Is there a comorbid mental disorder? Documentation of mental health conditions in medical reports from somatic rehabilitation hospitals

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Abstract
Comorbidity of mental health problems is a differential diagnostic aspect in patients with somatic illness. Mental health problems are therefore discussed not only in psychotherapy settings, but also in about one fourth of patients in behavior-medicine and somatic rehabilitation hospitals. If observed, mental health issues need to be documented precisely and understandable in the medical report, parallel to the somatic findings. Mental health findings must then be considered in differential diagnostics, treatment coordination, and in the social medicine epicrisis, i.e. work ability description.
This qualitative study investigated 42 medical reports from somatic rehabilitation hospitals concerning the documentation of mental health conditions, i.e. psychopathological report and anamnesis of mental health problems, as well as social medicine epicrisis. The social medicine epicrisis includes the acute work ability and long-term work ability prognosis for the next six months.
The medical reports were read and rated by a state-licensed psychotherapist and social medicine specialist with more than ten years of experience, and a corater (psychologist) who underwent a thorough training in social medicine reporting for mental health problems.
Types of documentation problems which were observed in medical reports were
– uncommented inconsistencies in symptom-, anamnesis- or work ability description,
– certifying a mental disorder diagnosis (F-diagnosis) without sufficient justification (e.g. psychopathological report and anamnesis were missing),
– work ability decision without sufficient consideration of observation findings (e.g. only the patient´s self-report or results from psychometric tests and questionnaires were reported).
Social medicine training in basic and further education of health professions may be a means to improve documentation of mental health conditions in medical reports. Also, working conditions in rehabilitation hospitals must ensure enough time for treatment coordination, and time slots for writing the medical report.

Keywords
Quality assurance, mental disorders, behavior medical treatment, comorbidity, medical report

Psychische Komorbidität? – Dokumentation psychopathologischer Befunde, Anamnese, sowie Arbeits- und Leistungsfähigkeit in Entlassungsberichten aus der somatischen Rehabilitation

Kurzfassung
Psychische Komorbidität ist – bei vergleichsweise hohem Anteil jährlicher Neuberentungen aufgrund psychischer Erkrankungen – ein zunehmend bedeutsames Thema auch im Rahmen der somatischen Rehabilitation. Psychische Beschwerden und Beeinträchtigungen sollen in somatischer und verhaltensmedizinisch orientierter Rehabilitation (VOR) in der Befundung und für die Weichenstellung in der Behandlung mitberücksichtigt werden. Dies schließt auch ein, dass die psychischen Befunde im Reha-Entlassungsbericht nachvollziehbar und präzise dokumentiert werden. Im Rahmen dieser qualitativen Pilotstudie wurde die Qualität der Befund- und Sozialmedizin-Dokumentationen aus Reha-Entlassungsberichten untersucht. Dafür wurden 42 zufällig ausgewählte Entlassungsberichte aus zehn somatischen Rehabilitationskliniken durch eine Psychotherapeutin mit mehr als zehnjähriger Erfahrung im Bereich der sozialmedizinischen Befundung in der Rehabilitation, und eine trainierte Coraterin qualitativ untersucht. Im Rahmen der qualitativen Inhaltsanalyse nach Mayring konnten Kategorien in den Bereichen „psychopa-

thologischer Befund", „Anamnese" sowie „Arbeits- und Leistungsfähigkeit" entwickelt werden, die die verschiedenen Gründe bei Fällen von suboptimaler Berichtsqualität systematisieren.
Als qualitative Probleme wurden Unstimmigkeiten in Befunden, nicht ausreichende Begründungen für die Attestierung psychischer Erkrankungen, unkommentierte Übernahme von Vordiagnosen, und sozialmedizinische Einschätzungen ohne ausreichende Berücksichtigung von Beobachtungsbefunden identifiziert. In Bezug auf die sozialmedizinische Nutzbarkeit von Rehaentlassungsberichten erscheint für die Zukunft vor allem die weitere Optimierung nachvollziehbarer Verbindungen zwischen psychischem Befund, Fähigkeitsbeeinträchtigungen und beruflichen Anforderungen von Bedeutung. Diese Anforderung erfüllen zu können setzt entsprechende strukturelle Bedingungen voraus, d.h. neben Fachqualifikationen auch (dokumentierbare) Zeitkapazitäten zur Behandlungskoordination.
In Fortbildungen und Dokumentation therapeutischer Leistungen sollte die interdisziplinäre Kommunikation im Behandlerteam und Entlassungsberichtskoordination Berücksichtigung finden.

