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Caring for Evidence: On the Intertwinement of Research and Care in an Obesity Outpatient Clinic March 2015



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Caring for Evidence:

On the Intertwinement of Research and Care in an Obesity Outpatient Clinic

Kay Felder, Ulrike Felt, Michael Penkler

The recent years have witnessed a substantial increase in bariatric surgery rates. This form of obesity treatment is often subjected to the critique that it turns patients into passive objects of medical intervention. Similarly, efforts to 'rationalize' medicine, as in evidence-based medicine, are sometimes denounced for imposing a 'one-size-fits-all' approach that neglects patient diversity. We argue that these critiques fail to do justice to the complexities of actual care situations. In our ethnographic study of a project for bariatric preand aftercare, we show how research protocols not only close down but also open up spaces for patient-centered care and how despite professional cautions, experiences of stigma and broader imaginations of biomedical care often lead patients to embrace surgery as a treatment conceptualized as a technological fix. We argue that investigations of how research and clinical practice intertwine need to be both empirically grounded and sensitive to wider societal contexts.

Key words: Objectification, Standardization, Evidence-Based Medicine, Patient-Centered Medicine, Obesity, Bariatric Surgery

Over the past few decades, there have been transformations of medical knowledge and practice connected to larger reorderings of the relationship between scientific research and medical practice (Cambrosio et al. 2006). As Clarke and colleagues (2003; 2010) have argued, "While science and technology became increasingly constitutive of medicine across the twentieth century, in its final decades, technoscientific transformations gained significant moment," leading to a "technoscientization of biomedicine" (2003:173). Evidence-based medicine (EBM) has been an important part of this process. Having emerged as "a social movement in medicine" (Pope 2003:267) with the goal of "rationalizing" clinical care by basing it on measurable state-of-the-art evidence (Cronje and Fullan 2003; Pope 2003), EBM has been evaluated differently by various involved actors: While some health professionals criticize rationalization processes as impinging on clinical autonomy, health service providers and policy makers in particular have often welcomed EBM for making medical practice more accountable (Timmermans and Mauck 2005; van Loon et al. 2013).

Responses from the social sciences initially criticized EBM for objectifying patients and dehumanizing doctor-patient interactions (Frankford 1994; Little 2003; Rogers 2002). Similarly, scholars problematized an increasing intertwinement of biomedical research and clinical care practices, arguing that both serve distinct and opposed

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logics (see Wadmann and Hoeyer 2014). Other scholars from medical anthropology and science and technology studies (STS) questioned this assumed opposition between objectification and patient engagement as well as between research logics and good care and called for more nuanced investigations of the restrictions and possibilities introduced into clinical practice through EBM (Mykhalovskiy and Weir 2004; Timmermans and Almeling 2009).

We answer this call for more nuanced investigations by presenting an ethnographic case study of a program for bariatric surgery pre- and aftercare situated at a large Viennese research clinic and enabled through a third-party funded research project. Recent years have witnessed an impressive increase in bariatric surgery rates, and gastric banding, gastric bypasses, and sleeve gastrectomy have become prevalent methods in the treatment of morbid obesity (Robinson 2009)¹. Some researchers even hail bariatric surgery as the magic bullet in obesity treatment, a field in which the success of conservative treatment is notoriously low (Fried et al. 2008). Simultaneously, as bariatric surgery becomes rapidly established as the standard procedure, both its long-term effects and best practice in pre- and aftercare are still partly unknown. For example, questions about how to prevent malnutrition after surgery and whether and how the observed benefits of bariatric surgery for blood sugar levels are long-term are not fully understood (Maggard-Gibbons et al. 2013; Wade et al. 2010).

The treatment program that we studied was thus designed to provide evidence on the long-term effects of bariatric surgery, to evaluate best practice for pre- and aftercare, and to build novel capacities for systematic surgery aftercare. Within this program, scientific research is intimately connected with clinical practice, standardized procedures, and ideals of patient-centered care, making it a suitable setting for studying the intertwinement of research and care.

In what follows, we first discuss the role of biomedicalization, objectification, and standardization processes in health care. We then present our ethnographic site and our findings in the form of three ethnographic vignettes. In the first vignette, we highlight the importance of standards and research protocols for structuring patient encounters, showing how such standards and protocols simultaneously open up and close down spaces of care. In the second vignette, we show how health professionals struggle to realign the exigencies of a standardized research protocol and hectic everyday work in the clinic with ideals of patient-centered care. In contrast to such ideals and perhaps somewhat surprisingly, many patients rather seek a form of treatment that they conceptualize as a technological fix. In the third vignette, we further discuss the entanglement of technologized care, objectification, patient agency, and subjectivities.

To understand our empirical findings, which are contrary to common characterizations of biomedicalization as objectifying and dehumanizing, we show that patients' previous experiences of stigma and their broader visions of biomedicine must be taken into account. Hence, we argue for the importance of considering the wider social contexts for investigating how the intertwinement of research and care plays out in practice. In contrast to many other studies on biomedicalization processes, our study addresses a bodily phenomenon whose medicalization is perhaps more controversial and debated than other phenomena (authors 2014a, b; Rich et al. 2011). Further, this phenomenon is marked by a high degree of stigmatization and moralization experi-

enced by individuals classified as obese (Evans 2006; Gard and Wright 2005; Warin and Gunson 2013). In the context of the supposed "obesity epidemic" and its attendant moral panics (Boero 2007), body size is both increasingly medicalized and equated with moral categories such as sloth, laziness, and indiscipline (Grønning et al. 2013). Critical obesity scholars have shown how body weight is a phenomenon that is profoundly shaped by different and sometimes disparate cultural, economic, and social contexts and that is intrinsically tied to questions of subjectivity, possible identities, and individual roles (Murray 2009; Popenoe 2004; Warin and Gunson 2013).

