Social Science & Medicine 292 (2022) 114577

Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

The German Organ Transplant Scandal - Unwritten rules of organizational wrongdoings

Markus Pohlmann, Kristina Höly, Maria Eugenia Trombini *

Max Weber Institute of Sociology, University of Heidelberg, Bergheimer Str. 58, 69115, Germany

A R T I C L E   I N F O

Keywords:
Organ transplant
Germany
Organizational wrongdoing
Qualitative method
Legal issues
Professions
Unwritten rules
Cultural repertoires

A B S T R A C T

Using data from organ transplant medicine in Germany, we propose a method for understanding the content of unwritten rules supportive of violations of written rules in light of the "German Organ Transplant Scandal". Grounded in the sociology of organizational crime, we reconstruct the cultural repertoires of medical professionals working with organ allocation when confronted with the applicable guidelines using collective mindset analysis. Four dimensions of cognitive and normative rules of interpretation were identified and discussed as a an occupational-professional form of deviance. Apart from not relying on data from the alleged perpetrators and still gazing at the latent structures of meaning behind misconduct, our approach offers a more general methodological framework for empirical studies of the unwritten rules at work in an organizational field where wrongdoing has been reported.

1. Introduction

Organ transplantation, especially of liver and heart, is known to be a very resource intensive therapy. To succeed, it takes a myriad of sectorial policies and the participation of several stakeholders, the most proximate of which are highly qualified physicians. This article focuses on them as relevant actors in transplant medicine, more specifically in those working at German hospitals, where rules on transplantation (and consequently the departure from them) are contingent on national and European guidelines. Against the backdrop of the "Organ Transplant Scandal" in Germany, where formal guidelines concerning organ allocation were circumvented with regularity, we are asking: what are the unwritten rules in transplant organizations and the medical profession supportive of misconduct in the field?

The widespread disclosure of the scandal began on an initial suspicion in the field of liver transplants at the university hospital in Göttingen back in 2012. Physicians forged medical data to place certain patients in higher places on the electronic matching list produced by the Eurotransplant foundation and render a faster organ allocation, while the priority that would otherwise be of others was tainted. In the first trial in this regard, liver transplant surgeon Aiman O. was acquitted of the charges of manslaughter and grievous bodily harm with fatal consequences. Although the fabrication of medical data was proven, the judiciary saw no criminal offense in the legal sense at the 2015 and 2017 rulings. Subsequent investigations by the Examination and Supervision Commissions (ESC) of the German Medical Association revealed that falsifying medical records on behalf of patients to skip the line is a collective practice that happened in many other transplantation centers. In light of the multitude of violations across different hospitals and organs revealed by the ESC, a setting of misconduct by individual physicians appeared to be implausible. Given that the establishment of unwritten rules conducive to wrongdoing within the medical professional community, the incentive structures in the transplantation centers and their surroundings have not yet received sufficient scholarly attention, this article wishes to fill this research gap.

With the approach of organizational crime, we place self-regulation into the center of the analysis and advance the premise that illicit behavior is in conformity with the goals of the organization also in the medical field, which has hardly been subject to sociological analysis so far. The legality or not of the conducts is outside the purview of this article, since it is not the defendants and their motives, but the unwritten rules behind the deviant actions that stand at the forefront of our analysis. From a sociological perspective, we would like to understand first how did the falsification of the waiting list data come about, and, second, to disentangle the role played by cultural repertoires i.e. organizational and professional factors, related to the physicians and the

* Corresponding author.
E-mail addresses: markus.pohlmann@mwi.uni-heidelberg.de (M. Pohlmann), kristina.hoely@mwi.uni-heidelberg.de (K. Höly), maria.trombini@mwi.uni-heidelberg.de (M.E. Trombini).

https://doi.org/10.1016/j.socscimed.2021.114577
Received 31 August 2021; Received in revised form 8 November 2021; Accepted 15 November 2021
Available online 19 November 2021
0277-9536/© 2021 Elsevier Ltd. All rights reserved.

transplantation milieu, in the rule-breaking. The originality of our research is to sidestep assumptions that the doctors are so called “bad apples” of the hospitals by introducing an innovative tool for studying taken for granted assumptions: the qualitative-interpretive procedure of collective mindset analysis.

The remaining of the text is organized as follows. First, we present our theoretical approach and research design (1). Then a summary of quantitative structural data is outlined which enables us to apply the organizational crime hypothesis (2). Subsequently, by using the qualitative method of Collective Mindset Analysis (CMA) we connect these findings with the collective forms of knowledge and unwritten rules of action of the interviewees (3). We conclude by discussing the findings and limitations of the study (4).

1.1. Theoretical and methodological frame

The deviant behavior in the German transplant medicine has received great media interest (Hoisl et al., 2015); however, only a few scientific studies are available on the topic (but see Pohlmann and Höly, 2017; Pohlmann, 2018). The criminal liability of doctors accused of violations is extensively discussed from a normative viewpoint: both the underlying tragic situation of choice in organ allocation (Calabresi and Bobbitt, 1978; Hoffmaster and Hooker, 2013; Fateh-Moghadam, 2016) and the economic constraints of organ shortage play a role in this context (Schlitt et al., 2011, p. 30). Looking at governance arrangements, scholars suggest that the introduction of new economic structures in hospitals, especially the Diagnosis Related Groups (DRGs), has offered incentives for “gaming” at the field (Neby et al., 2015, p. 128). Also, the policy activity of the German Medical Association has been criticized as fundamentally lacking in democratic legitimacy by the legislature (Gutmann, 2014, p. 148 ff.; Fateh-Moghadam, 2016, p.192 ff.; Schneider and Busch, 2013, p. 368; Schroth, 2013). Around the Göttingen scandal, a heated debate took place whether the manipulation of the waiting lists should be framed as manslaughter (Dannecker and Streng, 2014; Rissing-van Saan, 2016) and changes to an urgency-based organ allocation system to save more lives were pondered (Dannecker and Streng, 2012). Since then, German politicians started to revise the structural and financial conditions in the hospitals to improve organizational cooperation and sustainably increase organ donation numbers (Deutscher Bundestag, 2019). All in all, despite disagreement over the explanatory variables of wrongdoing, there is evidence that transplantation physicians and centers in Germany operate in an organizational field to which, to some extent, conflicting expectations are brought.

The article draws on the concept of organizational crime according to which rule-deviations are primarily oriented to the benefit of the organization that, in turn, pursues socially legitimate and legal goals (Luhmann, 1964; Koch, 2004; Vogd, 2004; Kühl, 2007, 2010; Pohlmann, 2008; Klinkhammer, 2013; Pohlmann et al., 2016; critical Ortmann, 2010; Tacke, 2015). Since deviance is a normal concomitant of organizations, understanding not the personal motivations or benefits, but the unwritten rules itself operating at an organizational or professional setting is important (Vaughan, 1998, 1999; Brief et al., 2001; Ashforth and Anand, 2003; Joshi et al., 2007; Pinto et al., 2008; Palmer, 2012; for a summary see Campbell and Göritz, 2014). We assume that individual acts of wrongdoing can be the thoughtless behaviour resulting from situational social influence and advance to empirically examine the collectively recognized and shared rules in transplantation centers by members of this professional subgroup. In our theoretical approach, we are following the neo-institutionalist tradition to move beyond the regulative pillars and map the normative and cultural-cognitive institutions (Scott, 1995, 2003). While normative institutions introduce a prescriptive dimension into social life, thereby shaping what is perceived as morally right and wrong, cognitive institutions are marked by taken-for-grantedness, offering the symbolic frames that support social sense-making. Cultural forms encode organizational patterns of behavior and interpretation (Dutton et al., 1994) and shape pre-fabricated links when people construct chains of action (Swidler, 1986).

Our preferred approach emphasizes unwritten rules as institutional complexes that might have been conducive to deviance from formal guidelines. We chart our way by reconstructing the collectively developed, organizational and professional stocks of knowledge ex-post (cf. Schütz, 1960; Schütz and Luckmann, 2003, p. 33, 44 ff.). If the limits of written rules have been long acknowledged by social scientists studying deviance – who address unwritten rules as an intervening variable –, far less research directly studies the internal properties and dynamics of a set of unwritten rules in a particular field (engulfed by crime). Existing work on cultural repertoires normally employ the qualitative paradigm such as in-depth interviews (Lamont, 1992), case studies (Ravasi and Schultz, 2006) or content analysis of communications produced by a specific community (Weber et al., 2013). To get a grip at the tacitly acknowledged rules behind existing strategies of action without talking to the physicians accused of wrongdoing, the collective mindset analysis of interviews with members of the organ transplant medicine is very suitable. In the search for cultural repertoires in this field, new institutionalism and the sociology of knowledge are joined by approaches from the sociology of the (medical) profession to explain our findings (e.g. Parsons, 1958, 1968; Freidson, 1988; Heubel, 2015). Doctors perform a differentiated occupational role within the division of expert labor (Abbott, 1988), applying technique expertise in health matters, gained through training and experience, with a special fiduciary responsibility towards the sick (Parsons 1958, 1975). Inside and across organizational settings, including professions, discursive interaction forges meaning, values, commitments and worldviews, providing individuals with shared frames of reference (Schütz, 1960; Berger and Luckmann, 1967; Schütz and Luckmann, 2003). Against this background, we expect to find convergence of mindsets at the transplantation field among the group of people interacting in it. Since an organizational field should not be determined *a priori* but rather defined on the basis of empirical investigation (DiMaggio and Powell, 1983), apart from introducing the (manifest) setting of the deviant actions and the regulatory framework, we will address the (latent) structures of meaning at the collective mindset section.

