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Clinical ethics consultations in psychiatric compared to non-psychiatric medical settings: characteristics and outcomes

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Abstract

Background: In the recent years clinical ethics consultations (CEC) received an increasing attention not only in patients with medical conditions but also in those with mental disorders. However, the systematic and empirical knowledge is still small. The aim of this observational study was to investigate whether CECs differ between psychiatric and medical hospital inpatients regarding ethical issues, goals, characteristics, processes, and outcomes.

Methods: This is a retrospective and in parts prospective analysis of a semi-structured CEC approach provided by the CEC service at a large German general hospital between January 2006 and June 2015.

Results: A total of 259 CECs in three inpatient settings were investigated, i.e. intensive care units (ICU, 43.6%), low care units (LCU, 33.6%), and psychiatric

care units (PCU, 22.8%). In all groups, most ethical issues addressed treatment intensity (80.6%) and resulted in over 93% in participants' agreement on final ethical recommendations as well as in high implementation rates (>89%). However, we found significant group differences: In PCUs patients participated more often in the CEC ($p < .001$), the number of all participants was higher ($p < .001$), CECs were more time expensive ($p < .001$), and more recommendations focused on interventions against the patients' declared intention (37.7% versus 0%) than in the other groups.

Discussion: In spite of different clinical characteristics and ethical issues between patients and settings, consensus and implementation of the CEC recommendation could be achieved at a high rate in all groups. There are substantial differences regarding goals, participation of patients, and processes. It is worth considering adapting the CEC to the special needs in psychiatric settings, especially under the aspect of the patients' perspective and involvement.

Keyword: Psychiatry

1. Introduction

To handle demanding ethical issues in an appropriate way is a main challenge in every day patient care faced by health care professionals [1] and an increasing ethical awareness in the health sector can be observed [2]. Over the last decades, ethical questions and their adequate and structured deliberation also have received increased attention in acute inpatient health care settings [3]. Thus, there is an urgent need to develop responsible recommendations in response to ethical uncertainties [4]. Clinical ethics consultations (CECs) are one type of formal ethical support that provides a practical orientated approach in addressing value-based conflicts [5, 6].

Even to date, procedures still vary substantially in detail and empirical data are rarely available [7]. CECs, as performed here, are individual sessions for each patient chaired by a trained clinical ethicist. The aim of a CEC is to facilitate and consider the ethical implication of a difficult case and to support to achieve reflected ethical decisions [8]. A second ethicist co-chairs the session and is responsible for the documentation. CECs are multidisciplinary rounds including optional participation of patients him- or herself, relatives/confidantes, members of the treatment team, legal guardians, and other professionals involved in the treatment and/or care of the patient. A CEC is requested for the purpose of deliberation on a particular patient and a treatment-related dilemma with uncertainties about the patient's wish and interest [9], and value-based contradictions. The explicit aim of the CEC is to create a common idea of the ethical problem, its solution and, consequently, a final recommendation.

While CECs are becoming increasingly implemented in many general hospitals, far too little attention has been paid to ethical issues concerning patients with mental disorders, even though many ethical problems may arise in psychiatric treatment settings [8]. Systematic CECs in the psychiatric sector are found only to a minor extent and there are only a few reports on CECs affecting psychiatric patients [10].

Our approach is a step to improve the quality of CECs in psychiatric settings. Therefore, the aim of the present observational study was to evaluate characteristics and outcomes of CECs in psychiatric (psychiatric care units, PCU) and non-psychiatric patients (intensive care units, ICU; and low care units, LCU). Our major assumptions were that (i) patients in IUC and LCU settings take part less and relatives more frequently in CECs than in PCU settings, (ii) initial requests in IUC and LCU settings focus more frequently on treatment intensity while in PCU settings on patients' autonomy and endangerments, (iii) implementation rates of CEC recommendations would be smaller in PCU settings.

2. Methods

This retrospective and in parts prospective observational study was conducted using routine data from CECs provided by the CEC service at the Evangelisches Klinikum Bethel (EvKB, Bielefeld, Germany). The EvKB is a medical center with over 1700 beds in 26 specialized clinical departments. There are two full-time clinical ethicists flanked by CEC service co-workers from different faculties and professions. The CEC service works on demand by clinicians and follows a modified Nijmegen chart. Further information and details of the methods were reported by Kobert et al. [11] and Reiter-Theil [12]. In sum, we employ a four step consultation procedure which includes (a) the elaboration of the ethical question (see also [2]), (b) gathering of data and information by the CEC participants, (c) identification and discussion of the ethical arguments, which leads to (d) a recommendation on the course of action. The physicians can transform this final recommendation with the consent of the patient or his or her legal guardian into a medical order.