Critical obesity studies have further highlighted a trend in public discourse of making individuals responsible and factoring out collective dimensions (Boero 2007; 2013). Simultaneously, the public staging of obesity often purports that the morality of 'Western' populations is declining, framing the increase in bodyweight in terms of a "familiar story about Western decadence" (Gard and Wright 2005:2). In another article, we have highlighted the media's role in formulating "diagnostic narratives" that stage obesity as a danger to the core values of Austrian society and that thus portray obese individuals as a threat to the common good (authors 2015).

We will show that against a highly moralizing public discourse, biomedical framings of obesity and processes of standardization and objectification in clinical settings can be experienced as de-stigmatizing and guilt freeing. Discourses on obesity shape research and care practices, not least because they influence health professionals' and patients' understandings of medical encounters in sometimes perhaps unexpected ways.

Theoretical and conceptual framing

Both bariatric surgery and evidenced-based medicine can be considered good examples of biomedicalization, a term that Clarke and colleagues (2003; 2010) have introduced for describing the major transformations and intensification of medicalization processes that have occurred since about the mid-1980s. Especially in the decades following the Second World War, medicalization has led to a rapid and vast extension of medical authority into ever-new realms, in which all kinds of conditions and behaviors have been redefined as medical problems. This ongoing process has taken a new form as medicalization has become "extended and reconstituted through the emergent social forms and practices of a highly and increasingly technoscientific biomedicine" (Clarke et al. 2003:162).

Medicalization rarely serves as a neutral description. It has grown out of concerns with the role of medicine as a form of social control, and it often implies that "medical authority [extends] beyond a legitimate boundary" (Rose 2007:701). Similarly, in a recent update and extension of their seminal article, Clarke and colleagues have conceded that "biomedicalization can seem much too 'tsunami-like,'" and that "ambivalences, complications, countertrends, contradictions, and dense negotiations" (2010:10) have sometimes received little attention in biomedicalization studies.

In this vein, initial socioscientific responses to both EBM and bariatric surgery have been largely negative. According to Mykhalovskiy and Weir, critics have often viewed EBM "as a constituent of institutional transformations in health care and of contests of power associated with the neoliberal restructuring of the welfare state"

(2004:1061). Further, they have pointed to humanistic critiques "performed in the name of holism and against the fragmentation and reification of the subject" (2004:1062). Similarly, bariatric surgery has been criticized for locating the solution for a societal problem within individual bodies: "For the surgeons, the answer to the problem is internal and involves the permanent surgical alteration of the body, whereas for the size-acceptance community the answer lies in accepting oneself as a fat person and working to change a fat-phobic society" (Boero 2010:318). In a recent article, Throsby even identified an "outright rejection of surgery...within much of the work of critical fat politics and scholarship" (2012:121).

A common theme in these critiques of biomedicalization processes is that they are reductive. Supposedly, biomedicalization reduces care encounters to the administration of technological fixes and standardized procedures and reduces patients to their biological bodies, thereby neglecting social, cultural, and subjective factors (see Frankford 1994; Lambert 2006; Little 2003). Biomedicalization is often portrayed as something that is done to patients. Opposing a view in which biomedicine on the one hand and subjectivity and agency on the other hand appear as mutually exclusive opposites, Mykhalovskiy and Weir (2004) and Timmermans and Almeling (2009) have called for more nuanced investigations of how the technoscientification of biomedicine plays out in practice. In a review of health and illness studies focused on standardization, objectification, and commodification, Timmermans and Almeling (2009) argued for a reappraisal of these concepts and processes, noting that they should be understood as not only restricting but also bearing empowering potential for patients. For our purposes of studying how a research project affects clinical care for obese patients, standardization and objectification are especially relevant, and we discuss them in turn.

Long before the advent of EBM, standardization had become a main component of biomedical practices (Timmermans and Berg 2003). The increasing standardization of clinical research and care has occasionally been critically appraised by a variety of actors. Some medical practitioners have bemoaned the loss of clinical autonomy as well as the transformation of the "art of medicine" into an automated enterprise that follows previously established rules (Lambert 2006). Socioscientific critics have argued that standardized procedures tend to neglect "the uniqueness of patients, their individual needs and preferences" (Bensing 2000:17) and that they thus ultimately dehumanize care (Frankford 1994). Other scholars have argued that this critique both overestimates the power of standards, which always need to be adapted to and negotiated within local contexts, and neglects the ambiguity, ubiquity, and productivity of standards (Bowker and Star 2000; Busch 2011; Lampland and Star 2009; Timmermans and Epstein 2010).

Medical research would simply not be possible without a large variety of related standards (Timmermans and Almeling 2009; Timmermans and Berg 2003). Reducing the manifoldness and complexity of real-world phenomena such as body size into a few comparable dimensions allows for their manipulation. The body mass index (BMI), for example, is a necessary standard for the very construction of epidemiological data and is thus constitutive of the phenomenon of the obesity epidemic itself (Fletcher 2014; Nicholls 2013). Numerical standards, such as the BMI, play an important role in producing comparable data and in coordinating research across different groups,

places, and timescales (Timmermans and Epstein 2010). Therefore, such standards become especially important in the context of the global character of biomedical research, which is often conducted within large and geographically dispersed clinical trials. Scholars have further shown how the implementation and maintenance of standards is not straightforward but always requires work and continuous tinkering within the specificities of local contexts (Lampland and Star 2009).