1.2. Data collection, sampling and analysis

The advantages of our research design lie in a combination of sources from the “detected cases”, like legal procedures, and “dark field”, with a total of 62 problem-centered expert interviews, three organizational case studies, as well as participant observation.

25 of the 62 interviews were conducted with medical and commercial directors of the 100 largest hospitals in Germany, including all university hospitals in the country, a few of which with organ transplant programs as part of a full survey on “economization” of the German healthcare system and the big hospital as a professional organization.

17 of the 62 interviews were conducted as part of three organizational case studies, purposefully selected on the basis of proximity to the dark field (Kersting and Erdmann, 2014) of guideline violations. Since, with respect to organ transplantation, guideline violations were found primarily among university hospitals in liver and heart transplantation, two centers for liver and heart transplantation and, in contrast, one center for kidney transplantation, where the possibilities of manipulation are limited and actual violations reported less frequent, were selected (for more information on the structural background of different manipulation opportunities and associated manipulation frequencies in heart, liver, and kidney, see Pohlmann, 2018, p. 78, 166ff.). Resorting to a qualitative criterion, we attempted to investigate the organ transplantation field in an exploratory manner using a comparative method. Within the framework of these case studies, we interviewed the chief and senior physicians who were usually the focus of the investigations. The interviews were conducted along the hierarchy: from the board of

directors to the chief physicians and senior physicians to the administrative positions.

We also conducted an unstructured or free *participant observation* (cf. Girtler, 2001; Lamnek, 2010) in the form of an eight-week stay at the coordination office of a transplant center with relevant observations being recorded in written form. The method provided valid knowledge about the unwritten rules of the profession and the organization in dealing with the problems of organ shortage and the guidelines for waiting list management in day-to-day clinical practice.

10 of the 62 interviews were conducted with four public prosecutors involved in the investigation and three defense attorneys active in the criminal proceedings at different jurisdictions and were thus part of a bright field analysis. To ascertain the perspectives from professionals not entirely implicated but active in the transplant field indirectly, interviews with lawyers sitting at the German Medical Association were carried out. This was supplemented by *10 informational interviews* with other transplant experts (e.g., members of foundations). Table 1

The focus of our research is the qualitative reconstruction of the unwritten rules of the transplant organizations and the medical profession. By conducting problem-centered expert interviews, we were able both to capture the relevance structures of the actors and to address predefined topics in a roughly pre-structured way. Because data collection was subsequent to the Göttingen trial, the scandals might have generated a distorting effect on the responses. Rather than inquiring interviewees about their own guideline violations, experience in dealing with recurrent problems in the transplantation milieu was at the center of the interview. Reasons for wrongdoing were addressed by the speakers when responding how they interpret external guidelines in the face of organ allocation vis à vis organ shortage. In this way, the unwritten rules of the profession and organization in dealing with the problem of organ shortage and waiting list guidelines could be well reconstructed.

The method of collective mindset analysis (CMA) was used to identify, reconstruct and map the knowledge stocks of the interviewees that cannot be stated from an "objective" standpoint. The CMA does so by inductively reconstructing the underlying collective cognitive and normative rules of interpretation at work (Oervermann, 1973, 2001; Ullrich, 1999; Sachweh, 2010). This implies that speaking directly with the physicians engaged in rule deviations is unnecessary, for the unwritten rules are reconstructed from the viewpoint of a member of the respective culture, on an empirical basis. Thanks to the emphasis of the method on the intersubjectively shared social meaning (Arnold, 1983, p. 894; Ullrich, 1999, p. 2), we assumed similarly situated actors who cope with the objective action problem of organ shortage have the same cultural repertoires and proceeded to identify the contours of such repertoire.

Compared to the more rapidly changing opinions or attitudes, as self-evident ways of thinking and behavioral habits, collective mindsets are much more time-resistant, so the manner in which violations are depicted should allow inferences about the past and present meaning of guidelines among physicians. To allow a comparative evaluation of

Table 1
Number of interviews in the period 2014–2016.

Survey steps and positions	Number of interviews
(1) Full survey of the 100 major hospitals	
Medical Directors/Board members	17
Commercial Directors	8
(2) Case studies (dark field analysis)	
Transplant physicians	14
Other transplant experts	3
(3) Bright field analysis	
Lawyers involved in the court proceedings	10
Informational interviews with other transplant experts	10
Total	**62**

Source: own data

numerous interviews, instead of the elaborate method of the objective hermeneutics of Oevermann (1973, 2001) the variant of CMA proposed by Ullrich (1999) and Sachweh (2010), which we further developed (see Pohlmann et al., 2014), was carried out. Admittedly, in the sense of socially desirable response patterns, the public scandalization of violations of externally imposed rules makes their overtly stated justification *ex post* very unlikely. At the same time, however, a critical distance also grants the opportunity to a more comprehensive characterization of organizational or professional rules that led to guideline violations.

2. The setting of the deviant actions

Before investigating the unwritten rules on which the behavior of doctors is anchored, we first need to assess the regulative dimension that circumscribes their decision-making through norms and guidelines. In the following, we outline the context in which physicians interact with the guidelines of the German Medical Association on organ transplantation. Our intention is to answer the extent to which a "rule-deviating custom" existed at the organizational setting under study. We are referring to secondary sources validated by data of a document analysis published elsewhere that concluded misconduct in the field was regular (for background regarding the sampling method and representativeness of these data see Pohlmann, 2018, p.122ff.).

The first issue with the regulative dimension is its complexity. While successes in organ transplantation were celebrated in Germany as early as the 1960s, the German Transplantation Act (TPG) came into force only in 1997. It regulates the donation, removal, procurement and transfer of organs donated after death or during life and defines organ donation as a joint task carried out by many different institutions. The responsibility for organ allocation is jointly shared by the German Organ Procurement Organization (*Deutsche Stiftung Organtransplantation*, DSO), the nationwide competent authority to coordinate the matter, and Eurotransplant. The Transplantation Act commits the German Medical Association to establish guidelines for specific areas of transplantation medicine, which must account for the current state of medical science, resulting in regular updates to account for new findings. Doctors working at transplantation centers must observe such guidelines concerning waiting lists and document the reasons for inclusion/exclusion of patients.

The second issue is its newness. At the outset of the German (2012) scandals, compliance monitoring at hospitals was still in its infancy, which allows us to expect that the odds of detecting guideline violations were rather low (Pohlmann and Höly, 2017; Pohlmann, 2018; Zeier, 2021). The second problem, which connects the law in books with the law in action, are the existing loopholes at the regulatory framework. Eurotransplant's reporting system, like the fact that medical staff at national level had access to the database registration, provided a multitude of ways to commit misconduct (Pohlmann, 2018). From a rational choice perspective, incentives for positively impacting patient rankings were readily available for professionals responsible for those on the waiting list. A checkmark for renal replacement therapy or self-reported information on alcohol abstinence was sufficient to move the patient expecting a liver up in the line, as well as the administration of a low-dose catecholamine for heart transplantation. In contrast, no objections were raised by the ESC in the case of kidney transplants, which can be attributed to the comprehensive documentation requirements that would demand much more effort to manipulate and would potentially attract the attention of too many physicians involved in the process. The difficulty to prove the manipulation on the patient's record was another factor impacting the propensity to violations. Early controls in place were based on individual incidents, whistleblowers from the clinics, like when the DSO received an anonymous call claiming "criminal wheeling and dealings at Göttingen University Hospital" and launched an investigation (cited at Pondrom, 2013). Without a policy that guarantees formal channels and protection for the medical staff to report wrongdoing, these cases are likely to continue underreported.

Opportunity structures and lack of deterrence do not excuse the departure from rules, but they surely help explaining it.

Moving from rule detection to rule sanctioning, other problems arise. The content of the guidelines from the German Medical Association have already been admonished in court on several occasions, not only on criminal grounds (see Bundesverfassungsgericht, 2013, para. 17 for instance). Episodic evidence from the German allocation scandal are eloquent of how complex the evaluation of the breach is, by jurists and physicians alike. Concerning the 25 cases of manipulations in liver transplantation uncovered in Göttingen, the leeway provided by statutory law has been supported. The judges from the regional as well as the Federal Court concluded that deviations from the guidelines issued by the German Medical Association were partially constitutionally supported when grounded on medical expertise (Landgericht Göttingen, 2015; Bundesgerichtshof, 2017). From a sociological perspective, the acquittal of a particular type of misconduct seems to be part of a professional and social production of deviance.