Each CEC is documented using a semi-structured protocol for the patient record. The protocols are in accordance with the standards of the Academy for Ethics in Medicine [13]. They include the ethical question, patients' relevant characteristics, names and functions of the CEC participants, an extensive summary of the ethical discussion as well as final recommendations. The protocols provide information about the expressed (verbally or written) or presumed preferences and values of the patient, the medical diagnosis and prognosis together with the particular concerns and arguments of all the CEC participants, and are of importance for the patient care [14].

We initially included 356 CECs realized between January 2006 and June 2015. To avoid potential confounding bias, we excluded CECs in patients younger than

18 years ($n = 52$), adults with intellectual disabilities ($n = 12$), outpatient consultations ($n = 2$), nursing home consultations ($n = 24$), hospice consultations ($n = 4$), and requests from external hospitals ($n = 3$). Thus, the final study group consisted of 259 adult inpatients. Before CEC, treating physicians had assessed patients' cognitive capacity to consent to treatment.

For the purpose of our study, we collected data on patients' demographic characteristics, medical diagnosis and clinical characteristics as well as detailed CEC information (i.e. participants, location, duration, main ethical issues). The first and the last author codified all data related to the CECs. The patient or the legal guardian obtained informed consent for CEC and a later use of data for publication in advance. For this project, formal ethical approval was not indicated. This study used only routine data for quality reasons.

Following the proposal by Pfaefflin et al [15], we assigned the initial requests for CECs to seven major domains: (a) the goals and regime of treatment, (b) structural questions (e.g. discharge, implementing a legal guardian), (c) psychosocial challenges and considerations of the teams, (d) patients' preferences, values, will, and autonomy, (e) communication between patients, their families, and health professionals, (f) self-endangerment and endangerment of others, and (g) other questions. CEC recommendations were assigned according to slightly adapted categories as proposed by Pfaefflin and colleagues [15]: (a) improving communication and awaiting the patients' course of illness; (b) discharge/transfer, (c) withholding therapy, (d) palliative treatment and care, (e) treatment intensification, (f) therapy reduction, (g) following patients' autonomic decision, (h) recommendation concerning pregnancy, (i) recommendation related to interventions against the patients' declared intention (coercive interventions), (j) self-endangerment as an inevitable risk, and (k) other recommendations. The evaluation whether a recommendation was put into practice was achieved within three weeks.

Data on demographic and clinical characteristics of patients and reasons of CECs were analyzed using χ^2 -Tests for categorical data and one-way between groups analysis of variance (ANOVA) for continuous data. The significance level for all analyses was set at .05 with Bonferroni-adjusted post-hoc t tests (Bonferroni corrected $\alpha = .017$). All analyses were conducted using SPSS version 20.

3. Results

The majority of the CECs (43.6%, $n = 113$) were requested for patients in ICU, 87 (33.6%) for patients treated in LCU, and 59 (22.8%) for patients in PCU. Table 1 shows demographic and clinical characteristics of the three patient groups.

Table 1. Demographic and clinical characteristics of the patient groups.

	ICU (n = 113)	LCU (n = 87)	PCU (n = 59)
Age, mean (SD)	69.25 (15.74)	71.30 (17.80)	48.20 (20.41)
Gender (male/female)	68/45	33/54	23/36
Primary diagnosis, n (%)			
<i>Medical conditions^a</i>			
Cardiovascular	24 (21.4%)	24 (27.6%)	0
Oncological	17 (15.2%)	12 (13.8%)	2 (3.4%)
Respiratory	16 (14.3%)	9 (10.3%)	2 (3.4%)
Gastro-intestinal	21 (18.8%)	3 (3.4%)	0
Neurologic	6 (5.4%)	16 (18.4%)	0
Infections	6 (5.4%)	3 (3.4%)	2 (3.4%)
Multiple organ failure	9 (8.0%)	0	0
Genito-urinary	3 (2.7%)	3 (3.4%)	1 (1.7%)
Injury/poisoning	3 (2.7%)	2 (2.3%)	1 (1.7%)
Others	5 (4.4%)	8 (9.2%)	0
<i>Psychiatric conditions</i>			
Schizophrenia	1 (0.9%)	0	17 (28.8%)
Personality disorders	0	0	11 (18.6%)
Organic brain syndromes	1 (0.9%)	5 (5.7%)	8 (13.6%)
Addictions	0	0	5 (8.5%)
Dissociative/post-traumatic	0	0	5 (8.5%)
Others	0	2 (2.3%)	3 (5.1%)
Exhausted treatment options, n (%)	52 (46.0%)	37 (42.5%)	12 (20.3%)
Advance directives, n (%)	29 (25.7%)	20 (23.0%)	4 (6.8%)

Note. ICU = Intensive Care Unit, LCU = Low Care Unit, PCU = Psychiatric Care Unit.