The constitutive role of standards is also evident in the context of clinical care, as Marc Berg (1996; 1998) has shown in his work on medical records and forms. Far from simply providing more or less adequate accounts of what has happened, standardized forms play an important role in mediating patient-doctor interactions, in shaping medical encounters, and in producing "particular renderings of patients' histories" (1996:499) in the form of a "problem which is manageable for the hospital's working routines" (1996:505). Standards are ubiquitous, and they form the necessary infrastructure for the coordination and implementation of medical work.

In social studies of health and medicine, processes of objectification have often come under particular fire for supposedly being a central component of a reductive tendency in contemporary biomedicine. According to Timmermans and Almeling, objectification "usually refers to the transformation of people into objects of medical manipulation [and] denotes the primacy of the body or bodily states and measures over any other subjectivity" (2009:22). These authors further argue that in socioscientific writing, objectification is often linked to dehumanization, as it supposedly "involves a professional neutralization of (patient) agency, an erasure of authenticity, an alienation of identities, and a silencing or even displacement of the self and the social world" (2009:22). Discussions of objectification processes are often couched in terms of an opposition between intruding medical practices and patients threatened in their lifeworlds. Mol (2009) has highlighted that claims of such an opposition are often tied to calls for empowerment and responsibilization in the context of patient choice.

Despite the wide prevalence of this critique, a few studies have unraveled instances in which (potential) patients actively seek their own objectification as part of (bio-) medicalization processes. Interestingly, these studies are mainly situated in the area of reproduction (Thompson 2005; van Wichelen 2013) or nutrition (Gremillion 2003) and thus in fields that focus on women's health issues. In her study of infertility treatment, Thompson (2005) argued against a dichotomy of technological objectification and human agency. Her study showed how "in the various nonreductive manifestations of objectification, patients can manifest agency (and so enact their subjectivity) through their objectification" (2005:179). Before starting infertility treatment, women engage in a process of reframing their bodily experiences in biomedical terms. This process of "anticipatory socio-naturalization" allows them to "un-black-box" their body into several parts, thus making a problem that previously seemed overwhelming graspable and solvable (2005:192). Moreover, the clinic engages them in a situation in which they become reduced to biological bodies and in which their various components become treated in a range of bureaucratized technoscientific procedures.

This objectification is not something that patients experience as bereaving them of agency, their social roles, and their authenticity: They seek objectification actively, as they are "eager for medicalization," to use an expression coined by Becker and Nachtigall (1992). Medical objectification within the various procedures becomes the

means to successfully construct a "long-term self," enabling novel agency and the achievement of desired social identities (Thompson 2005:201). According to Thompson, women who have successfully completed infertility treatment experience their objectification very differently from those who have not. Whether objectification is perceived as dehumanizing depends on the successful constitution of agency. Timmermans and Almeling argued that Thompson thus "draws our attention to the purpose of objectification. She notes that the same procedures can be experienced as objectifying or not in light of broader life goals" (2009:22).

Processes of standardization and objectification are thus not a priori contrary to good care. As Mol (2009) has noted, good care needs to take the specificities of each situation into account. The situation, however, is sometimes far larger than the consultation room. Building on STS investigations of standardization and objectification in health care, we investigate in this article how these processes play out in the biomedicalized setting of a research project concerning a phenomenon that is marked by a high degree of stigmatization. As we show, the wider social contexts of body weight play a crucial role for how the involved actors, namely, patients and health professionals, evaluate, take up, and negotiate processes of biomedicalization.

Ethnographic Site and Methods

The data in this article stem from an eight-month ethnography at an outpatient clinic for obesity in a general hospital in Vienna in 2013. During joint fieldwork, we performed participant observations and conducted 53 formal and informal interviews with health professionals and patients. The fieldwork was part of a larger project in which we are investigating how human diversity is done and undone in obesity treatment, prevention, and research within different ethnographic sites (see authors forthcoming).

We contacted the clinic about a year earlier with the goal of exploring the meanings of diversity in the clinical practice of obesity care. We were introduced to a researcher and nutritionist especially interested in social and psychological factors of obesity, who became our gatekeeper. Although social scientific research in biomedicine is a potentially conflictual endeavor owing to the diverging approaches to questions of research ethics (Hoeyer et al. 2005), the idea of investigating diversity aspects was met with great endorsement by our informants, and we received continuous support. Our gatekeeper informed us about a large ongoing research project on pre- and aftercare in bariatric surgery. We learned that this project consists of both nutritionists and medical doctors and that it is led by one of these doctors. The patient collective in the outpatient clinic consists mainly of subgroups of the Viennese population with lower socioeconomic status, including a considerable number of people with a migration background and a majority of female patients². The central aim of this ongoing research project is to build a database on bariatric pre- and aftercare and to develop and implement a protocol to this end. The protocol structures and shapes interactions in the clinic, as it affects operating principles, workspaces, and material tools such as questionnaires or measurements. These protocol-enabled assemblages of health professionals and the clinic can be understood as what Rabeharisoa and Bourret called "bioclinical collectives" that "bring together researchers and clinicians from different disciplines and specialties, and strongly interconnect the clinic and the research" (2009:693). Our ethnographic site is shaped by research practices and "transcends the consulting room in which doctor-patient interaction traditionally takes place [and] extends to numerous places in which biology and pathology are conjointly researched" (Rabeharisoa and Bourret 2009:693).