The legitimacy of the rules is questioned by physicians, particularly the subgroup who faced the reputational costs of such scandals. Rule circumvention on the topic of organ allocation was not labelled unlawful and neither were the individuals engaging in them seen as “bad apples” of the organization in the run-up to the guideline violations, but as “insiders”, thoroughly respectable, highly recognized peers. The problem, if any, would be in the Diagnosis-Related Group (DRG) system and the contribution margin accounting subjecting clinics and doctors to strain. Against such a wide array of rules, medical professionals were still expected to do their work under risk and uncertainty, a cost which should be computed in the liability equation.

In brief, rules lie at the regional and national dimensions. They are relatively new; control mechanisms are scarce and challenging interpretations exist even when actual violations are uncovered. Against this regulatory setting, it comes as no surprise that rule violation is a regular practice, reinforced by economic, legal, and societal drivers. The ESC reports for the review period 2010 to 2012 evaluated confirm that guideline violations at several transplantation centers took place regularly and are not a matter of individual deviance. Out of those centers in which some violation was reported guidelines were being circumvented at a rate of 2 out of 5, meaning 40% of the total transplantation activity registered at those centers was in disconformity with the GMA guidelines. Fig. 1

Out of a total of 2176 transplant cases reviewed by the ESC, 397 guideline violations took place in the timeframe under analysis across 14 centers distributed nationwide. The map illustrates that in the years 2010–2012, violations were geographically widespread at more than a quarter of the 51 transplantation units, including renowned centers and clinics (e.g., Leipzig, Heidelberg, Berlin, München r. d.I. etc.). This evidence that misconduct was systemic supports the argument that the devious actors are somewhat interchangeable, and allows us to reach out to the speech of the actual participants in organ allocation to make sense of the unwritten rules governing the situation.

2.1. Qualitative results

In the following we will reconstruct the collective mindsets at use in the different transplant centers by focusing on the collective stocks of knowledge and unwritten rules of action of the interviewees. The findings presented below were processed by sub-groups of interpretation as a means of validation of the qualitative analysis, which was halted after a saturation point was reached (Glaser and Strauss, 1967).

2.1.1. Aspirational collective mindset

Cognitive and normative structure: The competitive pressure associated with transplantations and the career aspirations of the physicians operating in this field play a role in 12 out of 17 expert interviews, the majority of which occupying top positions in the university hospitals. According to them, the strive for reputation starts already at a very early

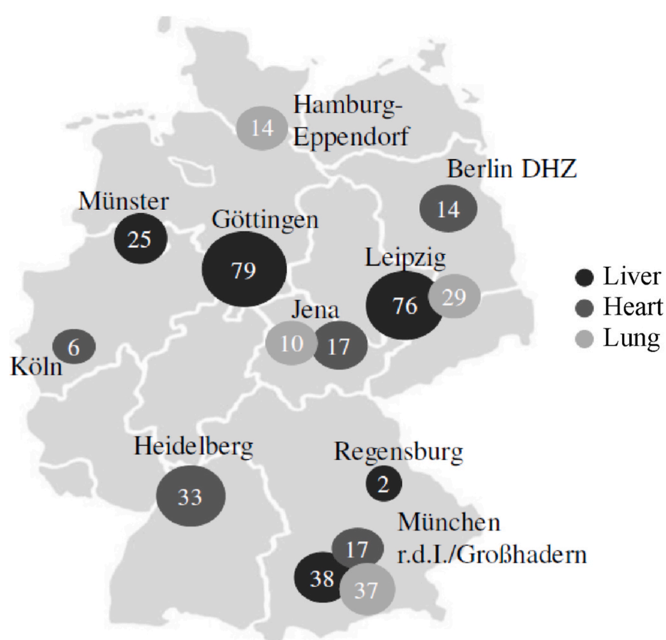


Fig. 1. Transplant centers/units in Germany with notified guideline violations*, according to ESC data* The data on guideline violations for liver are taken from the ESC report 2012/2013 and refer to the period 2010 to 2011 (Bundesärztekammer, 2013, p. 16). For heart see ESC reports 2013/2014 and 2014/2014, for lung see ESC reports 2014/2015 and 2015/2016 (Bundesärztekammer, 2014, 2015, 2016). Source: Own illustration.

stage. Competition among the medical professionals is not primarily economically defined, in the market sense of espousing a career ambition. Instead, the wish to thrive in the transplantation milieu stays in the foreground of the explanations of the guideline violations.

Looking more closely at the cognitive and normative structure of the argumentations, one sees that the starting point is always the scarcity of organs. Shortage of organs brings sharpness into the competition: “My surgeon was constantly going wild and said: I used to transplant X organs, now only Y organs. The guys take away all my livers” (I21, Medical Director). Against the background of this market-oriented perception of organ shortage, it becomes clear why patient information and distribution rules themselves became the subject of competitive strategies that also include guideline violations.

The interviews describe that transplantation medicine was a pioneering field of cutting-edge medicine, with which the top medical doctors adorned themselves as well as the hospital management and the national politics. Being among the leading medics, centers or countries transplanting organs is central to the reputation of all parties. This reputation is scientifically determined by aggregating the achievements of the physicians and clinics who practice it. Furthermore, since most university clinics are funded by the federal states, such reputational gains often provide additional opportunities to set up and finance expensive medical services.

The unwritten rule of action amongst the interviewees was: *Transplant (within the externally set rules) as many organs as possible and medically recommended.* Widespread criticism of the economic driven logic by the interviewees shows how much the norm of “the more the better” is institutionalized in the medical competition. Medicine is “always somewhat warlike” (I5, Medical Director TPM). There is talk of “athletic ambition”, of “wanting to be the best” (I7, Senior Physician TPM) and this has not changed over the years.

Contextualization: Medicine is a very competitive field. The access to medical schools in Germany is extremely selective and even during the study the sharp internal competition among the students is often cause for concern for the budding physicians. Almost half of the students in an

online survey reported that they experienced competitive situations with other students during their studies (see e.g., Gágyor et al., 2012).

Using the DSO data, we could determine that overall, in recent years, the organ shortage in Germany has sharpened (see Schleicher, 2016). If one takes the annual reports of the clinics for the review period 2010 to 2012 into account, it becomes evident that for the university hospitals, as well as for the federal state's public health policy, the number of transplants was an important criterion for the success of the transplant medicine. However, the increase in numbers is not explicitly formulated as a goal. It is implicitly present in reference to the outcome of the transplant centers.

It is surprising how central a role professional competition plays from the standpoint of the physicians when narrating the problem of organ allocation, since transplantation medicine today is a field tightly regulated and largely determined by a distribution algorithm from Eurotransplant. Most transplantation centers are located at large non-profit hospitals with a focus on scientific research instead of for-profit healthcare organizations. Even so, intragroup disputes over aspirational goals are still present at the career ladder of those doctors.

Explanation: Even though the allocation system proposed by Eurotransplant was set forward precisely to avoid possibilities of direct engagement on behalf of or to the detriment of a particular transplantation center, the only envisioned situation in which guidelines are tailored to specific circumstances occurs if an organ is rejected, to respond rapidly and prevent the loss of the organ altogether. Nonetheless, the activity of organ allocation as depicted by the physicians is embedded in a competitive scenario, not understood as an economic competition between the university clinics, but rather as a professional strive for reputation and experience. The incentive structures of the organization pointed in the same direction, even if formal rules and regulations opposed it. Since the controls and examinations were not sufficient by the clinics, this professional competitive orientation in the run-up to the distribution by Eurotransplant could find a terrain which simply made "gaming" possible. Against this background, we assume that there are socialization effects in medical studies that promote competitive orientation and that they are exacerbated in university hospitals, where high-end medicine is often taking place. It also plays a role in a sociological explanation that even the rule-deviating ways in the context of medicine were not unusual, but regular, and only in certain cases unlawful.

2.1.2. Technical collective mindset

Cognitive and normative structure: The economic benefit of the diagnosis codes of transplant patients was another important factor for the doctors not to play by the rules of the German Medical Association. This is articulated in 15 out of 17 interviews, encompassing individuals spread throughout the administration of organ transplanting. In order to cooperate with pressure and to work well, you have to master the game of billing rules within the financial standards of case-based fee management and break-even analysis of hospital medicine. Thus, classifying sick people as being sicker than they actually are in order to realize billing benefits ("upcoding") is a constant of the DRG system. Contrary to its targeted cost-containment impulse, the increase in the reimbursed costs is in the foreground here. This interpretation of the DRG billing rules for the benefit of the patients, the clinics as well as doctors themselves is not always equivalent to rule violation. The limits to fraud are fluid. But those who cannot master the DRG system for their advantage, according to our interviewees, quickly fall behind. Against this background, transplantation patients belong to the "cash-cows" of billing, i.e. to the welcome "DRGs" in the reimbursement economics.