^a Data missing for one ICU patient.

3.1. Demographic and clinical characteristics

The patient groups differed substantially with regard to age ($F_{(2,258)} = 35.79$, $p < .001$) and gender ($\chi^2 = 12.17$, $df = 2$, $p < .002$) with patients in PCU being significantly younger than in LCU ($p < .001$) and ICU ($p < .001$) (Table 1). By contrast, patients in ICU and LCU did not differ regarding age ($p = .999$). In addition, the ICU group included more men than the LCU and the PCU group. The majority of patients in the CECs were seriously or terminally ill, including a variety of severe and/or life-threatening medical conditions. The most frequent primary diagnoses of non-psychiatric patients were cardiovascular diseases, while schizophrenia was most common in psychiatric patients (see Table 1). In 39.0% of the patients, all therapeutic options were exhausted, but the rate varied significantly between patient groups ($\chi^2 = 9.27$, $df = 2$, $p = .010$) with the lowest rate in PCU. Due to the severity of the underlying illness or critical illness-related conditions (e.g. intensive care treatment), the majority of patients were not able to consent to treatment (90.3%),

with the lowest rate in PCU (81.4%), followed by LCU (89.7%) and ICU (95.6%) patients ($\chi^2 = 9.06$, $df = 2$, $p = .011$). In ICU and LCU patients an advance directive was significantly more often available than in PCU patients ($\chi^2 = 9.01$, $df = 2$, $p = .011$).

3.2. CEC characteristics

The number of participants attending a CEC ranged from 3 to 26 ($M = 7.72$, $SD = 3.00$) with substantial differences between the groups ($F_{(2,250)} = 59.29$, $p < .001$) (Table 2). CECs in psychiatric patients consisted of significantly more participants than for patients in LCU ($p < .001$) and ICU ($p < .001$), while there was no significant difference between the latter ones ($p = .061$). All CECs were performed in the presence of a clinical ethics consultant and at least one treating physician. The majority of CECs also included an additional ethics consultant as co-chair (70.7%) and at least one member of the nursing team (86.5%). Attendance rates in general were significantly higher in PCU compared to ICU and LCU (co-chair: $\chi^2 = 27.29$, $df = 2$, $p < .001$; nursing team: $\chi^2 = 9.98$, $df = 2$, $p = .007$). By contrast, other professionals attended less often a CEC. This was especially true for ICU and LCU consultations ($\chi^2 = 57.33$, $df = 2$, $p < .001$).

Of particular interest is the involvement of the patients in the CECs. Only a minority of consultations in ICU and LCU took place in the presence of the patients

Table 2. Characteristics of clinical ethics consultations.

	ICU ($n = 113$)	LCU ($n = 87$)	PCU ($n = 59$)
Number of CEC participants, <i>mean (SD)</i> ^a	6.46 (1.78)	7.29 (1.87)	10.79 (3.99)
Attendance in CECs, n (%)			
Clinical ethicist	113 (100%)	87 (100%)	59 (100%)
Co-chair	63 (55.8%)	65 (74.7%)	55 (93.2%)
Patient	2 (1.8%)	8 (9.2%)	21 (35.6%)
Physicians	113 (100%)	87 (100%)	59 (100%)
Nurses	96 (85.0%)	70 (80.5%)	58 (98.3%)
Legal guardian	18 (15.9%)	22 (25.3%)	34 (57.6%)
Relatives	52 (46.0%)	63 (72.4%)	15 (25.4%)
Attorneys	16 (14.3%)	12 (13.8%)	2 (3.4%)
Healthcare chaplains	32 (28.3%)	12 (13.8%)	4 (6.8%)
Other professionals	17 (15.0%)	39 (44.8%)	43 (72.9%)
Duration of CEC (min), <i>mean (SD)</i> ^b	48.49 (16.86)	60.72 (19.55)	77.27 (19.60)
More than one CEC, n (%)	5 (4.4%)	4 (4.6%)	6 (10.2%)

Note. ICU = Intensive Care Unit, LCU = Low Care Unit, PCU = Psychiatric Care Unit.