The nutritionists informed the patients about the nutritional aspects of the surgery, evaluated their dietary habits, and kept track of the patients' well-being, progress, and changes after surgery. Preparing for and living with bariatric surgery was mainly framed as a question of diet (Boero 2010; Throsby 2009). Patients came for presurgery consultations for both internistic and dietological clearance required for having the surgery covered by public health insurance. They then had appointments at three months and six months after the operation, continuing for intervals of six months and later a year. At every appointment, blood samples, body weight, and fat composition measures were taken, and a questionnaire was completed.

Our gatekeeper and her team were involved in planning and executing this project, which had no planned endpoint and was designed to run as long as they could procure funding. Their motives were rooted in longstanding concerns about how little aftercare bariatric patients receive and the lack of knowledge about such patients' long-term well-being. The study thus aimed to not only generate knowledge but also extended care for bariatric patients, which so far had not been provided. The team of the aftercare project was very conscious about the ways in which clinical studies induce organizational change and serve to build infrastructural capacities for health care that extend beyond the original purpose of research (Petty and Heimer 2011).

To structure our empirical observations, we present three ethnographic vignettes (Hammersley and Atkinson 2007; Humphreys 2005) that show different ways in which scientific research and clinical care are entangled. These vignettes represent typical situations extracted and condensed from our field notes and interview transcripts. Employing vignettes allows us to present our material in a vivid way that conserves its contextual richness while showing the diversity of articulations of research and clinical practice.

Vignette 1: Opening Up and Closing Down

It's an early Wednesday morning and still quiet in the outpatient clinic. A few patients are already sitting on plastic stools in the narrow corridors. Susanne, the dietician, has her first appointments. Space is a precious resource in the hospital, and a tiny conference room without windows serves as her office. The room seems quite crammed with the dietician, the ethnographer, and Barbara, a patient. Barbara, a woman in her thirties, does not seem much to notice the ethnographer's presence, even after she has been introduced as a social scientist.

At the beginning of the consultation, Susanne opens the file that had been handed over to her by a nurse who had just taken Barbara's body weight. Six months have gone by since her gastric bypass operation. The files contain the medical records of prior consultations in the pre- and aftercare program. Susanne takes a new log sheet and opens the consultation by asking how Barbara feels today. Barbara answers: "Fine, I have already lost 20 kg!" Susanne goes through a list of questions: "Did you have diarrhea? How often do you use the bathroom? Do you become fully sated?

How much do you drink?" In doing so, she constantly fills out the medical form and ticks off items on her list. It seems as if Susanne is seamlessly translating Barbara's answers into categories fitting the questionnaire.

Most of Barbara's answers are relatively short. One of her longer personal accounts concerns her changed digestion: "I can really feel how some food is bad for me. I used to love fried stuff, and now I can't even smell it anymore.... I get sick, and this is sometimes really difficult when I cook for my kids. But, of course, I now cook different food for myself and them." In these moments in which Barbara deviates from strictly answering the questions asked by the protocol, the dietician interrupts the process of going through the guided questionnaire and listens patiently. She sometimes tries to relate to Barbara's accounts with her own professional opinion: "It would actually be quite good for your kids to eat the same, healthy food as you do. Weight problems often run in families, you know?" In the process of translating the accounts into concrete advice, Susanne does a lot of rephrasing and paraphrasing. In doing so, she uses the plural 'we' and thus alludes to a kind of shared project with the patient. Yet, virtually none of this is translated into written evidence. At the end, the dietician sums up her advice—stressing the importance of consuming more proteins, mainly through protein shakes—and ends the consultation on a positive note.

In this vignette, we can observe the logic of the scientific project of evaluating pre- and aftercare at work, guided by ideas of EBM. The questionnaire, which is designed to cater to the needs of the scientific project, gave structure to the entire therapeutic encounter in the consultations that we observed. It guided the interactions between nutritionists and patients step by step. We can thus see how protocols and guidelines shape clinical work. Only some of the patients' accounts were translated into specific schemes, while the more personal stories remained 'fleeting moments' in the conversation without being 'taken note of.' The questionnaire thus played an important role in the selection of relevant information and the production of comparable data.

The entire encounter not only served research logics but also opened up spaces of care. Going through the questionnaire provided fixed and stable timeslots to tend to and come into regular contact with the patients. The project team told us on several occasions that being third party funded, they feel glad that they can "afford the luxury to engage with patients." Ideals of engaging and connecting with patients clearly informed their imaginaries of good care and appeared to be strongly shaped by understandings of 'patient-centered medicine,' which they felt were especially important in the context of obesity, as patients' personal histories and diverse backgrounds are often considered to be tied to the development of weight problems. Patient-centered medicine began receiving increased attention (Bensing 2000; Slowther et al. 2004) at about the same time when EBM emerged in the early 1990s, and it was sometimes positioned as a countermovement. While EBM supposedly tends to consider medicine "merely as a cognitive-rationale enterprise" and to neglect "the uniqueness of patients, their individual needs and preferences, and their emotional status," patient-centered medicine was noted to have "basically a humanistic, biopsychosocial perspective" and to "put[] a strong focus on...taking into account the patients' perspective, and tuning medical care to the patients' needs and preferences" (Bensing 2000:17). While some have considered patient-centered medicine to be the "antithesis" of EBM (Slowther et al. 2004:152), there have recently been increasing attempts to align these seemingly opposing approaches and to include patients' perspectives into EBM (see van de Bovenkamp and Zuiderent-Jerak 2013).