Schlüsselwörter
Qualitätssicherung, Befund, psychische Erkrankungen, verhaltensmedizinisch orientierte Rehabilitation, Komorbidität

1 Social medicine assessment in somatic rehabilitation hospitals

Social medicine describes the interactions between illness, health, individuum, society and organisational structures of the health care system (Muschalla & Linden, 2011). An important social medicine task in medical rehabilitation is the description of acute and prognostic work ability. Another task is treatment coordination with specific consideration of social and work integration of the patient. The aim is to establish an individually fitting level of daily life participation despite chronic illness symptomatology.
Basically, the differential diagnostic of mental and somatic health problems plays an important role in somatic rehabilitation settings. Differential diagnostic is the basis for conclusions on work ability which shall be documented in the rehabilitation medical report. A patient is unfit for work if, due to illness, s/he is no longer able to perform her/his present or any other applying job, or can only do so at the risk of a worsening of the illness (work disability guideline, GBA, 2014). The "acute work (dis)ability" focuses on the patient's current state. "Prognostic work ability" refers to the prognostically expected work ability of a person in his/her profession, or any other job which fits his/her qualification (DRV, 2013). Prognostic work ability is an estimation for work ability on the general labour market and takes into account the prognosis of the illness development in the next six months.
Social medicine diagnosis should also indicate possibilities for supporting and improving psychosocial development for the patient. In addition to work ability assessment, context-oriented treatment recommendations can be given. Treatment means are for example graded reintegration into full workload (§ 44 SGB IX; DRV, 2014), or aids at work, or in the case of general work disability, benefits for participation in other professional fields (§ 49 SGB IX).
The data required for work ability decisions are usually collected by social medicine examination, observations in the clinical routine by all health professionals involved in the treatment, and behavior observation in defined test situations. Behavior observations serve to gain concrete information on the patient´s activity level. They are also useful to check consistency: To what extent is the subjective information provided by the patient compatible to observable impairments (Bengel & Mittag, 2016).
For making a decision on work ability a thorough process and data collection is needed: First, a disease and treatment anamnesis must be explored. This serves to obtain information on the severity and chronification of the disease. In addition, resources and barriers in dealing with the disease will be identified, in the sense of the ICF (WHO, 2001). Subsequently, a social medicine anamnesis is recorded. Here restrictions of participation in different areas of life must be named. They must be explored concerning working life and private life. Finally, the patient´s subjective impairments of skills, activities and participation are explored. Examples of the nowadays most needed psychological capacity dimensions are group integration, endurance, flexibility and adjustment to regulations (Mini-ICF-APP capacity dimensions, Muschalla, 2016).
Also, the work demands of the patient´s job should be described as precisely as possible in the medical report. It must then be described which work demands the patient can-

not perform do due to illness, e.g. as a result of permanently reduced psychological capacities. The resources and capacities which still exist should also be described (DRV, 2012).
A physician or psychotherapist must therefore examine a psychopathological diagnosis and anamnesis, describe the illness-related capacity impairment, explore the work demands, and then compare illness-related capacity impairment with demands (Muschalla, 2016).
In sum, psychopathological findings and anamnesis, work demands and psychological capacity level are therefore closely related. They are the basis for work ability decision, and recommendations for interventions in the further course of treatment.