On the other hand, the planned economy side becomes clear. Pressure also arises if either target specifications are not met or target quantities are exceeded. The interviewees made clear that economic planning and accounting requires a creative approach from doctors to at one and the same time keep the system on track and cope with the medical complexity of the individual case. In their argumentations, the legal dimension of inadmissibly entering into general distribution rules and gaming the waiting list steps back behind the daily routine of medical practice to decide questions that concern life and death of patients.

Contextualization: It is worthy to mention that violations such as those in organ transplantation are not an isolated case in medicine, where the boundaries between a permissible optimization of resources, errors and illegal acts are sometimes blurred (for the example of "DRG upcoding" see Jürges and Köberlein, 2014; Klaus et al., 2005; Schönfelder and Klewer, 2008; for the booking of "air services" by downcoding see Döring et al., 2016). As one of the interviewees states, "we are not lawyers" whose *métier* is "a deductive science that emanates from an ideal image", but rather empiricists (see Appendix). . As other studies show, manipulation also occurs elsewhere in a similar manner (Silverman and Skinner, 2004 Luo and Gallagher, 2010). Often, the status of settlement rules and the possible criminal liability for deviations are unclear (see Kölbel, 2013). Is

Explanation: The frequencies of the violations indicate that in the field of transplantation medicine, occasional structures, incentives and informal customs allowed the violations to occur in very different places, forms and largely independently of each other. From a sociological perspective, we found first that playing on the keyboard of the accounting systems and other regulations for the benefit of the patients and the clinics are a usual practice in hospitals; and second, that acting in such a way is only occasionally illegal. This causes a considerable degree of normalization of rule deviations, which, in our opinion, has led to the decoupling between the informal, but technically determined distribution rules for organ allocation (those of physicians) and other formal regulatory systems (the GMA's). Our assumption is that the accounting advantages promoted the creative handling of the number of transplants and the data for the waiting lists.

2.1.3. Positional collective mindset

Cognitive and normative structure: According to the interviewees, the highest hierarchical levels in the centers set the tone of guidelines and provide a basis for standardization of informal agreements. The images used here correspond to the traditional metaphor of clinics and centers as principalities under the exclusive rule of head physicians. This is referenced in 10 out of 17 interviews partly among leading physicians, and partly among their subordinates().

The informal norm applicable by subordinate staff (e.g. assistant doctors or administrative staff) is to tolerate deviations from formal rules when the chief physician is the decision-maker. Their positional schema is one of anticipatory action, where the expectation of the superior suffices to avoid challenging behaviors in the context of group dynamics. This indicates that incentives have been set along the medical hierarchy, supportive of the "creative interpretations" of guidelines without officially legitimizing them.

In addition to the upstream delegation of responsibility - towards the official authority - the expert authority of the chief physicians operates as important factors for the creeping in of rule-deviating behavior in the transplantation centers. Nonconforming behavior is legitimized if the head physician knows, tolerates, or encourages it. Conformity with the supervisor seemed to be more important than regulatory compliance with an external set of rules.

Contextualization: In contrast to the private sector, a large number of historically grown hierarchies are at work in the professional organization of the hospitals. The hierarchy is anchored in medical authority-, which is, in the case of the university clinics, divided into three: a professional, a clinical and an academic hierarchy. The impact of a validity claim based on the authority of the medical profession still appears to be largely intact (Wilkesmann and Jang-Bormann, 2015, p. 227). On the one hand, the semiskilled and experienced colleagues without medical studies stand in front of closed doors of certified expertise, which limit any say in medical matters. On the other hand, because clinical and academic careers overlap at university hospitals, there is a surplus of

symbolic capital accumulated at the upper strata, while the inferior one is constantly reminded, through formal and informal mechanisms, of their subordinate status along the medical hierarchy. This constellation contributes to the assumption that systematic guideline violations in the clinics are not possible without the advocacy or tolerance of the senior physicians or the respective chief physician.

Explanation: The positional collective mindset we reconstructed provides an argument that the guideline violations were not limited to individual deviance, but also translated by the hierarchical pressure in organizational deviance. Several were involved, tolerated and kept silent. To decide when, how and in what way the formal rules are obeyed or circumvented not only documents the professional authority of the professional, but also the superior authority of the hierarchy. Deviating from formal rules is, against this background, a duplicate of both professional and positional autonomy, and official authority. As a result, a corresponding authority assignment is stabilized from below. According to Iseringhaus and Staender (2012), the potential of such successful resistance against bureaucratic interventions and externally issued rules in the professional organization is based on "the indispensability of professional competence, the medical individual case orientation and the interaction dependency of the work results" (Iseringhaus and Staender, 2012, p. 195 [translated by the authors]; Wilkesmann and Jang-Bormann, 2015, p. 227ff.).

Departure from written rules is reinforced through unwritten nudges, like the expert authority of the medical personnel as well as their positional prerogatives asymmetrical to those of lower tier professionals at the same work environment. This hierarchical pressure translates into distinctive actions through the use of professorial forms of recognition and power.

2.1.4. Ethical collective mindset

Cognitive and normative structure: Many statements from the field of transplant centers indicate that the status of the guidelines was to some degree unclear to physicians. Accordingly, the charges of attempted manslaughter against Aiman O. have been shocking for the medical profession, the majority of whom reacted claiming they would have chosen better. The last mindset we encountered displays a sensitivity tuned with the Hippocratic oath, the milestone of medical ethics. The speech encountered aims at a performative effect to convince that rationalizations and justifications for deviations alone are solid reasons for departing from formal guidelines.

For liver transplants, e.g., they build on the tragic choice situation created by the de facto priority of very seriously ill patients. The physicians are not allowed to transplant patients at the time they wish, risking the transplant to happen when it can no longer maximize the patient's survival probabilities. The consequence in this cognitive pattern is that organs are "wasted". The underlying normative order of this collective mindset was reconstructed in 12 out of 17 interviews along the same patterns as the Aspirational CM: with a majority of top-level physicians as carriers. It is ethically required for the medical profession that doctors seek to heal their patients. In individual cases, one must trick the external control system in order to be able to help patients, an alternative which appears to be technically and ethically available.

From the standpoint of the physicians, the formal rules of the German Medical Association itself are externally established rules that cannot claim unconditional validity. They are neither self-evident nor sacred or attain a "lawfulness" threshold to orient their actions. The doctors dare to make their own judgements regarding the quality of the guidelines and feel free to ethically, scientifically and practically justify the deviation from the rules. The central source of legitimacy of their judgements is (analogous to the transplantation law) that the guidelines of the German Medical Association must be based on the state of medical science (§12/II TPG). This is also a central part of their professional self-image. Rather than dogmatic, the understanding of science is positivistic, i.e. oriented towards the measurability of reality and the provability of causality. In the professional self-perception of the university physicians, they are working in particular at the front of the empirical medical sciences and by no means the committees of the German Medical Association. The ethical evaluation of the action is determined by the usefulness of the consequences. Therefore, compliance with the guidelines may be as ethically reprehensible as breaking the rule.

Contextualization: According to the oath, the doctor "will keep the sick from harm and injustice". Before the German courts, Aiman O. was clear in in stating his main concern was the patient's well-being, a claim that was not falsified by the accusation at the legal setting. Placing patients who are non-abstinent alcoholics or in an advanced stage of cancer on the waiting list, due to the life-prolonging effect, has constitutional grounds, according to the Göttingen ruling, and as upheld by the Federal Court of Justice (Landgericht Göttingen, 2015; Bundesgerichtshof, 2017). One of the accusations against the transplant surgeon was registering patients with alcoholic liver disease at the waiting list, contrary to the six months abstinence guideline of the German Medical Association, a rule that has been reported as fundamentally flawed, even unconstitutional, in light of progressive loss of organ function in a relatively short time period. The view espoused by critics is this clause is an unlawful attack on the life of urgent patients with such conditions, entitling them to the right to lie, if this is the only means of accessing the waiting list (Fateh Moghadam, 2016, p. 196). This dispute over the meanings of written rules complexifies the decision-making of actors, and strengthens the understanding that instead of seeing an intrinsic validity of laws, it takes ascertaining the empirical verifiability of their significance.

From an ethical perspective, the doctors are weighing several factors when engaging in organ allocation, the ultimate of which is the survival of their patient. But no matter what guidelines are issued, the scarcity of organs makes it inevitable that some patients will die. If the guidelines favor those (less serious) patients who are more likely to be helped by a transplant on the long run, those urgent cases will have a higher risk of dying. If, on the other hand, the latter are given priority, the risk of dying of the former increases: a tragic choices situation (Calabresi and Bobbitt, 1978).