Similarly, we observed the cohabitation of ideals of patient-centered medicine and EBM in practice as the dietician carefully listened to patients' stories and with practiced ease selectively took notes. However, while the dieticians in our study engaged with patients' individual stories, these personal accounts remained without formalized consequence. Practitioners did not write down longer accounts and mostly followed the protocol to determine what was recordable and relevant. While patients' personal circumstances were acknowledged, they tended to be written out of the medical memory embodied in the record.

The patient encounter also served an important therapeutic function. Adherence to the dietary regime warranted after bariatric surgery is notoriously low, and the explicit hopes in implementing the aftercare program were to reach higher levels of compliance, to ensure the sustainability of the surgical intervention, and to prevent malnutrition. In this context, visits for regular checkups served as a reminder for patients to keep focused. The protocol thus extended beyond the clinic to reconfigure patients' daily lives. Its disciplinary function was evident in a variety of aspects: On the one hand, patients were required to keep a food diary that not only contributed to the scientific study but also served the purpose of fostering self-surveillance. It thus promoted a specific biopedagogy, i.e., "methods to evaluate, monitor and survey the body," which patients were encouraged to adapt (Wright 2009:1). On the other hand, many conversational features of the encounter served to construct patients' dietary regimes as a shared enterprise. The use of gentle reproaches and encouragement by the dietician and the ubiquitous use of a pedagogic 'we' appear as part of a paternalistic conception of care that aims to authoritatively guide patients (Foucault 1988; Rose 1999).

The questionnaire thus simultaneously fulfilled several purposes. It not only ensured that standardized data were gathered for the scientific study but also served as a device to shape the therapeutic encounter, opening up possibilities to engage with patients in all their diversity of self-understandings and life situations and addressing them as persons that merit individual and emotionalized care.

Vignette 2: Keeping it short but in line with the protocol

It is a very busy day in the clinic, and the hallways are full of noise and turmoil. Susanne's conference room is disheveled—the tables have been moved, and some chairs are missing. Wondering what happened to her room, she jokes with the ethnographer that today will be a tight squeeze and that she might have to balance her notes on her lap. While they tidy up the room, Susanne tells him that one of the main skills that she has acquired while working at the clinic is to be flexible. Today, she has more than 12 appointments, and she suspects that it will get stressful. They finish just in time for the first patient.

Petra, a middle-aged woman, is a presurgical patient, and she states at the very beginning: "Honestly, I don't have a lot of time, especially for all the bureaucracy going on here. I know all these consultations are a necessary step for the health insurance,

but I think it is a big burden for people who actually work." Susanne starts going through her questionnaire and keeps a calm and professional demeanor. The ethnographer notices that she refrains from asking additional questions and that she instead ticks off the relevant items on her form in a quick succession. Susanne nevertheless addresses issues regarding life after surgery: "You know that in order for you to succeed, it will be crucial to eat and drink small amounts throughout the day. It would be best if you started doing this already before the surgery." This is our 'training time' during which we learn to adapt to life after surgery." Petra is skeptical about this repeated advice: "How are you supposed to constantly eat and drink while working?" She also questions some of the recommendations: "We come from Burgenland, and it is a big family tradition to sit together and have a good time eating. But I know that most of this food is bad for you. Yeah, I guess with the surgery there will be changes." After a comparatively short time, Susanne closes the consultation, signs her approval for surgery, and tells Petra, "We need to work on some of these problems."

Later the same day, when two of us reflect with Susanne on the day's work, she tells us: "Yeah, on some days we just don't have the time to engage with patients." She implies that she regrets this. On such days, she has to focus on the protocol and convey the "relevant information." Even when patients sometimes do not seemingly "get" what Susanne wants to tell them, she at least formally sticks to the protocol and presents all the required information. However, she also feels that sometimes the patients themselves are difficult to engage with, and she points to the example of the woman from a few hours earlier.

While the health professionals were clearly dedicated to implementing patient-centered medicine in their research-structured everyday working life, their commitment became challenged when days were stressful or when patients themselves displayed a lack of interest. In these situations, ideals of catering to individual differences moved to the background, and the questionnaire determined the course of the conversation.

We thus see how under stress, the guiding structure of the protocol became even more important. It formed a minimal procedure and remained the stable element in a daily clinical routine marked by the need to adapt to changing circumstances. STS has pointed to the important role of standard procedures in maintaining social order in general and in scientific practice in particular (Bowker and Star 2000; Busch 2011; Timmermans and Epstein 2010). Filling out the protocol-guided form helped to organize and stabilize the research team, which did not have fixed rooms and facilities but worked and operated within a clinic where many different research projects take place. While the questionnaire-guided consultations opened up moments of care and allowed for the accommodation of diverse backgrounds, when there was a lack of time or other pressures, the encounter was reduced to filling out the form.

The health professionals themselves experienced these reduced minimal forms of patient encounters as deficient. They often told us about their desire to "connect with patients." Our informants at the clinic explained to us that to "engage properly with patients," they have to exert extra effort to go beyond the narrow framing of the protocol and discuss aspects that are especially important for the individual patient

and her or his personal circumstances, and they sometimes seemed frustrated that the exigencies of daily clinical life often do not allow for this.

While the health professionals found restricted care encounters regrettable, such encounters seemed to fit well with patients who wanted to minimize the extent of the care encounters. Many patients seemed quite satisfied with just ticking boxes and answering routine questions, and they rarely contested the restriction of the patient encounter to filling out the form. Some patients remarked afterwards in personal interviews that health professionals "don't have enough time," but they know that "it isn't the doctors' fault"; it is just the way it is. Others hoped for a brief and swift procedure, seeing care encounters mainly as a bureaucratic obstacle, as they located the agency for the desired weight loss firmly within the surgical intervention itself, regarding the encounters with dieticians as an addendum.

