study. In: *BMJ Case Reports*, 14, pp. 1–5.

TVCAR, R. & DERNOVSEK, M. et. al. (1999): Self-amputation of the left hand: A case report. In: *Journal of Clinical Psychiatry*, 60, pp. 793–794.

WORLD HEALTH ORGANIZATION (2019): *International classification of diseases for mortality and morbidity statistics (11th Revision)*.

WORLD PROFESSIONAL ASSOCIATION FOR TRANSGENDER HEALTH. (2012): *Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People* [7th version].