^a Data missing for 6 CECs.

^b Data missing for 10 CECs.

themselves, while over one third of the psychiatric patients attended the CEC ($\chi^2 = 43.04$, $df = 2$, $p < .001$). Legal guardians, who were appointed by a court, were significantly more often present in PCU than in ICU and in LCU CECs ($\chi^2 = 33.72$, $df = 2$, $p < .001$). The attendance rates of legal representatives (relatives with the power of attorney) did not differ between the groups ($\chi^2 = 5.06$, $df = 2$, $p = .080$). Moreover, in one-half of the CECs (50.2%), one or more relatives of the patient took part and actively contributed to the CECs, with the highest rates in LCU, followed by ICU and PCU ($\chi^2 = 32.45$, $df = 2$, $p < .001$).

Overall, the mean duration of a CEC was 59.4 minutes ($SD = 21.6$) without time for preparation and follow-up. As expected, the duration of CECs significantly differed between groups ($F_{(2,248)} = 46.62$, $p < .001$), i.e. lasting significantly longer in PCU than in ICU ($p < .001$) and LCU ($p < .001$). CEC time duration was associated with the kind of initial request ($F_{(4,247)} = 4.25$, $p < .002$). In particular, CECs including questions on treatment intensity ($M = 57.34$, $SD = 20.37$) lasted significantly shorter than CECs on questions related to self-endangerment and endangerment of others ($M = 84.00$, $SD = 7.43$). Furthermore, the majority of all patients (93.4%) received a single CEC. Due to a change of the situation in the course of treatment, consecutive CECs for the same patient were conducted in 6.6 % cases. However, this number did not significantly differ between the patient groups ($\chi^2 = 3.54$, $df = 2$, $p = .170$).

3.3. Ethical issues in CECs

The initial ethical problems that led to a CEC differed significantly between groups ($\chi^2 = 39.94$, $df = 8$, $p < .001$) (Table 3). The majority of CECs addressed ethics-related questions concerning treatment intensity (80.6%), with highest rates in LCU and ICU and lowest in PCU ($\chi^2 = 10.04$, $df = 2$, $p = .007$). The second most common initial ethical issues were related to patients' autonomy (11.2%) with comparable rates in all groups ($\chi^2 = 1.79$, $df = 2$, $p = .409$). Only a minority of CECs initially addressed structural questions (3.1%), communication (1.9%), and ethical problems pertaining to patients' self-endangerment/endangerment of others (3.1%).

Apart from these ethical questions, the CEC participants raised additional ethical issues during the course of consultations resulting in further differences between groups. Overall, 21.6% of the CECs involved comments of the treatment team on the importance of the patient-therapist-relationship with significant differences between the groups ($\chi^2 = 83.1$, $df = 2$, $p < .001$). In over half of the CECs in PCU (64.4%), ethical conflicts were reported that might impair the patient-therapist-relationship, but only a minority of CECs in ICU (7.1%) and LCU (11.5%) included such comments. Moreover, as expected, CECs on psychiatric and non-psychiatric patients varied in occurrence of ethical problems pertaining to patients' self-endangerment ($\chi^2 = 149.04$, $df = 2$, $p < .001$) and endangerment of others

Table 3. Initial request and outcome of clinical ethics consultations.

	ICU (<i>n</i> = 113)	LCU (<i>n</i> = 87)	PCU (<i>n</i> = 59)
Initial request, <i>n</i> (%) ^a			
Intensity of treatment	94 (83.2%)	75 (86.2%)	39 (67.2%)
Structural questions	2 (1.8%)	1 (1.1%)	5 (8.6%)
Patients' autonomy	16 (14.2%)	8 (9.2%)	5 (8.6%)
Communication	1 (0.9%)	3 (3.4%)	1 (1.7%)
Self-endangerment/endangerment of others	0	0	8 (13.8%)
Other questions	0	0	1 (1.7%)
Final recommendation, <i>n</i> (%) ^a			
Improving communication/awaiting course of illness	6 (5.3%)	7 (8.0%)	5 (8.5%)
Discharge/transfer	2 (1.8%)	0	8 (13.6%)
Treatment limitation	51 (45.1%)	33 (37.9%)	9 (15.3%)
Palliative therapy	32 (28.3%)	21 (24.1%)	3 (5.1%)
Treatment intensification	21 (18.6%)	14 (16.1%)	8 (13.6%)
Therapy reduction	1 (0.9%)	7 (8.0%)	0
Promoting patients' autonomy	0	1 (1.1%)	1 (1.7%)
Concerning pregnancy termination	0	4 (4.6%)	0
Concerning interventions against patient's declared intention	0	0	22 (37.3%)
Self-endangerment is inevitable	0	0	2 (3.4%)
Other	0	0	1 (1.7%)
Consensus	109 (96.5%)	79 (90.8%)	55 (93.2%)
Implementation rate ^b	41 (100.0%)	21 (95.5%)	35 (89.7%)

Note. ICU = Intensive Care Unit, LCU = Low Care Unit, PCU = Psychiatric Care Unit.