Explanation: The deviations are rationalized and partially justified by subjecting the guidelines to the own professional judgements of the physicians. Under "a purely medical point of view", as emphasized by one of the interviewees, "every patient with a non-metastatic HCC (hepatocellular carcinoma) is a candidate for a liver transplant, everyone". The contention with overly restrictive guidelines hampering organ allocation for particular patients is articulated by the physicians responsible for the lives of those exact patients under a schema matched with ethical attributes. Following his/her cue, an evasion from the written rule would be advisable to fix a regulatory conundrum and benefit every patient reputed by a doctor as in need of an organ. Here, the professional drive related to the well-being of the patient, as measured by survival probabilities, plays just as much a role as the reference to the state of the medical sciences. Close to what has been identified at the second collective mindset opposing medicine and law, the legally competent authority of the German Medical Association receives little recognition as a scientifically limited body without sufficient clinical knowledge. University medicine comes to play here and keeps generating scientifically justified rationales for deviations. This alternative intake of formal regulations, driven by a scientifically-based ethics, focused on the concrete outputs of interpreting the guidelines, infuses individuals at the medical field with unwritten rules decoupled from written ones. Shared repertoires of doctors cement the technocratic aspect of medicine and reinforce its humanistic elements long before achieving occupations like chief physicians, given that in Germany and worldwide, many medical schools administer the oath to their students in formal, public ceremonies (Antoniou, 2010; Hasday, 2002).

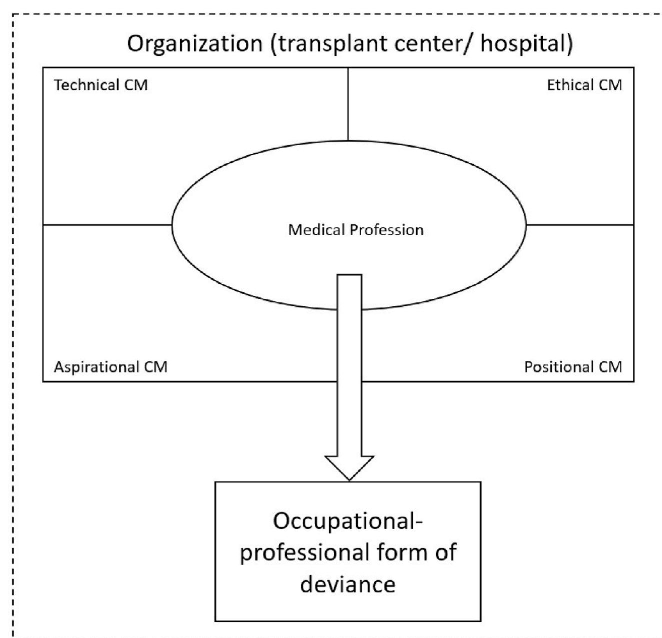
The figure below summarizes the results of the CMA. In their reconstruction, the unwritten rules of interpretation and action of the

actors in the transplant centers were anchored on the organizational field, marked by organ shortage, and largely on the profession of medicine itself. The context of the clinics became apparent primarily in the sense of a professional organization: The rules of interpretation and action, which were inductively ascertained in the qualitative analysis process, proved to be shaped in particular by medical competition, by medical authority, and by the professional ethos and the claim of a mandate for autonomous problem solving by the doctors. The occupation-professionally grounded form of deviance shaped its organizational form and, in this way, makes rule-deviating behavior literally understandable as "white-gowned" deviance and distinguishable from pure organizational deviance. Fig. 2

3. Discussion

As part of our previous research, we were able to show that the claimed manipulations of organ transplant waiting lists could not be understood and explained exclusively as the behavior of a few misguided physicians to the disadvantage of the clinics, but rather as a form of organizational deviance (see also Pohlmann and Höly, 2017; Pohlmann, 2018). In the collective mindsets reconstructed, the organizational benefit of "creative interpretations" of guidelines was furthered, while the claim of illegal personal enrichment was dismissed. Indeed, performance-based remuneration and other indirect incentives may be part of a physician's motivation, but they are licit and supported in the medical field.

The focus of the present paper was to identify the underlying rules and orientations of this "rule-deviating custom". Within the framework of an ex-post interview analysis, we chose the CMA as a method that reconstructs the relatively time-consistent, underlying collective rules of interpretation and action of physicians. As a result, these unwritten rules of interpretation and action proved to be very much shaped by the profession of medicine, where working in the context of the transplantation clinics, a specific status characteristic, weighs more heavily than diffuse status characteristics (such as gender, specialization, or training) (Berger et al., 1980). The rules of interpretation and action inductively derived in the qualitative analysis procedure testify to a broad cognitive institutionalization (see Scott, 2008). While the medical profession proved to be the central reference point of the collective knowledge stock in justifying and explaining rule-deviating behavior, the interviewees followed this up by opening up four additional dimensions of reasoning: aspirational, technical, positional and ethical. This cognitive anchoring in a four-dimensional form indicates a strong institutionalization of the collectively shared solutions strategies for the collective action problem of organ shortage. The dimensions are functionally aligned with the medical profession and, in their interplay within the context of the organization, shape the cognitive framing of a professionally justified form of deviance.



Source: own illustration

Fig. 2. Dimensions of cognitive and normative institutionalization of deviance in organ transplantation. Source: own illustration.

However, the question remains, as to what led to the "rule-deviating customs" to become normal practice in the different transplant centers. The cognitive structure of the CMs are tuned with the organizational crime literature that competitive and hierarchical pressure, justifications and socialization are enablers of misconduct at medical organizations too. *Competitive pressure* on or within an organization is translated by the personnel into rules of interpretation and action, which suggest circumventing debilitating or cumbersome legal rules or guidelines (see Ashforth and Anand, 2003; Ashforth et al., 2008; Pinto et al., 2008; Palmer, 2012; Campbell and Göritz, 2014). The fact that the positional CM, associated with obeying orders, was encountered among fewer chief physicians than the aspirational CM, where striving for performance is the motto, is indicative of that. In the present study, the scenario is moderated by competition within the profession: to advance in the career ladder it takes reputation, experience, and knowledge of unwritten rules supported by the incentive structures of the clinics.

Often high-ranking personnel of the organization are involved or tolerate the deviant practices. Through informal expectations structures and action rules, organizational deviance could prevail over legitimate action alternatives (see Palmer, 2012, p. 174; Campbell and Göritz, 2014). The context of the hospital organization endowed physicians with two forms of authority at once: to decide when, how and in what way the formal rules are obeyed or circumvented not only documents the professional authority of the professional, but also the superior authority of the hierarchy – which resulted in a wide, partly unquestioned recognition of the rule-deviating behavior from below.

Ethically positive assessments or justifications of deviations often accompany the establishment of the deviant customs. They promote the tolerance or recognition of deviations by appearing ethically justifiable or even necessary, thus creating a frame of interpretation for deviations (see Ashforth and Anand, 2003, p. 17). It has been empirically proven that the more loyal the staff towards the organization is, the higher the willingness for "unethical pro-organizational behaviour" (Umphress et al., 2010; Umphress and Bingham, 2011; Ilie, 2012; Matherne and Lichtfield, 2012). Against the background of the organ shortage and the tragic choice situation, physicians consider it both ethically correct to take responsibility for their patients as a physician and, if necessary, to decide against the rules of the German Medical Association so that no organs are wasted. At the same time, it is also ethically justifiable that the society interfere with objective and transparent external regulations.

This inconsistency translates via professional *socialization* into a higher probability of professional deviance for those who rate the assigned mandate for autonomous problem solving higher than the general guidelines of the German Medical Association. The guideline violations in the view of the physicians interviewed are based on adherence to professional self-regulation in case-handling. Through socialization, these unwritten rules of the organization and profession become internalized and gain the status of a self-evident action (see Ashforth and Anand, 2003). At the same time, through long-standing collaboration and preservations of mutual trust within the organization is established (see Luhmann, 1964, p. 311).

As to the institutional reforms, a few are noteworthy to mention for they might instill an emerging culture of observance of formal regulations in the present and future generations of transplantation medicine. Since the 2012 scandals on transplantation medicine, the German Medical Association, which provides legally binding guidelines on all

issues related to organ transplantation, has issued more precise rules and intensified the scrutiny of transplant centers at the German Ministry of Health for the sake of rendering the rules more transparent and verifiable. At the regional level, Directive 2010/53/EU European Parliament and Council, 2010 provides the mandatory standards for quality and safety aspects of the transplantation of organs, on which topic the European Committee on Organ Transplantation of the Council of Europe has been publishing guidance since 2002, the latest version of which is from 2019. The debate on the meshwork of statutory regulations on organ allocation and the persistency of a professional self-management of physicians continues, nonetheless (Fateh-Moghadam, 2016).

