Examining the organization and quality of the Psychiatric Consultative Service in Norway.

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Abstract

Aim Patients admitted to somatic departments may face psychiatric challenges, such as suicidal behavior, substance abuse, crisis reactions, or somatoform disorders. Mental disorders can complicate the diagnosis and treatment of a somatic disorder. The Consultation–Liaison Psychiatry Service (CLP) can provide advice and guidance to attending staff in somatic departments. CLP in Norwegian hospitals was last reviewed in 1997. There is insufficient awareness of the service as it currently stands. This specialist field is expanding, and there is a need to examine how the service is organized at present and how it works.

Materials and methods A study of the scope, quality, availability, content, and organization of the psychiatric consultative service was conducted in February–March 2016. The study also examined whether service users and providers were satisfied with the service, the content of the service, and whether they considered the service to be adequate.

Results and conclusions Although CLP has expanded over the last three years, somatic and psychiatric departments wish for its further expansion. The service provision is at an acceptable level during the daytime, but not during weekends and holidays. We found that 20% of all referrals are rejected, and that 80–90% of all physicians wanted outpatient services for short-term follow-up and for help with undiagnosed, unclear, unexplained, (indeterminate) conditions.

The service works satisfactorily during ordinary working hours. There is a need to establish outpatient services and to strengthen the services outside these hours. Collaborative research should be further developed.

Keywords: consultation; liaison; psychiatry; services

Introduction

The Consultation–Liaison Psychiatry service (CLP) was first developed in university institutes, where its activities continue to be the most comprehensive. CLP competence is characterized by knowledge of both somatic and psychiatric conditions, especially when these occur simultaneously [1]. CLP is provided by psychiatric personnel, and is made up of two elements.

The consultation service is provided to patients in somatic hospitals who have psychiatric comorbidities, psychological reactions to serious and/or chronic somatic illnesses or complex conditions where the etiology is unclear. Patients with a primary psychiatric disorder may also benefit from the CLP. Patients with self-destructive behavior (attempted suicide, self-harm, and/or substance abuse) need support in crisis situations and a psychiatric follow-up after discharge.

The liaison activity consists of guidance to staff and instruction in psychiatric issues.

Of all patients admitted to somatic hospitals, 20–40% also have a mental disorder [2] that is rarely identified and treated [3]. Although physical comorbidity is well recognized, the somatic healthcare needs of psychiatric patients often go unrecognized and untreated [4].

Depression and anxiety reduce the quality of life of hospitalized patients [5] and are associated with increased costs [6]. CLP in somatic hospitals is important in terms of quality of health care and resource use by the patients and the health service.

Internationally, CLP has evolved greatly over the last 30–40 years, and differs in form and organization in different places [7,8]. In 2017, the Psychiatric Liaison Accreditation Network (PLAN) updated literature-based quality standards for a liaison service [9].¹ The PLAN core standards include ease of referral; relationship with the whole hospital and with external agencies; staffing, training, and support within the liaison team; in addition to provision of urgent and emergency mental health care, provision of routine mental health care to adults, provision of psychological therapy, and provision of training to hospital colleagues.

In the USA, CLP is a subspecialty of psychiatry. The United Kingdom has a well-established and graded CLP which is differentiated according to the size and needs of the hospital [8]. In Sweden,

1 After our survey was completed.

there has been a relatively small but growing interest in CLP [10]. The CLP in Norway was reviewed in 1997 [11], but no data have subsequently been published, so there is a need to outline the organization and availability of the CLP, establish the scope of associated research, and identify any need for change.

Materials and methods

This study was a collaboration between the Division of Mental Health and Addiction at Oslo University Hospital, the Committee for Consultative Liaison Psychiatry at the Norwegian Psychiatric Association (NPA), and the Committee for Consultation–Liaison Child Psychiatry and Psychosomatic Medicine at the Norwegian Society for Child and Adolescent Psychiatry (NSCAP).

Questionnaires were prepared for four groups:

- Group 1: Adult psychiatric wards providing a consultative service
- Group 2: Pediatric/adolescent psychiatric wards providing a consultative service
- Group 3: Adult somatic wards² that are users of a consultative service
- Group 4: Pediatric/adolescent somatic wards that are users of a consultative service.

University hospitals and at least one hospital in each county were invited to take part in this study. The CLP committees at NPA and NSCAP provided the names and addresses of contact persons at psychiatric and pediatric/adolescent psychiatric wards. For the somatic departments, we tried to use respondents who knew the service well. Many respondents were therefore recruited via those who provide the CLP service. Where we did not identify a contact person, the head of department put us in touch with an experienced somatic consultant, who was then asked to answer the questionnaire.

In somatic hospitals, we invited not only those departments we knew undertook extensive consultative work (e.g., critical care, emergency surgery, and neurology) but also departments where this was less certain (e.g., dermatology, ear, nose, and throat). Only one person in each department was sent an invitation to participate: 31 in Group 1, 20 in Group 2, 172 in Group 3, and 68 in Group 4. Therefore, a total of 291 people received an online questionnaire (Questback) and

2 Somatic wards include both medical and surgical departments for both adult and pediatric/adolescent wards.

two reminders.