1.2 The medical report from inpatient rehabilitation

The medical report records the diagnostics, course of therapy, treatment results, and the social medicine decision and justification for work ability. In addition to the purpose of passing on information between treating physicians, pension insurance institutions and patients, the medical report is an expert opinion on the question of work ability. The report builds an important decision-making basis when it comes to the question of disability pension. The medical report is also a quality indicator for the rehabilitation hospital. It reflects the working method of the hospital and its rehabilitation concept.
The medical report includes complex medical information (DRV, 2015a): The first part contains the illness symptoms and anamnesis: It reports on the patient's acute symptoms and summarises the course of the disease, diagnostics and therapy. In case of comorbid mental health problems, the psychopathological symptoms and a specific anamnesis for mental health problems must be included. The second part deals with the diagnostic procedures during inpatient rehabilitation. This includes physical findings, internal and external apparatus examinations, as well as indication-specific findings. The third part describes rehabilitation goals, the course and results of rehabilitation. The fourth part is the „social medicine epicrisis" which contains the acute and prognostic work ability. In the end of the medical report, further diagnostics and aftercare recommendations are given (DRV, 2015b). The following quality characteristics make a good medical report:
1. Rehabilitation treatment process. The report must reflect the rehabilitation treatment process. Individual resources of the patient should be named, treatment means and aims, and the degree to which these aims have been achieved until now or are reachable in future.
2. Medical and social medicine correctness. The medical report shall report and comment all relevant clinical and social medicine data. Medical findings from the patient´s history before entrance into the rehabilitation hospital shall be evaluated and commented.
3. Structured and consistent report. The medical report should have a clear and concise structure. All information collected shall be combined into a concise but complete overall presentation.
4. Description of work demand profile. The work demand profile of the most recently performed work activity should be described with regards to (psychological) capacity demands.

1.3 Research question: Which documentation problems (if any) occur in medical reports?

Psychopathological findings and anamnesis (after differential diagnostic consideration of somatic findings) are the basis for the diagnosis of a mental disorder. The correctness and conclusiveness of the differential diagnostic findings is of great importance. Incorrect diagnoses can lead to maltreatment and labeling. Incorrect diagnosis thus have serious consequences for the patient, such as induction of additional problems, irritation, worsening of symptoms, or taking a false patient role (Muschalla & Linden, 2011a).
The social medicine epicrisis provides the justification for why a patient is assessed as being fit or unfit for work. This work ability decision is given after detailed observation within the inpatient rehabilitation setting. After inpatient rehabilitation, primary therapists and physicians usually receive the medical report. A concise but precise diagnosis and anamnesis provide the pre- and post-therapist with important information. An overall, conclusive finding is also important for the rehabilitation treatment payer, as decisions for further diagnostics and therapies are made on the basis of this finding (DRV, 2015a).
Since writing a concise medical report is an important but complicated issue, the question arises which types of documentation problems appear in daily practice of writing medical reports.

Research question: This qualitative investigation analyses medical reports from somatic inpatient rehabilitation concerning the social medicine correctness of

– psychopathological findings and specific anamnesis, and
– social medicine justifications for decisions on acute and prognostic work ability.

2 Method

Medical directors of various somatic rehabilitation hospitals were asked on behalf of the German Federal Pension Agency to submit 20 medical reports from their hospitals. These medical reports were recorded anonymously in a total pool of 100 cases. Subsequently, a random selection of medical reports was rated by two independent readers according to quality criteria described below. Fourty-two medical reports from ten different national rehabilitation hospitals were investigated.
The method of analysing medical reports chosen for this study is based on the peer review routine procedure within the rehabilitation quality assurance system (DRV, 2015b). In this peer review procedure, senior physicians working in the hospitals blindly evaluate medical reports from colleagues in other hospitals. The evaluation is done according to a structured rating system.

2.1 Qualifications of the raters

The raters in this present investigation were the author B.M., state-licensed behavior therapist and supervisor, a long-time social medicine trained and professionally experienced advisor, and the author R.H. as a trained psychological corater. B.M. has worked for seven years in a psychosomatic rehabilitation hospital as a behavior therapist where she underwent extensive social medicine training. She spent another three years in somatic rehabilitation in the departments of cardiology, orthopaedics and neurology, carrying out diagnostics and group treatments for patients with work ability problems. For many years she has been working as a lecturer for social medicine, mental work ability assessment and work-related mental disorders. She has worked and published extensively in the field of social medicine and rehabilitation research and is a member of the Mini-ICF-APP team, which has received national and international recognition for the description of psychological capacity disorders (Linden et al., 2015; DRV, 2012; SGPP/SGVP, 2012; Balestrieri et al., 2013; Molodynski et al., 2013). Corater R.H. completed a one-semester seminar on the diagnosis of mental disorders by B.M. This seminar focused on a practice-oriented introduction to psychopathological findings and an understanding of the two different forms of diagnosis: Research diagnostics (SKID, MINI, Sheehan et al., 1998, psychometric questionnaires) and clinical diagnostics (psychopathological findings, anamnesis, integration of additional findings and medical consultation, acute and chronic work ability). The corater advised ten medical reports under the supervision of B.M. during a training phase prior to this investigation.