4. Conclusion

Departing from the German organ transplant scandal, we have reconstructed the cultural repertoires of medical professionals working with organ allocation when confronted with the applicable guidelines and identified a cognitive and normative institutionalization of deviance. Despite not having interviewed direct participants in the wrongdoings, labelled as such by law-enforcement, this limitation was resolved thanks to the research design that combines data from the bright and dark fields. Our choice of method, collective mindset analysis, has proven to be a useful technique to operationalize the charting of unwritten rules at use. We showed how an approach that relies on the sociology of knowledge can be supported by a method that helps to reconstruct the cognitive and normative rules in a given field of interest and expand researchers' focus on regulative institutions that are predominantly addressed by new institutionalism. For the field of transplant medicine, we demonstrated that a professional "software" comprised of collectively accepted knowledge stocks is used by members of this respective culture to translate written rules into action orientations when solving a significant action problem.

Due to the strong anchoring of the profession-related interpretation and solution to the issue under study, the fair distribution of scarce organs, it can be assumed that other objective action problems are also addressed along a similar logic by other members who share the same cultural repertoire. The internal validity of our preferred methodology is persuasive, but for calibrating the external validity of the findings, further studies would be beneficial. The handling of externally set recommendations on priority setting in the face of the SARS-CoV-2 pandemic, like those issued by the World Health Organization, by the German health sector offers a promising example. If the general methodological framework we put forward for studying the departure from written rules in an organizational field where alternative "rules of the game" are in place works, it should also contribute to understand other domains than organ allocation.

Our results have displayed that the medical jurisdiction supersedes the legal jurisdiction in transplantation medicine, and its scientific ontology based on empiricism is an important element for understanding the departure from formal rules. A variation of the organizational field with other cultural repertoires would also be instructive in the context of further research. How do engineers or lawyers navigate between externally set rules and professional autonomy? Insofar as doctors are concerned, creative interpretations of rules are compatible with the pursuance of occupational goals, something that might not be equally true for lawyers, whose craft is based on formal rules. Comparative studies would benefit from shedding light on how professional and organizational variables interplay on the interpretation and departure from written rules.

Appendix

Glossary

DRGs: (Diagnosis Related Groups) represent an economic-medical patient classification system used for a flat-rate billing procedure in hospitals. Patients are classified into case groups on the basis of their diagnoses and the treatments they have received, and are thus evaluated according to their economic costs. DRGs form the basis for the financing, budgeting and billing of hospital services (see Gesundheitsberichterstattung des Bundes, 2016).

ESC: Examination and Supervision Commissions, set up by the German Medical Association, the German Hospital Association and the National Association of Statutory Health Insurance Funds (*GKV-Spitzenverband*), to prove whether, inter alia, the allocation of organs has been carried out in accordance to the guidelines of the German Medical Association.

Eurotransplant: The Eurotransplant network is responsible for the allocation and cross-border exchange of deceased donor organs and consists of Austria, Belgium, Croatia, Germany, Hungary, Luxembourg, the Netherlands and Slovenia, serving a total population of around 137 million people (www.eurotransplant.org).

Selected legislation.

On organ procurement in Germany: The National Association of Statutory Health Insurance Funds (GKV-Spitzenverband), the German Medical Association and the German Hospital Federation (DKG) decided that the German Organ Procurement Organization (*Deutsche Stiftung Organtransplantation*, DSO) would be the nationwide competent authority to coordinate the matter, in cooperation with Eurotransplant (§ 11 and 12 TPG).

On criteria for the waiting lines: In § 12 (3) TPG, the legislator determined that the scarce organs donated post-mortem are to be distributed according to "chance of success and urgency" and delegated the weighting of these two criteria, their concretization and their operationalization to the German Medical Association (§ 16 (3) TPG). The concrete guidelines have been elaborated by the "Permanent Committee for Organ Transplants of the German Medical Association" (Ständige Kommission Organtransplantation der Bundesärztekammer). The interdisciplinary Committee includes experts from the fields of medicine, law and philosophy, but also patients as well as relatives of organ donors.

On procedures for allocation following organ rejection: If an organ could not be procured by Eurotransplant via the primary way of the waiting list - usually because it was rejected by the transplant centers on the ground of quality reasons, an allocation was made as a so-called competitive center offer or also as a pure center offer, at least until 2013. In the case of a competitive center offer, Eurotransplant informs one or more transplant centers about the offer of such an organ. A selection process among the centers does not take place; rather, the center that comes forward first with corresponding concrete data "wins" the bid for the recipient named by it. Until 2013, there were also pure (non-competitive) center offers; these were then made exclusively to a single center, which may or may not accept the organ. If Eurotransplant has a suitable organ available, the offer is made in such a way that the centers considered by Eurotransplant are informed by telephone.

Acknowledgments

This research was supported by the Volkswagen Foundation (Grant Nr. 89481) and Heidelberg University (Innovation Fund "Frontier" and Field of Focus 4).

CMA	Exemplary quotations
CM 1 12/17	"Well, I myself had my first experiences as a student when I realized that people who did their PhD in the labs destroyed each other's experiments. (…) I think the problem is just that there are a lot of students who are extremely ambitious, who want to move forward, where professional success -not just a secure income, but a reputation and so on- is going to be ahead, plays a big role" (I7, Senior Physician TPM). "You are as cardiologist as 20 years ago, try as many heart catheters as to make possible. That was already the case then, that's how it is today. And the abdominal surgeon will operate as much pancreas as possible independent of the DRG system. So, the primary motivation did not change …" (I12, Senior Medical Director). "From a purely business point of view, there must always be competition when you have scarcity of resources and many suppliers. That's perfectly logical. How to feel it or how to do it in order to revive or experience this competition is a completely different matter." (I4, Deputy Medical Director and Chief Medical Officer TPM).
CM 2 15/17	"I would say that if you meticulously comply with all regulations precisely, this clinic is basically broken. Well, just because you're busy looking, what are the formal rules that apply for the case. The thinking of a lawyer and the thinking of physician is completely contrary. The physicians are empiricists. Basically, we always operate only with statistical quantities, yes. While jurisprudence is a deductive science that emanates from an ideal image" (I22, Medical Director and Chief Physician TPM).
CM 3 10/17	"I do not question anything and just do it. I'm not a doctor either. (…) And in case of problems he [the chief physician] has to take responsibility for it". However, it also becomes clear that this is by no means true for all members of the transplant unit: "Patients who still don't have any updated findings, no matter how insignificant they are, I do not list at Eurotransplant (…), even if the boss has a different practice". (quote from the participating observation)
CM 4 12/17	"It is just difficult for a doctor when he stands by a patient bed and sees that patient is dying now because there are other patients who need the organ more urgently than he" (I37, lawyer involved in proceedings and member of the German Medical Association). "From a purely medical point of view, every patient with a non-metastatic HCC (hepatocellular carcinoma) is a candidate for a liver transplant, everyone! Each of these patients, whether drinking alcohol or not, is a candidate for a liver transplant, everyone!" (I4, Deputy Medical Director and Chief Medical Officer TPM).

References

Abbott, A., 1988. The System of Professions. University of Chicago Press, Chicago.

Arnold, R., 1983. Deutungsmuster. Zu den Bedeutungselementen sowie den theoretischen und methodologischen Bezügen eines Begriffs. Z. für Padagogik 29 (6), 893–912.

Ashforth, B.E., Anand, V., 2003. The normalization of corruption in organizations. Res. Organ. Behav. 25, 1–52. https://doi.org/10.1016/S0191-3085(03)25001-2.

Ashforth, B.E., Gioia, D.A., Robinson, S.L., Trevino, L.K., 2008. Re-viewing organizational corruption. Acad. Manag. Rev. 33 (3), 670–684. https://doi.org/10.5465/amr.2008.32465714.

Berger, P.L., Luckmann, T., 1967. The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Doubleday, Garden City, NY.

Berger, J., Rosenholtz, S.J., Zelditch Jr., M., 1980. Status organizing process. In: Inkeles, A., Smelser, N.J., Turner, R.H. (Eds.), InAnnual Review of Sociology6, Annual Reviews (Palo Alto).

Brief, A.P., Buttram, R.T., Dukerich, J.M., 2001. Collective corruption in the corporate world: toward a process model. In: Turner, M.E. (Ed.), Groups at Work: Theory and Research. Lawrence Erlbaum Associates Publishers, pp. 471–499.

Bundesgerichtshof, 2017, June 28. *Urteil zur Frage der Strafbarkeit von Manipulationen im Rahmen der Verteilung von postmortal gespendeten Lebern wegen versuchten Totschlags oder versuchter Körperverletzung*, file number 5 StR 20/16. Retrieved August 25, 2021, from http://juris.bundesgerichtshof.de/cgi-bin/rechtsprechung/document.py?Gericht=bgh&Art=en&nr=79359&pos=0&anz=1.

Bundestag, Deutscher, 2019. January 8). *Entwurf eines Zweiten Gesetzes zur Änderung des Transplantationsgesetzes – Verbesserung der Zusammenarbeit und der Strukturen bei der Organspende*, Drucksache 19/6915. Retrieved August 25, 2021, from. http://dip21.bundestag.de/dip21/btd/19/069/1906915.pdf.