They appeared to welcome the ways in which demands of comparable and standardized research procedures disregarded their personal histories and instead focused on technological procedures. Research on obesity has highlighted how discussing the stigmatized issue of body weight is challenging (Warin and Gunson 2013; Wills et al. 2006). In the context of the clinic, patients seemed to appreciate the highly abstract and medicalized logic of going through the questionnaire without having to struggle to find a voice.

Patients thus played an active role in keeping interactions formalized and standardized and partly welcomed this dynamic. While we reflect more on this in the discussion of the next vignette, we want to note here that this acceptance can be interpreted as an implicit understanding of the clinic and its "institutional body language" (Wynne 1992) that conveys a specific order of what is central and what is peripheral. While health professionals strongly implied that patients' eagerness to keep interactions to a minimum related to a knowledge deficit about the dangers and consequences of the surgery, we argue that this seeming lack of interest might instead be connected to patients implicitly or explicitly "knowing the ropes" (Felt et al. 2009:99). Patient understandings of 'the ropes' strongly focused on the ways in which the general hospital is embedded in a strong bureaucratic logic of standardized procedures, while they often appeared to be less responsive to the dieticians' efforts to take the complexity of their own situations as patients into account. In their determination to receive clearance as quick as possible, they had a clear understanding of what is necessary and important for this purpose. They strongly focused on these formal procedures and sometimes experienced dieticians' attempts to involve them as a burden or delay.

In sum, despite the health professionals' commitment to ideals of patient-centered care, this care remained fragile, as the clinical encounter appeared to be reducible to merely following the protocol, at least in principle. While our first vignette showed that the protocol opened up spaces of patient-centered care, the second vignette revealed how these spaces appeared as an "extra" effort that could be easily omitted when necessary. We have further highlighted how patients themselves are not passive victims of a dehumanizing logic; rather, they actively participate in maintaining the social order guided by the protocol. We further this line of argument in the discussion of the next vignette.

Vignette 3: Negotiating the Technical Fix

It is another Wednesday morning. This time, two of us have the tiny room in the outpatient clinic for ourselves to conduct interviews with patients who have agreed to spare some time for a few questions from us "sociologists." The first informant is an elderly woman named Johanna. She tells us: "I received a gastric bypass 6 months ago, and everything is different now. I can do things I never even dared to think of. I wish I'd had the surgery sooner!"

Robert, a man in his thirties who had his stomach stapled five years ago, shares his unhappiness with the surgery in the next interview. "My sleeve doesn't work anymore. At first, it worked fine, and I lost a lot of weight. But, by and by, a lot of the weight has crept back on. And I paid a high price for this. The time after the surgery was hard. My stomach hurt a lot, and for a long time, I felt quite sick.... And now I need to get another surgery real soon. Doctors have told me that my stomach has extended again. Well, then it needs to be made small again. I really hope I get the clearance as soon as possible." We wish Robert good luck on his journey, and we are slightly baffled about how strongly he holds onto the promise of surgery.

In a calmer moment, when there is no patient waiting to be interviewed, one of the nutritionists, Anna, drops in to check on us. In the informal conversation, she tells us about her observation that patients themselves are often not interested in a comprehensive therapeutic encounter. The preoperation patients in particular often seem to "simply not listen," as they are mostly interested in reaching their immediate goal: quick surgery. "I really don't know why we have to tell them the same things again and again," she says, "They keep on claiming that they hear the most basic things for the first time, even after they are here for the fourth or fifth consultation."

In the interviews we conducted, patients tended to think of the surgical intervention in terms of what we might call a "technological fix model" (see Rosner 2004), in which all the agency is attributed to the technology that is expected to automatically lead to weight loss (see Augustine 2003). For them, it often was the "operation" that either made them lose weight or failed to do so. There seemed to be a logic at play that encouraged patients to seek 'quick' clearance and to attribute less importance to engaging in all its facets with the process of receiving a bariatric surgery. Although the health professionals repeatedly stressed that the patients have to contribute to the process substantially, a majority of patients rendered themselves quite passive in light of the aspired functioning of the biomedical technology.

While classic humanist critiques of EBM tended to focus on the objectification of the patient, our case thus appears to be more complex. In our setting, the professionals appeared to strive for patient centeredness, while many patients themselves appeared to be content with their own objectification, and some even seemed to seek it. What might be the reasons for this? We argue that this dynamic is tied to questions of responsibilization. Bioethical discourses often posit that patient choice is an unquestioned and self-explanatory good. However, for many obese patients, the responsibilization that coincides with a "logic of choice" (Mol 2009) did not appear to be an unproblematic ideal. They often had a long history of being made responsible for their body weight, something that was often tied to experiences of stigmatization (see Boero 2010; Throsby 2009).

Locating the pathology inside the body and framing obesity as something that is treatable through a physical intervention, patients embraced a classical model of illness (see Armstrong 1995) that eliminates their responsibility and agency. While the nutritionists deemed it especially important to engage with patients' individual circumstances because of the multifactorial nature of obesity's purportedly socioeconomic and biological causes, patients themselves did not necessarily strive for complex patient-centered consultations but hoped for what they expected to be biomedical care for a disease: a date for the scheduled surgery and some information boxes to tick. Responsibility and agency are thus located within both the operation itself and the entire bureaucratic and often opaque machinery of the hospital.