2.2 Medical report checklist

In order to assess the psychopathological findings, anamnesis and social medicine epicrisis (acute work ability, prognostic work ability) in the present study, the documentation of 1) the psychopathological findings, 2) the anamnesis, 3) the reason for unfitness for work and 4) the description of performance was assessed with a checklist (Table 1). The assessment was based on defined criteria (Tables 2-5). If an aspect (e.g. psychopathological findings) was rated as „not at all“ or „rudimentary“ described, the reason had to be explained in free text by the rater.

"Psychopathological findings have been described in the medical report"

☐ missing ☐ rudimentary ☐ sufficient ☐ detailed

If missing or rudimentarily:
What is the reason? _____

☐ no mental disorder certified

Table 1

Scaling of the medical report checklist

Degree	Coding	Description	Example
Missing	0	There are no psychopathological findings.	
Rudimentary	1	Approaches of psychopathological finding are recognizable; however it is incomplete and/or incomprehensible, or describes the view of the patient only.	"Patient reports current depressed mood and difficulty concentrating."
Sufficient	2	The psychopathological findings are understandable and consistent. The most important information is noted, but concise.	"The patient is anxious about the interaction, but openly reports her problems. Observable depressed mood, subjectively reported concentration problems, credibly distanced from suicidal tendencies."
Detailed	3	The psychopathological report is complete, consistent and comprehensible. Selfreport and observer report are distinguished.	"The childlike looking patient is anxious in the interaction and begins to cry easily. She reports openly about her complaints. Contact can be established well. The patient is oriented in time, person, situation and space. Concentration, attention and mnestic are subjectively impaired. No psychotic experience. No formal or content-related thinking disorders, no compulsive symp-toms, no perceptual or ego disorders. Affectively worried, depressed, reduced ability to vibrate, drive reduced: getting up in the morning is very difficult; psychomotor skills inconspicuous, currently no suicidality."
None F-diagnosis	9	No mental disorder (F-diagnosis) was documented. If necessary, the usual brief findings in the orienting medical examination by the physician are sufficient (e.g. "psychopathologically inconspicuous").	Any behavioural peculiarities, or subsyndromal complaints, which, however, do not reveal any disease value as such, are described. "Healthy complaints" such as dissatisfaction with a problematic job situation are described in terms of behavior peculiarities.

Table 2

Evaluation of the psychopathological findings ("Psychopathological findings have been described in the medical report")

Table 3

Evaluation of the specific anamnesis („Specific anamnesis of psychopathology is described in the medical report.")

Degree	Coding	Description	Example
Missing	0	There is no specific anamnesis.	
Rudimentary	1	Aspects of specific anamnesis are recognizable, but incomplete and/or incomprehensible, or based only on the patient's spontaneous report.	"Patient completed psychosomatic rehabilitation in 2013 which was done be-cause of mood problems."
Sufficient	2	The specific anamnesis is understandable and coherent. The most important information is noted, but concise.	"Depressive episodes are detectable in 2011, 2013 and 2015. In 2015 inpatient stay of six weeks, afterwards drug treatment at the family doctor. No manic episodes known, no suicide attempts."
Detailed	3	All information necessary for the case is described detailed in the anamnesis.	"The patient reports about mood and drive problems since 2011, recurring every two years. In 2013, with a state of insensitivity and social withdrawal of colleagues and friends, she was for the first time unable to work for 4 weeks. Her family doctor and her husband had constantly encouraged her and prevent-ed her from quitting her job. In 2015, she was again in a depressive state. At the insistence of her family doctor, she underwent psychosomatic rehabilitation. She had learned to act independently of her mood and to pay attention to her day structure. She also consented to medical treatment. This is continued to this day and supervised by her family doctor. So far there have been no suicide attempts, no manic episodes."
None F-diagnosis	9	No mental disorder (F-diagnosis) was documen-ted. It is clearly stated that the mental health anamnesis is inconspicuous.	"No mental disorders are known in patient's medical history"