Bundesverfassungsgericht, 2013. January 28). *Beschluss über eine Verfassungsbeschwerde*, file number 1 BvR 274/12. Retrieved August 25, 2021, from. https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/DE/2013/01/rk20130128_1bvr027412.html.

Calabresi, G., Bobbitt, P., 1978. Tragic Choices. The Conflicts Society Confronts in the Allocation of Tragically Scarce Resources. Norton, New York, London.

Campbell, J.-L., Göritz, A.S., 2014. Culture corrupts! A qualitative study of organizational culture in corrupt organizations. J. Bus. Ethics 120 (3), 291–311. https://doi.org/10.1007/s10551-013-1665-7.

Dannecker, G., Streng, A.F., 2012. Rechtliche Möglichkeiten und Grenzen einer an den Erfolgsaussichten der Transplantation orientierten Organallokation. Juristenzeitung 67 (9), 425–434. https://doi.org/10.1628/002268812800567113.

Dannecker, G., Streng, A.F., 2014. Verschaffung des Wartelistenzugangs für Alkoholiker entgegen den Organallokations-Richtlinien der Bundesärztekammer – (versuchter) Totschlag? Neue Z. Strafr. 34 (12), 673–680.

DiMaggio, P., Powell, W., 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. Am. Socio. Rev. 48 (2), 147–160. https://doi.org/10.2307/2095101.

Döring, S., Dittmann, H.-M., Reith, D., 2016. Abrechnung von ambulanten und stationären Behandlungen. In: Schmola, G., Rapp, B. (Eds.), Compliance, Governance und Risikomanagement im Krankenhaus. Rechtliche Anforderungen – Praktische Umsetzung – Nachhaltige Organisation. Springer Fachmedien, Wiesbaden, pp. 117–162.

Dutton, J., Dukerich, J., Harquil, C., 1994. Organizational images and member identification. Adm. Sci. Q. 39 (2), 239–263. https://doi.org/10.2307/2393235.

Fateh-Moghadam, B., 2016. Legal Justice in organ allocation. A legal perspective on the failure of the German organ allocation system. In: Jox, J.R., Assadi, G., Marckmann, G. (Eds.), Organ Transplantation in Times of Donor Shortage: Challenges and Solutions. Springer International Publishing, Cham, pp. 187–199.

Freidson, E., 1988. Profession of Medicine: A Study of the Sociology of Applied Knowledge. University of Chicago Press.

Gágyor, I., Hilbert, N., Chenot, J.-F., Marx, G., Ortner, T., Simmenroth-Nayda, A., Scherer, M., Wedeken, S., Himmel, W., 2012. Wie häufig und belastend sind negative Erfahrungen im Medizinstudium? – ergebnisse einer Online-Befragung von Medizinstudierenden. GMS Journal for Medical Education 29 (4), Doc55. https://doi.org/10.3205/zma000825.

Girtler, R., 2001. Methoden der Feldforschung. Böhlau Verlag, Wien, Köln, Weimar.

Glaser, B., Strauss, A., 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. Aldine, Chicago.

Göttingen, Landgericht, 2015, May 6. Urteil in der Schwurgerichtssache gegen Dr. med. A.O. wegen des Verdachts versuchten Totschlags u.a file number 6 Ks 4/13. Retrieved August 25, 2021, from. https://www.jura.uni-mannheim.de/media/Lehrstuehle/jura/Buelte/Dokumente/Examensvorbereitung/_anonymisierte_Fassung_6_KS_4_13.pdf.

Gutmann, T., 2014. Organisierte Verantwortungslosigkeit. Die Hässlichkeit des deutschen Transplantationssystems. In: Haarhoff, H. (Ed.), Organversagen. Die Krise der Transplantationsmedizin in Deutschland. Referenz-Verlag, Frankfurt am Main, pp. 143–177.

Heubel, F., 2015. Vom Berufsstand zur Profession. In: Heubel, F. (Ed.), Professionslogik im Krankenhaus. Heilberufe und die falsche Ökonomisierung. Humanities Online, Frankfurt am Main, pp. 13–33.

Hoffmaster, B., Hooker, C., 2013. Tragic choices and moral compromise: the ethics of allocating kidneys for transplantation. Milbank Q. 91 (3), 528–557. https://doi.org/10.1111/1468-0009.12025.

Hoisl, A., Barbey, R., Graf, B.M., Briegel, J., Bein, T., 2015. Wertungen des „Transplantationsskandals“ durch die Medien. Der Anästhesist 64 (1), 16–25.

Ilie, A., 2012. Unethical Pro-organizational Behaviors: Antecedents and Boundary Conditions. Graduate Theses and Dissertations of the University of South Florida. Retrieved August 25, 2021, from. https://scholarcommons.usf.edu/etd/4085.

Iseringhausen, O., Staender, J., 2012. Das krankenhaus als organisation. In: Apelt, M., Tacke, V. (Eds.), Handbuch Organisationstypen. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 185–203.

Joshi, M., Anand, V., Henderson, K., 2007. The role of organizational practices and routines in facilitating normalized corruption. In: Langan-Fox, J., Cooper, C.L., Klimoski, R.J. (Eds.), Research Companion to the Dysfunctional Workplace: Management Challenges and Symptoms. Edward Elgar Publishing, pp. 235–251. https://doi.org/10.4337/9781847207081.00022.

Jürges, H., Köberlein, J., 2014. First do No harm. *Then Do Not Cheat: DRG Upcoding In German Neonatology*, Schumpeter Discussion Papers No. 2014-001. Retrieved August 25, 2021, from. http://hdl.handle.net/10419/97202.

Kersting, S., Erdmann, J., 2014. Analyse von Hellfelddaten – darstellung von Problemen, Besonderheiten und Fallstricken anhand ausgewählter Praxisbeispiele. In: Eifler, S., Pollich, D. (Eds.), Empirische Forschung über Kriminalität. Methodologische und methodische Grundlagen. Springer, Wiesbaden, pp. 9–29.

Klaus, B., Ritter, A., Grosse Hülsewiesche, G., Beyrle, B., Euler, H.-U., Fender, H., Hübner, M., v Mittelstaedt, G., 2005. Untersuchung zur Qualität der Kodierungen von Diagnosen und Prozeduren unter DRG-Bedingungen. Gesundheitswesen 67 (1), 9–19. https://doi.org/10.1055/s-2004-813833.

Klinkhammer, J., 2013. On the dark side of the code: organizational challenges to an effective anti-corruption strategy. Crime Law Soc. Change 60 (2), 191–208. https://doi.org/10.1007/s10611-013-9453-y.

Koch, J., 2004. Zwischen den Zeilen der Organisation. Zur Bedeutung postmodernen Denkens für Organisationstheorie und Organisationsberatung. Organ. Superv. Coach. (OSC) 11 (4), 313–327. https://doi.org/10.1007/s11613-004-0035-9.

Kölbel, R., 2013. Abrechnungsverstöße in der stationären medizinischen Versorgung – Medizinische, ökonomische und juristische Perspektiven. W. Kohlhammer Verlag, Stuttgart.

Kühl, S., 2007. Formalität, Informalität und Illegalität in der Organisationsberatung: systemtheoretische Analyse eines Beratungsprozesses. Soziale Welt 58 (3), 271–293.

Kühl, S., 2010. *Informalität und Organisationskultur. Ein Systematisierungsversuch.* Working Paper 3/2010, Universität Bielefeld. Retrieved August 25, 2021, from. https://www.