The biomedicalized way in which the clinical practice and surgery opened up new ways for the patients to understand and evaluate their bodies and lives was often expressed as being 'taken seriously' for the very first time (see Boero 2010). Becoming part of the pre- and aftercare program, many patients appeared to relish the ways that the formalized, serene, and standardized questionnaires rendered their personal experiences not individual shortcomings but medically relevant information about a disease. Many obesity patients seemed to desire a different form of care from one that focuses on personal idiosyncrasies: one that acknowledges individual struggles but simultaneously stresses the generalizability of their problem. This understanding of generalizability is connected to how the surgery is imagined as a straightforward solution, which in turn renders the stigmatized purported causes of obesity less relevant. It is imagined as one biomedical intervention that promises help for everybody regardless of the circumstances. In our interviews, we found clear traces that our patient collective, in which the individuals are not only subject to weight-related stigma but also disadvantaged because of their socioeconomic position and often migrant background, frequently experiences its own clinical objectification as liberating, destigmatizing, and removing unwarranted blame.

Patients' expectations toward receiving 'straightforward' medical care are reinforced by what we have described as the institutional body language of the clinic. In the Austrian health care system, hospitals like the one we investigated are viewed as sites of high-quality professionalized care, which is not always available for everybody in Vienna (authors forthcoming). Thus, research hospitals are particularly attractive entry points for socioeconomically disadvantaged parts of the population. As in other contexts in which patients are included into clinical studies (see Brives 2013; Wadmann and Hoeyer 2014), patients experienced themselves as 'the lucky ones' that now get 'special' care. This 'special' care is experienced as not only high-end and state of the art but also as allowing patients to receive health professionals' time and attention in an otherwise often overburdened Austrian health care system.

In addition, the patients often did not appear to be fully aware of the logic of the entire program of pre- and aftercare, which is guided by both research and care considerations. They experienced their medical errands in the clinic as being sent from station to station, from consultation date to consultation date, for reasons that they were not fully aware of or that they did not want know. Despite signing an informed consent, the patients often did not seem to care about being part of a scientific study beyond receiving access to a prestigious hospital. For many patients, being part of the research program was experienced as being embedded in a black-boxed but caring

machinery that, for the first time in their biomedical histories, took them seriously in a biomedically 'expected' way by telling them what to do and where to go.

Obese patients, having experienced a high degree of responsibilization in the past, therefore took a very active role in the process of rendering their bodies as passive objects of medical care. This is connected to why they seemingly 'did not listen' to the advice of the doctors, nutritionists, and dieticians, which becomes understandable as not due to a deficiency in their ability to understand but as an active choice and a form of resistance to a responsibilization that they denounced. Throsby observed in her study on bariatric surgery that a form of "noncompliance" by patients can sometimes be interpreted as resistance toward "dominant values and practices" (2012:112) connected to their stigmatization. Refusing to comply with models of medical care that focus on individual circumstances and behaviors, patients strongly commit to a technological fix model against health professionals' cautions, and they thus resist being involved in forms of treatment that constitute them as rational subjects who have to act in specific ways (see Callon and Rabeharisoa 2004). This discrepancy is also connected to the differences between the institutional body language of the clinic, which conveys standardization and bureaucratization, and health professionals' commitment to actively involve patients into their treatment.

Discussion: Objectification, Standardization, and Agency

In her study on infertility treatment, Thompson argued that objectification in medical care does not necessarily imply reduction and that it is "only sometimes a reductive state in opposition to the presence or goals of a subject" (2005:179). Yet, in the case of bariatric surgery, it is exactly the reduction entailed in objectification processes that patients seek. The focus on a biotechnical solution shifts stigmatized behavioral aspects to the background and allows the transformation of patients' self-understandings and subjectivities.

As in Thompson's case, objectification thus allows the patients to successfully construct a "long-term self" (2005:201) and to establish desired social identities. However, while in the case of women undergoing infertility treatment this objectification appears to be merely strategic, in our case the objectification itself and the accompanying relinquishment of agency carry de-responsibilizing and liberating potential. In a study on nutritionists' work in Guatemala, Yates-Doerr reported that she "was surprised by the eagerness with which patients turned their well-being over to their nutritionists." According to her, obese patients "had pushed up against the limits of the care of the self and were now relieved to find themselves in the care of another" (2012:147, emphasis in original). We could see something similar in the ways that patients focused on medical encounters and care as a way of relinquishing responsibility. The dialectics of agency in the case of bariatric surgery appear to be different from that in the case of infertility treatment: patients actively seek a state in which they relinquish agency to both the biomedical setting and their own reconfigured and naturalized postsurgical stomach.

Hence, similar to the logic of care that "lessens the weight of the self" (Yates-Doerr 2012:151) for obese patients in Guatemala, a very important aspect for bariatric patients in the Viennese clinic is connected to the way in which agency becomes redis-

tributed in biomedical contexts. Agency is thus quite literally given away in the case of a surgical intervention, as the reconfigured body forces particular eating behaviors upon the self. A sense of self is maintained exactly because a larger degree of agency is attributed to both the body, which is separated from the self, and a caring biomedical machinery.

As in the case of objectification, complaints about standardization have often implied that standards lead to "mindless homogeneity." Against this critique, Timmermans and Almeling have argued that standards are not reductive but are in effect highly productive, engendering "a vibrant sociotechnical world full of intended and unintended and even counterproductive practices" (Timmermans and Almeling 2009:26). We have shown how standardized procedures in our case are indeed productive, opening up spaces of patient-centered care. However, depending on their current situations and goals, patients often resist complex patient-centered consultations: It is precisely the homogenizing aspects of the research protocol in the pre- and aftercare program and of the intervention itself that carry liberating potential for obese patients.