Degree	Coding	Description	Example
Missing	0	There is no justification for unfitness to work reported.	"The patient is discharged unfit for work."
Rudimentary	1	It is indicated why a patient is discharged unfit for work, but the explanation is not conclusive (e.g. there are only patient self-reports).	"The patient does not yet have the courage to return to work."
Sufficient	2	It can be understood why the patient is dismissed unfit for work, but precise information is still lacking in the medical report.	"Due to reduced psychomental endurance after surgery, the patient is not yet able to return to work."
Detailed	3	The incapacity for work is clearly described and all important information for understanding is given.	"Presently the patient is still reduced in her endurance and capacity for contacts with thirds. She can only serve in service and contacts with clients for about half a day. At her job she has to held service or consultations 6-8 hours a working day. She is dismissed unfit for work. We suggest a graded return to work starting with half a day service and half a day office."
Fit for work	9	The patient is discharged fit for work.	

Table 4

Evaluation of decision on acute work ability ("Acute unfitness for work is reported and justified by illness-related capacity impairments which are clearly described.")

Degree	Coding	Description	Example
Missing	0	There is no justification given for a certified work ability impairment.	"The patient will not be able to work even in the long term."
Rudimentary	1	It is indicated why a patient is dismissed as unable to perform in the long term, but the explanation is inconclusive.	"Due to psychological stress, the patient will not be able to work as an education professional for long periods of time."
Sufficient	2	It can be understood why the patient is impaired in his performance, but information is still missing.	"The patient is strongly suffering from social anxieties and can therefore no longer work in his profession as a salesman."
Detailed	3	The certified impairments in performance are clearly understandable.	"The patient has chronic social fears, two psychotherapy therapy treatments and a social competence training have failed. This makes it impossible for him to return to his workplace as a salesperson, since there are high demands on his interaction skills on a daily basis: interacting with people, making clients in brief contacts (contact ability), and handling excessively demanding customers (self-assertiveness). The patient cannot adhere to these interactional demands and would need help constantly."
Fit for work prognostically	9	The patient will presumably remain fit for work. A positive prognosis can be assumed.	"There are no permanent psychological capacity impairments."

Table 5

Evaluation of decision on prognostic work ability ("Impairment of prognostic work ability is justified by illness-related permanent capacity impairments which are clearly described.")

2.3 Qualitative content analysis of medical reports

The descriptions of psychopathology, anamnesis, acute and prognostic work ability in the investigated medical reports were evaluated by the two raters. Free text comments were written down in the checklist in case of "rudimentary" or "missing" reports. The comments from the checklists were then analysed by content analysis according to Mayring (2000). The aim was systematizing which (if any) social medicine correctness problems occur in medical reports. The analysis material used was the free text entries by the raters in the checklist. Each free text entry described a concrete problem of the reporting of psychopathology, or anamnesis, or acute and prognostic work ability. A similar qualitative research approach can be found in other qualitative studies (Flöge, 2014; Walter, 2013).

3 Results

3.1 Data material and inter-rater-reliability

A total of 42 medical reports from ten different hospitals were investigated, 26 of which came from spefialised behavior medicine rehabilitation hospitals, 16 from somatic rehabilitation hospitals. Ten reports each from somatic and behavioural rehabilitation were evaluated in parallel by both raters. In order to determine the agreement of the raters, the interrater reliability was determined with Cohens Kappa (Bortz & Schuster, 2010). The values varied between .69 (for the item work ability) and .93 (psychopathological findings). According to Bortz and Döring (2006), values between .60 and .75 are in the range of good agreement. Since this applies to all investigated characteristics, this means a good interrater reliability.