uni-bielefeld.de/soz/personen/kuehl/pdf/Informalitat-und-Organisationskultur-Workingpaper-01062010.pdf.
Lamnek, S., 2010. Qualitative Sozialforschung. Beltz, Weinheim, Basel.
Lamont, M., 1992. Money, Morals, and Manners. University of Chicago Press, Chicago, IL.
Luhmann, N., 1964. *Funktionen und Folgen formaler Organisation*. Schriftenreihe der Hochschule Speyer, vol. 20. Duncker & Humblot, Berlin.
Luo, W., Gallagher, M., 2010. 2010). Unsupervised DRG upcoding detection in healthcare databases. IEEE International Conference on Data Mining Workshops 600–605. https://doi.org/10.1109/ICDMW.2010.108.
Matherne, C.F., Litchfield, S.R., 2012. Investigating the relationship between affective commitment and unethical pro-organizational behaviors: the role of moral identity. Journal of Leadership, Accountability and Ethics 9 (5), 35–46.
Neby, S., Lægreid, P., Mattei, P., Feiler, T., 2015. Bending the rules to play the game: accountability, DRG and waiting list scandals in Norway and Germany. European Policy Analysis 1 (1), 127–148. https://doi.org/10.18278/epa.1.1.9.
Oevermann, U., 1973. Zur Analyse der Struktur von sozialen Deutungsmustern. Unveröffentl. Manuskript. Frankfurt am Main.
Oevermann, U., 2001. Die Struktur sozialer Deutungsmuster. Versuch einer Aktualisierung. Sozialer Sinn 2 (1), 35–81.
Ortmann, G., 2010. *Organisation und Moral. Die dunkle Seite*. Weilerswist: Velbrück Wissenschaft.
Palmer, D., 2012. Normal Organizational Wrongdoing. A Critical Analysis of Theories of Misconduct in and by Organizations. Oxford University Press, Oxford.
Parsons, T., 1958. Struktur und Funktion der modernen Medizin. Eine soziologische Analyse. In: König, R., Tönnesmann, M. (Eds.), Probleme der Medizin-Soziologie. Westdeutscher Verlag, Köln, Opladen, pp. 10–58.
Parsons, T., 1968. Professions. International Encyclopedia of the Social Sciences 12, 536–547.
Parsons, T., 1975. The sick role and the role of the physician reconsidered. Milbank Meml. Fund Q. - Health & Soc. 53 (3), 257–278. https://doi.org/10.2307/3349493.
Pinto, J., Leana, C.R., Pil, F.K., 2008. Corrupt organizations or organizations of corrupt individuals? Two types of organization-level corruption. Acad. Manag. Rev. 33 (3), 685–709. https://doi.org/10.2307/20159431.
Pohlmann, M., 2008. Management und Moral. In: Blank, T., Münch, T., Schanne, S., Staffhorst, C. (Eds.), Integrierte Soziologie: Perspektiven zwischen Ökonomie und Soziologie, Praxis und Wissenschaft, Festschrift zum 70. Geburtstag von Hansjörg Weitbrecht. Rainer Hampp Verlag, München, Mering, pp. 161–176.
Pohlmann, M., 2018. Der transplantationsskandal in deutschland. Eine sozialwissenschaftliche Analyse der Hintergründe. Springer VS, Wiesbaden.
Pohlmann, M., Höly, K., 2017. Manipulationen in der Transplantationsmedizin – ein Fall von organisationaler Devianz? Kölner Z. Soziol. Sozialpsychol. 69 (2), 181–207. https://doi.org/10.1007/s11577-017-0436-3.
Pohlmann, M., Bär, S., Valarini, E., 2014. The analysis of collective mindsets: introducing a new method of institutional analysis in comparative research. Rev. Soc. e Politic. 22 (52), 7–25. https://doi.org/10.1590/1678-987314225202.
Pohlmann, M., Bitsch, K., Klinkhammer, J., 2016. Personal gain or organizational benefits – how to explain active corruption?. In: Graeff, P., Wolf, S. (Eds.), Ethical Challenges of Corrupt Practices: Formal and Informal Conflicts of Norms and Their Moral Ramifications, German Law Journal, vol. 17, pp. 73–100, 1.
Pondrom, S., 2013. Trust is everything. Am. J. Transplant. 13 (5), 1115–1116. https://doi.org/10.1111/ajt.12277.
Ravasi, D., Schultz, M., 2006. Responding to organizational identity threats: exploring the role of organizational culture. Acad. Manag. J. 49 (3), 433–458. https://doi.org/10.5465/AMJ.2006.21794663.
Rissing-van Saan, R., 2016. Legal consequences of organ transplantation malpractice. In: Jox, J.R., Assadi, G., Marckmann, G. (Eds.), Organ Transplantation in Times of Donor Shortage: Challenges and Solutions. Springer International Publishing, Cham, pp. 179–185.
Sachweh, P., 2010. *Deutungsmuster sozialer Ungleichheit. Wahrnehmung und Legitimation gesellschaftlicher Privilegierung und Benachteiligung*. Schriften des Zentrums für Sozialpolitik, Bremen. Campus-Verlag, Frankfurt am Main, p. 22.
Schleicher, C., 2016. Situation der Organspende in Deutschland: 30 Jahre Nierentransplantation in Stuttgart (Stuttgart).
Schlitt, H.J., Loss, M., Scherer, M.N., Becker, T., Jauch, K.-W., Nashan, B., Schmidt, H., Settmacher, U., Rogiers, X., Neuhaus, P., Strassburg, C., 2011. Aktuelle Entwicklungen der Lebertransplantation in Deutschland: MELD-basierte Organallokation und „incentives" für Transplantationszentren. Z. Gastroenterol. 49 (1), 30–38. https://doi.org/10.1055/s-0029-1245946.
Schneider, H., Busch, J., 2013. Der lebensretter als mörder? Der „organspendeskandal" an den grenzen der Strafrechtsdogmatik. Neue Kriminalpolitik 25 (4), 362–372. https://doi.org/10.5771/0934-9200-2013-4-362.
Schönfelder, T., Klewer, J., 2008. Verfahren zur Erkennung von DRG-Upcoding. Heilberufe 60 (1), 6–12. https://doi.org/10.1007/s00058-008-1302-5.
Schroth, U., 2013. § 19 Abs. 2a TPG – ein missglückter medizinstrafrechtlicher Schnellschuss. Medizinrecht 31 (10), 645–647. https://doi.org/10.1007/s00350-013-3529-7.
Schütz, A., 1960. Der sinnhafte Aufbau der sozialen Welt. Eine Einleitung in die verstehende Soziologie. Suhrkamp, Frankfurt am Main.
Schütz, A., Luckmann, T., 2003. Strukturen der Lebenswelt. UVK, Konstanz.
Scott, W.R., 1995. Institutions and organizations. Ideas, interests and identities. M@n@gement 17, 136–140. https://doi.org/10.3917/mana.172.0136.
Scott, W.R., 2003. Institutional carriers: reviewing modes of transporting ideas over time and space and considering their consequences. Ind. Corp. Change 12 (4), 897-894.
Silverman, E., Skinner, J., 2004. Medicare upcoding and hospital ownership. J. Health Econ. 23 (2), 369–389. https://doi.org/10.1016/j.jhealeco.2003.09.007.
Snider, L., 2008. Corporate economic crimes. In: Minkes, J., Minkes, L. (Eds.), Corporate and White-Collar Crime. Sage, Los Angeles, pp. 39–60.
Swidler, A., 1986. Culture in action: symbols and strategies. Am. Socio. Rev. 51 (2), 273–286. https://doi.org/10.2307/2095521.
Tacke, V., 2015. Formalität und Informalität. In: von Groddeck, V., Wilz, S.M. (Eds.), Formalität und Informalität in Organisationen. Springer VS, Wiesbaden, pp. 37–92.
European Parliament and Council, 2010. Directive 2010/45/EU of the European Parliament and of the Council of 7 July 2010 on standards of quality and safety of human organs intended for transplantation. Retrieved August 25, 2021, from. https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32010L0053.
Ullrich, C.G., 1999. Deutungsmusteranalyse und diskursives Interview. Z. Soziol. 28 (6), 429–447.
Umphress, E.E., Bingham, J.B., 2011. When employees do bad things for good reasons: examining unethical pro-organizational behaviors. Organ. Sci. 22 (3), 621–640. https://doi.org/10.1287/orsc.1100.0559.
Umphress, E.E., Bingham, J.B., Mitchell, M.S., 2010. Unethical behavior in the name of the company: the moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. J. Appl. Psychol. 95 (4), 769–780. https://doi.org/10.1037/a0019214.
Vaughan, D., 1998. Rational choice, situated action, and the social control of organizations. Law Soc. Rev. 32 (1), 23–61. https://doi.org/10.2307/827748.
Vaughan, D., 1999. The dark side of organizations. Mistake, misconduct, and disaster. Annu. Rev. Sociol. 25 (1), 271–305. https://doi.org/10.1146/annurev.soc.25.1.271.
Vogd, W., 2004. Ärztliche Entscheidungsfindung im Krankenhaus: komplexe Fallproblematiken im Spannungsfeld von Patienteninteressen und administrativorganisatorischen Bedingungen. Z. Soziol. 33 (1), 26–47. https://doi.org/10.1515/zfsoz-2004-0102.
Weber, K., Patel, H., Heinze, K.L., 2013. From cultural repertoires to institutional logics: a content-analytic method. In: Lounsbury, M., Boxenbaum, E. (Eds.), Institutional Logics in Action, Part B, vol. 39. Emerald Group Publishing Limited, pp. 351–382.
Wilkesmann, M., Jang-Bormann, R.S., 2015. Führt Nichtwissen zu Unsicherheit in der Organisation Krankenhaus? In: Apelt, M., Senge, K. (Eds.), Organisation und Unsicherheit. Springer VS, Wiesbaden, pp. 213–232.
Zeier, M., 2021. The silence of organizations - the transplant-allocation scandal. In: Starystach, S., Höly, K. (Eds.), The Silence of Organizations: How Organizations Cover up Wrongdoings. heiBOOKS, Heidelberg, pp. 227–236. https://doi.org/10.11588/heibooks.592.c11626.