^aMore detailed information available on request.

^bData only for 102 CECs (January 2013 to June 2015).

($\chi^2 = 42.65$, $df = 2$, $p < .001$) during the consultation. The majority of the CECs in the PCU group addressed ethical challenges due to self-endangering behaviors including treatment rejection (50.8%), suicidal tendencies (16.9%), or both (13.6%). By contrast, self-endangerment as one contextual aspect was rarely discussed in the other settings (ICU: 5.3%; LCU: 5.7%). Likewise, ethical issues resulting from endangering behaviors of the patients towards others (e.g. the health care professionals) were specific to psychiatric patients (20.3%). In addition, CECs in medical and psychiatric settings differed in terms of addressing compulsory treatment issues ($\chi^2 = 117.59$, $df = 2$, $p < .001$). Notably, compulsory treatment was a common issue in CECs in PCU (61.0%) but not in ICU (0.9%) and LCU settings (4.6%). Professionals of different treatment settings significantly contrasted with respect to reported subjective stress ($\chi^2 = 64.91$, $df = 2$, $p < .001$) caused by moral dilemmas or uncertainty. In particular, psychiatric professionals reported specific

emotional, physical, or psychosocial consequences of moral stress (72.9%). In contrast, ICU and LCU professionals mentioned such challenges only in 16.8% and 19.5% of the consultations.

3.4. CEC outcomes

Most CECs completed with recommendations performed by a mutual consent of all participants (see Table 3). Of note, consensus in final recommendations was not associated with the patient groups ($\chi^2 = 2.76$, $df = 2$, $p = .252$). However, recommendations with respect to appropriate treatment differed between groups ($\chi^2 = 145.11$, $df = 20$, $p < .001$). In ICU and LCU, the most frequent recommendation was limitation of treatment, while the most often proposed CEC recommendation in PCU was related to interventions against the patients' declared intention (coercive interventions).

Although the implementation of the final CEC recommendation in the actual clinical procedure is optional [11], the rate of implemented recommendations was remarkably high. Of note, we did not observe any significant difference of implementation rates between the three patient groups ($\chi^2 = 4.52$, $df = 2$, $p = .104$, see Table 3).

4. Discussion

While ethical counselling and in parts clinical ethics consultations (CEC) have been established in many general hospitals during the last decades, little attention has been paid to the role of ethical support in psychiatric treatment settings. The aim of the present study was to evaluate characteristics and outcomes of CECs in psychiatric and medical hospital patients. According to our expectations, the main findings of our study support the assumption of specific differences between psychiatric and non-psychiatric CES, especially regarding patients' involvement in the consultation, central ethical issues, and structural and process CEC characteristics. On the other hand, in all three settings, the major ethical issues were treatment goals and procedures. Although substantial differences between groups and settings, this did not result in different rates of later implementations of the recommendations.

With respect to the active engagement of the patients, we found that the majority of CECs was performed without an active involvement of the patients. In addition, the majority of patients were not capable to consent to treatment. This was not surprising given that most patients discussed in CECs, especially in somatic-medical settings, were seriously or terminally ill. However, it is interesting to note that a substantial number of psychiatric patients actively participated in the consultation process. The clinical implications of this finding are not yet clear but the impact of the patients' involvement in the CEC process on consultation rates may be an important target for future research. Moreover, the participation of treating health care

professionals differed between psychiatric and non-psychiatric CECs with a higher number in the first ones.

Considering the central ethical issues that led to a CEC request, we found that the main ethical problem addressed the therapeutic goals and procedures, irrespective of the underlying disease or treatment setting. Wasson et al [5] retrospectively analyzed 156 CECs in somatic settings with 47.4% in ICUs. The most frequent broad ethical issues were decision-making (93.6%), goals of care/treatment (80.8%), and questions regarding end-of-life (73.1%). As PCU was no element of that study, a comparison with our results is only partially possible. Regarding CECs in ICU and LCU, the main categories like goals of care/treatment and patient wishes/autonomy are similar to our results.