Table 6

Interrater reliability by Cohens Kappa

Item	Cohens Kappa
Assessment of the acute work ability	.69
Assessment of prognostic work ability	.86
Assessment of the psychopathological findings	.93
Assessment of the mental health anamnesis	.78

3.2 Reasons for suboptimal medical reports

In the following, the reasons for suboptimal medical reports ("missing" or "rudimentary" reports) which have been identified in qualitative analysis are systematized (Tables 7-9). With regard to the psychopathological findings, seven categories were identified on the basis of comments on a total of 21 out of 27 medical reports which certified mental disorders (F-diagnoses). 23 comments from the two raters were evaluated[1].

The number of comments cannot be interpreted quantitatively in itself, but merely as an indicator of the relative distribution of problem types.

[1] The fact that the number of rater´s comments is larger than the number of the medical reports is due to the fact that in the double-rated reports the comments of both raters were used. The two raters partly highlighted different aspects and thus the different comments complemented the overall picture.

Table 7

Categories for suboptimal (rudimentary) documentation of psychopathological findings

Category	Definition	Examples (raters' comments)
Only self-report from the patient	The findings refer only to the self-assessment of the patient. There is no assessment and observation by a physician or psychotherapist, or this is inconspicuous.	"Self report of patient is reproduced."
Findings refer only to questionnaire and test results	The findings only report results from self-rating questionnaires and tests. There is no assessment and observation by physician or psychotherapist described.	"Findings refer to a self-rating questionnaire on work coping (AVEM)."
Findings refer only to questionnaire and test results and self-report of the patient	The findings only report results from self-rating questionnaires and tests as well as the patient's self-assessment. There is no assessment and observation by physician or psychotherapist described.	"Findings refer primarily to a self-rating questionnaire on work coping (AVEM), and patient reports to be dissatisfied at work."
Diagnosis is transferred uncommented from previous medial reports	Diagnosis of mental disorder is maintained uncommented from previous medical reports. There is no assessment and observation by physician or psychotherapist described.	"F-diagnosis was taken over without comment from previous findings."
Uncommented findings	Various information is available uncommented at various places in the medical report. There is no differential diagnostic discussion reported (e.g. whether a phenomenon is an illness or healthy suffering).	"It is written that the patient has presently bad mood, lost her partner last year, had a longer phase of grief, is presently satisfied with her job."
Inconsistent findings	The psychopathological findings do not justify certification of a mental disorder (F-diagnosis), either because the observations described are inconsistent, or because the report is too brief and scarce to reach a conclusion.	"It is written that the patient experienced nightmares regarding fire in an old people's home, but has no anxiety, currently normal mood, and feels grief regarding suicide of son." "In first part of the report two R-diagnoses are reported, in another part F- and Z-diagnosis. There is no information on observation and exploration" "It is written that the patient´s behaviour was appropriate to the situation, and that the patient seems stressed and exhausted."
No in-depth diagnostics is reported despite certification of mental disorder	Despite certified mental disorder (F-diagnosis) no thorough psychiatric examination is reported, F-diagnosis appears only derived from general medical admission interview.	"There is only a note from medical admission: Patient appears in depressive mood."

Two categories covered more than half of all rudimentary reports (7 out of 23 raters' comments): The category "inconsistent findings" included reports in which there were uncommented contradictions between medical and psychological findings, inconsistencies between patient report and diagnosis, discrepancies between diagnosis and report, or also uncommented discrepancies between findings from questionnaires on the one hand and examination and observation on the other hand, or in the diagnosis allocation (R-, Z-, and F-diagnosis mixed). The second frequently assigned category were reports in which the finding did not seem to justify a diagnosis of a mental disorder, since it was either inconsistent or too scarce, but in the medical report nevertheless an F-diagnosis was certified. There were three findings that only referred to the patient's self-report. Further categories included the medical reports, which took over preliminary diagnoses uncommented from previous findings (2 out of 23) or only manifested a mental disorder by means of an F-diagnosis due to the general medical admission interview without deeper diagnostics (2

out of 23). Occasionally, there were psycho-pathological reports that only referred to self-rating questionnaire and test results, or that referred to questionnaire and test results as well as the patient's self-report (1 out of 23).