We can thus see how the specificities and societal contexts of bodyweight and its biomedicalized solutions play an important role for how objectification, standardization, agencies, and subjectivities are entangled. One of these specificities is the availability of an apparently simple and straightforward biomedical solution. Similar to other biosocial phenomena, such as alcoholism (Rabeharisoa 2008) or ADHD (Conrad 2007), a biomedical diagnosis in itself plays an important role in diagnosed individuals ability to experience themselves and their medical history in novel ways. However, in the case of obesity, genetic and psychological explanations have been available for quite some time, but the lack of a corresponding biotechnical solution like a "fat pill" failed to offer meaningful ways for transforming obese subjectivities (Felt and Fochler 2011). We would like to argue that bariatric surgery here offers patients novel possibilities for attaining de-stigmatized social identities.

This liberating capacity is tied to wider discourses and imaginations. Bariatric surgery corresponds in a privileged way to a biomedical understanding of disease as being located within the confines of the body, with the biomedical intervention being an intrusion that corrects the clearly localized and faulty body part (Armstrong 1995). As we have shown, this seeming solvability is attributed to the surgery despite of professional cautions and resistances. The persistence of this attribution is at least partly rooted in the dominance of biomedical models of disease as well as broader societal imaginations surrounding techno-scientific solutions and the distribution of expertise (see Felt and Mueller 2011). In present societies, patients not only value 'state of the art' and 'high-end' technologies as the most precious form of care that they can receive but also often regard technological solutions as more 'efficient' and thus desirable (see Rosner 2004). Dominant logics of technoscientific subjectification enable trust in a black-boxed but caring technology-driven system that invites patients to surrender responsibility through its institutional body language.

Conclusions

The biomedicalization of care practices is often confronted with concerns regarding an erasure of patient subjectivities and patient agency, and the increasing prominence of research logics is sometimes depicted as being in tension with patient-centered care. In contrast, our study of an evidence-based project focused on the pre- and aftercare of bariatric patients has shown how the introduction of research protocols opens up spaces for health professionals to pursue patient-centered care, which they clearly regard as important in the case of obesity. However, these spaces do not merely remain fragile, appearing as an addendum to the core procedure that is easily omitted when under stress. Surprisingly, patients themselves are often invested in a technological fix model of care. Biomedicalization, in this case, is largely done not to but by patients.

Our analysis has shown how detailed empirical observations might provide a different picture of biomedicalization processes from many broader humanist or economic political critiques. Accounting for the messy, emotional, and multilayered empirical setting might often produce a more nuanced picture that embraces seeming contradictions (Mykhalovskiy and Weir 2004; Timmermans and Almeling 2009). Simultaneously, devoting attention to the micro details of a case might divert attention from the wider picture. We want to use our analysis to build on Mol's (2009) concerns regarding being context sensitive within clinical care. In her "Logic of care," she argued that good care does not consist in framing patients as autonomous and rationally choosing individuals; rather, it is something that requires collaborative and contingent efforts to align interventions to specificities of bodies and complex situations and lives. In our case, choosing a technological fix and denying the idiosyncrasies of individual bodies and lives appear to be the most promising way for many patients to cater to the complexities of living with bodies that are labeled as obese.

Consequently, our analysis can be seen a forceful argument for taking the wider contexts of care situations into account in order to assess objectification and standardization practices and their effects. Similarly, our study highlights the importance of taking the specificities of biomedical phenomena and their material, corporal, and social dimensions into account. It further calls for the specific characteristics of patient collectives to be taken into account. While we have hinted at the socioeconomic status of our patient collective, we did not systematically investigate how patients' socioeconomic position might contribute to their propensity to invest in biomedicalized forms of care. However, overall, we would like to make the claim that comprehensively engaging with medical phenomena thus calls for a critical reflection of society as a whole apart from the specificities of medical encounters as such.

Socioscientific studies therefore need to draw multiple aspects together. Specifically, to further understandings of clinical practice, theoretical considerations on knowledge, power, and subjectivity; insights from a macro level; and close analytical observations need to be brought together in a careful and comprehensive account of the situation (Biehl 2013). In a political context where bariatric surgery is often deplored by size acceptance activists as giving into hegemonic body discourses and fat hatred, our research makes the plea to take into account both the wider contexts in which patients decide to undergo surgery and the liberating potential inherent in this procedure.

For health professionals, this need to draw on multiple aspects might similarly mean that neither patient-centered care nor standardized procedures can be regarded as a-priori normatively privileged; rather, their effects in concrete situations need to be considered. These insights might also contribute to a more nuanced and comprehensive public health policy. In a health policy context that increasingly calls for both patient centeredness and a greater sensitivity to issues of diversity, our study shows that these ideals might not be unquestioned values for everybody affected: A sensitivity toward patients' individual circumstances not only carries empowering potential but also can equally be experienced as restraining or as being labeled in an unwanted manner. This, however, poses the question of what it means that often-critiqued 'one-size-fits-all' biomedical approaches carry liberating potential. Our case does not provide a straightforward answer to these questions but serves as a reminder to take wider societal and discursive contexts into account when analyzing and evaluating medical practice.

NOTES

¹All of the employed surgical procedures involve either a reduction of stomach size or a re-routing of the small intestines to a small stomach pouch, resulting in either a reduction of the amount of possible food intake and/or a lessened capacity to digest food.

²While we have not pursued this line of questioning further, it would be worthwhile to explore the ways in which gender and class aspects influence the dynamics analyzed in this article, as both the condition of obesity itself and its surrounding discourses appear to be strongly patterned by class and gender relations (Broom and Warin 2011).

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