In our study, we found obvious differences between CECs in psychiatric and non-psychiatric patients when analyzing additional ethical issues. As expected, particular ethical issues concerning patients in PCU were related to self-endangerment and endangerment of others, even if not being considered as initial ethical request. Another ethical issue was the patient-therapist-relationship, which was almost exclusively present in CECs for PCU patients. These differences may be explained in part by the central role of the therapeutic relationship in psychiatric and psychotherapeutic care [16]. One may speculate that CECs, especially in long-term settings, benefit from the implementation of this issue in the ethical discussion. Furthermore, stress related to ethical conflicts reported by the health care professionals was most prominent in psychiatric CECs. This observation may support the notion that most of the health care members have experienced stress and burdens because of moral dilemmas [17]. By contrast, in less than 20% of the CECs in medical settings, somatic health care professionals mentioned ethics-related stress. Possible explanations for these results may be that (i) professionals in the psychiatric setting are more often involved in measures against the will of patients and (ii) are more familiar and trained in reflecting personal conflicts and challenges. Noteworthy, in our study pressures caused by moral dilemmas and uncertainties were not associated with the lack of therapeutic options. To bring up these dilemmas and burdens by the staff members may improve the quality of the CEC as well as the mutual understanding of the parties and, in our experience at least improves the chance to find an agreement for a patient-specific recommendation.

Furthermore, we focused on the *structural and process quality* of the CECs in this study and found a number of important differences between CECs in the psychiatric and non-psychiatric settings in terms of numbers and compositions of the participants. Especially, as already mentioned, the involvement of the patient was more frequent than in other settings. In addition, CECs in PCU included a higher number of participants than in the other settings, which may be probably due to structural characteristics of the treatment context. However, some of the differences may be

due to higher time pressure by urgently needed decisions in ICU and in LCU compared to PCU. For example, all invited persons could not always realize a rapid appointment resulting in smaller numbers of participants. Of note, a higher or lower numbers of participants did not lead to discrepancies concerning a later implementation of the recommendation.

Finally, we identified considerable variation of CEC recommendations. According to the discussed ethical questions, the most common recommendations in ICU and LCU CECs were the limitation of treatment, followed by palliative alignment. In PCU, by contrast, the most frequently given recommendations were related to interventions against the patients' declared intention (coercive interventions). Hearing the conflicting viewpoints and analyzing the specific ethical aspects is important in coming to consensus [12]. Consent as a result is helpful for the implementation, but of course, it may not be the central or even the only argument for the justification of a recommendation. Even more striking was the finding that ethical consensus could be reached in the overwhelming majority of CECs. In nearly 90% of all three groups, staff members reported that the consented recommendations indeed were implemented, indicating CECs to be a substantial help in ethical dilemma situations in all clinical settings: Apparently, an agreement in ethical issues or conflicts is not more difficult to achieve in any clinical settings than in others.

There are several *limitations* of this study to mention. According to our retrospective design, we reported data of CECs based on post-hoc classification of consultation statements. The major limitation of our study is the lack of valid and reliable instruments to assess CEC characteristics and outcome. This study only considered aspects like the patient-therapist-relationship, if team members actively introduced it as an issue into the CEC. Future research on CECs would benefit from prospective study design. Furthermore, the prospective evaluation (rates of implementation of CEC recommendations) was reduced to only one part of CEC considered here.

In sum: Although CECs are growing in many general hospitals, adequate empirical data are still missing. This is one of the first reports of psychiatric and non-psychiatric CEC. Our findings suggest that there were similarities, but there were also some important differences between psychiatric and non-psychiatric ethical discussions probably as consequences of the underlying illness. As the participation of the patient strengthens the patient's perspective in the deliberation [18], this should be of central interest in CECs. Our study indicates that the patients' involvement is possible, especially in psychiatry.

The identification, awareness and consideration of differences between the three settings, especially regarding the psychiatric sector, is important for further research and the quality of CECs. This might stimulate the debate about clinical ethics support services.

Declarations

Author contribution statement

Tanja Löbbing: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Wrote the paper.

Silvia Carvalho Fernando, Martin Driessen: Conceived and designed the experiments; Analyzed and interpreted the data; Wrote the paper.

Michael Schulz, Johann Behrens: Conceived and designed the experiments; Analyzed and interpreted the data.

Klaus Kobert: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data.

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Competing interest statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

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