Table 8

Categories for suboptimal (rudimentary) documentation of specific anamnesis

Category	Definition	Examples (raters' comments)
Specific anamnesis missing	There is no mental health anamnesis.	"There is only somatic anamnesis, no specific anamnesis of mental disorder."
Missing symptom description on the timeline	Only symptoms are reported, but there is no information about when mental health symptoms (related to F-diagnosis) started and how they developed over time.	"Specific anamnesis only reports 2006 as the "first time of physical problems", 2010 there was an extension of permanent pain problems".
Unexplained or implicit attribution of life events to mental health symptoms	There is a biographical anamnesis in terms of life events, but there is no description of the psychopathology over the course of time.	"unclear beginning and course of symptoms over the time, unclear course of work ability. Only "recurrent episodes of absence at work" are reported"
Incomplete or insufficient anamnesis	Anamnesis is not detailed enough or necessary information is missing.	"Only keywords are given: "lack of self-confidence, fears of loss, excessive demands, depression, fears""

Four categories were derived from the comments on specific mental health anamnesis in 16 medical reports. N=17 comments by the raters were evaluated. The category "Specific anamnesis missing" (5 out of 17 raters´ comments) covers cases in which the mental health history was not explored but only a somatic anamnesis was reported. If there were approaches to a specific anamnesis in which, however, necessary information was missing, the reports fell into the category "incomplete/insufficient anamnesis" (6 out of 17). Examples are reports in which only previous findings but not the acute state was reported, or a description of the depressive history was missing, although a recurrent depressive disorder was diagnosed. Also relatively frequent were anamnesis which did not include a description of symptoms on the time line, i.e. there was no psychopathology description over the course of time (5 out of 17). Although mental health symptoms were reported, there was a lack of information on their beginning and course over time.

Table 9

Categories for suboptimal (rudimentary) documentation of social medicine evaluations (acute or prognostic work ability)

Category	Definition	Examples (raters' comments)
Reason for work disability not job/ occupation specific	It is not explained why the impairment makes it impossible to carry out the work or profession; or only symptoms are described without reference to the work context.	"There is no explanation as to which aspect the patient cannot work any longer." "There is only written that the patient cannot work "due to psychomental limitations"." "There is only written that the patient cannot work due to the pronounced exhaustion symptoms and the low resilience."
Only self-report of the patient	The judgement on work ability refers only to the patient's assessment. There is no observation or exploration by the physician/psychotherapist reported.	"There is only written that the patient didn't yet see himself able to return to work." "There is only written that, from an orthopedic point of view, the patient is unsure whether he "dares" to work"
Formal errors	The justification for work ability is not given in the right place within the reports structure. This may lead to confusion.	"Unfitness for work is not justified on social medicine decision formular"
Inconsistent report	Different information are presented under different headings in the medical report (e.g. decision for unfit for work, but without clear justification).	"It is not clearly described why the patient is dismissed unfit for work. In one paragraph of the report it is said that the patient is impaired due to somatics, in another paragrapgh it is said that the patient is impaired due to psychological impairment" "There is not justification reported for the decision to certify a quantitative impairment (3-6h instead of fulltime). Later in the report it can be read: "special reintegration measures are not necessary". This is a contradiction". "Is is reported that the patient has been fired at work because of his disability, but it is not explained why the patient should be unfit for work. The patient wants to continue and search any new work."
Inadequate prognostic work ability	Acute (ina)ability to work is sufficiently explained. But, but the time perspective is missing and therefore the prognostic work ability is not sufficiently explained.	"There is no explanation as to why the patient will not be able to work full time again in the future."

A total of five categories were derived from 13 medical reports with comments, with the last category being a specific one for prognostic work ability. N=14 comments were evaluated. Most frequently, social medicine reports were classified as rudimentary because they were not work-related (6 out of 14 raters´ comments). Although it was explained which psychomental impairments the patient had, it was not specified which aspect of the work (e.g. customer contact, since the patient is affectively incontinent and starts crying) he can therefore no longer cope with. The second most common category of suboptimal reports was "inconsistent report" (4 out of 14). Here, inconsistencies were noticed in the reasoning for the incapacity to work, or uncommented contradictions in the assessment between physician and patient. Occasionally, the social medicine report referred only to the self-assessment of the patient (2 out of 14) or there were formal errors (1 out of 14). The fifth category refers to the assessment of prognostic work ability (1 out of 14). The time perspective for prognostic work ability was only insufficiently described: The patient cannot return to work in the short term, which is conclusively explained, but it is not clear why the patient should not be able to work full time prognostically, i.e. six months later.

4 Discussion

By means of the qualitative analysis according to Mayring (2002) different categories of documentation problems could be identified concerning "psychopathological findings", "anamnesis", and "acute and prognostic work ability". Particularly the certification of mental disorder without observation and withour specific clinical differential diagnosis is a problem. An ad hoc and uncommented certification of mental disorder (F-diagnosis) can have considerable bad consequences for the patient (Link et al., 1997; Angermeyer & Matschinger, 2003; Zimmerman et al., 2008; Dowrick & Frances, 2013).
Psychopathological findings that are based only on the patient's self-report, or appear inconsistent in the overall report, are problematic. An uncommented indecisive or contradictory finding in the medical report may have a variety of negative effects. Justified claims, e.g. social welfare application, could be rejected by the insurance company in case there is a real (but not well described) work disability, or an appropriate follow-up treatment, e.g. vocational reintegration treatment, might not be granted.
With regard to the description of acute and prognostic work ability, the phenomenon of inconsistency was relatively frequent. The interdisciplinary diagnostic in the team should ensure that a social medicine finding is explained and reflected in relation with the rest of the medical report. This requires appropriate structure and process quality in the clinical routine.
Concerning the ***structural requirements*** for behaviour medicine rehabilitation hospital, for example, there are nowadays more and more calls for state-licensed psychotherapists (instead of diploma psychologists without psychotherapy qualification). Additionally, training courses in social medicine, medical report writing and communication within the treatment team are regularly offered (Worringen et al., 2016, 2018). Peer review is used continuously to improve medical reports (Glattacker & Jäckel, 2007; Klosterhuis, 2008). The peer review method itself is continuously improved (Strahl et al., 2016).
Concerning ***process quality***, it must be recognized that the preparation of a coherent and conclusive medical report needs time and coordination resources. Further research might review how the production processes are different in case of coherent and conclusive medical reports as compared to "suboptimal" reports. Is it due to lack of time (the medical report must be "sent out" on day X), diffusion of responsibility in the treatment team (who feels responsible for final editing of the medical report?), participation or non-participation of certain health care professionals (psychotherapists, physicians, co-therapists), scarce personnel and time resources (the coordinating therapist is already involved in other current tasks)? Currently, neither team meetings nor time slots for documentation and writing the medical reports are recognized as therapeutic services. Visitations and further qualitative analysis can be used to find out how coordination tasks are conducted in rehabilitation treatment teams.

4.1 Limitations

This study is a qualitative investigation. The data do not provide any information on the frequencies of documentation problems in medical reports.
In the present study, the qualitative analysis of psychopathology, anamnesis and social medicine were carried out for those reports in which a mental disorder was certified by means of an F-diagnosis. However, this does not permit the reverse conclusion that in medical reports without certified mental disorder psychopathological findings and anamnesis of mental health signy are irrelevant. Thus, for example, psychopathological abnormalities that occur in the context of somatic illnesses, but are not mental disorders in the narrower sense, can and must also be described psychopathologically and anamnestically. Examples are affect modulation disorders or memory disorders in the context of cerebro-organic psychosyndromes after stroke or heart attack, or a dysphoric mood in a migraine disease (Linden & Muschalla, 2012).

4.2 Conclusion

Relevant diagnostic information must be included in the medical report. The medical report in rehabilitation has the function of a social medicine report and must be precise in order to ensure "medical and socico-medical correctness". In this present study, different types of qualitative problems were identified: insufficiently explained diagnostic or social medicine decisions, uncommented certification of mental disorders (F-diagnosis), or contradictions in findings.
With regard to social medicine correctness and usability, the further improvement of comprehensible connections between psychopathology, anamnesis, work demands

and acute and prognostic work ability in medical reports might be an aim.

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