Questionnaire

The questionnaire consisted of 21 questions, some with sub-questions. Of the 21 questions, seven were the same for all groups; eight were very similar for all groups. Six differed between groups because they were adapted to the type of service provider and their respective referring parties/service users. The psychiatric departments were asked about their affiliation to somatic ward. The wording was similar for pediatric/adolescent and adult wards.

The first questions were related to the respondent and the respondent's working conditions, such as their title, location, and other formalities. Then the different aspects of the service were assessed as follows.

The scope of the service was measured by the number of evaluations in 2015. The response options were: *fewer than 50, 50–99, 100–199, 200–499, 500–999, and 1000 or more*. We subsequently used the subdivisions: *fewer than 100, 100–499, and 500 or more*.

The performance of the service was measured both by specifying the percentage distribution between the specialist groups who carried out the evaluations and by the question '*Estimate how many evaluations you do on average per week for the following departments:*

medical department, medical intensive care unit, surgical department, surgical intensive care unit, neurological department, oncological department or other department.'

Service content was measured by four items: *Is it provided for outpatients? Is it provided outside office hours? Does it offer debriefing and guidance of somatic personnel? and Does it offer support to next of kin?* The response alternatives were 1: *Yes, on request*, 2: *Yes, regularly* or 3: *No*.

Reasons for consultation was assessed by the item "*Estimate how many evaluations you do on average per week for patients with the following issues: suicidal behavior, anxiety and depression, crisis following injury or acute illness, substance abuse, psychosis, coping with an illness, psychosocial stress in the family, indeterminate conditions or other*" and by the item: "*State the proportion of referrals that were well founded and the percentage that were rejected.*"

Time after referral until evaluation was measured using the response alternatives < 1 h, 1–3 h, 4–8 h, 9–24 h, 1–2 days, and > two days. We subsequently divided these into 0–3 h, 4–24 h, and > 24 h. There were separate rankings for different times of the day: daytime, evening and night, and for weekends and holidays.

Assessment of the scope of the service was assessed using the following response alternatives to the following three question items:

- *The scope of the service is: far too limited, slightly limited, appropriate, or too extensive.*
- *It has increased, it has remained unchanged, or it has declined.*
- *Is there a need to increase the services offered, yes or no.*

Satisfaction with the service's content, quality, and availability was assessed by 13 items that were ranked on a scale of 1–5, where 1 = very poor, 2 = quite poor, 3 = average, 4 = quite good, and 5 = very good. Some of these were ranked separately for different times of the day: *daytime, evening and night*, and *weekends and holidays*.

Evaluation of the need for outpatient services for patients with identified issues (trauma, recently diagnosed cancer, suicidal behavior, indeterminate conditions, and/or other) was based on responses to the following question items:

- *Is there a need to establish a CLP outpatient clinic for follow-up of discharged patients: no, doubtful, possibly, or yes.*
- *Siting of an outpatient unit: state whether it should consist of psychiatric and/or somatic personnel, and whether it should be located in a somatic or psychiatric department.*

Research was evaluated by the response to the following question: *Number of research projects within a psychiatric/somatic department: 0, 1–2, 3–5, 6–9, or ≥ 10.*

Copies of the questionnaires can be supplied on request.

Ethics and data protection

The study was approved by the Data Protection Officer at Oslo University Hospital.

Statistics

Student's *t*-test was used to compare continuous variables, and chi-squared to compare proportions. SPSS PC, Version 21 was used. The significance threshold was set at $p < 0.05$.

Results

Total response rate: 41% (119/291).

Group response rates:

Group 1 (Adult psychiatric wards): 65% (20/31), nine of which were from day wards, one affiliated to a somatic ward (employed), and 10 were from a district psychiatric center.

Group 2 (Pediatric/adolescent psychiatric wards): 70% (14/20), two from day wards, five affiliated to somatic wards (employed), six were from outpatient services. One respondent did not answer this question.

Group 3 (Adult somatic wards): 30% (51/172).

Group 4 (Pediatric/adolescent somatic wards): 50% (34/68).

All four health regions were represented in all groups.

Physicians' response rate: 71% (85/119), of which 44/119 (37%) were physicians/heads of department and 41/119 (34%) were consultants.

The response rate among heads of department with other occupational backgrounds: 14% (17/119), and among respondents with other occupational backgrounds: 10% (12/119).

Percentage of respondents from university institutes: 57% (68/119).

The scope of the service

Of the CLPs that were active in 2015, 28% (9/32) completed more than 500 consultations and 34% (11/32) fewer than 100 consultations.

The performance of the service

Specialists in psychiatry undertook about half of the evaluations, the rest were performed by specialist residents, consultant clinical psychologists, psychiatric nurses, and others. Of all units that provided evaluations for children/adolescents or adults, 28% (9/32) reported more than 500 evaluations, and 34% (11/32) reported fewer than 100. The medical department, the medical

intensive care unit, and the oncology department had the highest frequency of evaluations of adults, and the medical and oncology departments had the highest frequency of evaluations of adolescents and children.

Service content

All respondents from the CLP treating children/adolescents reported that they provided services to somatic outpatients. The vast majority offered debriefing and guidance to somatic ward personnel, and about half provided services outside office hours.

Of the respondents from the CLP for adults, 40% (8/20) reported that they provided services to somatic outpatients, 50% offered debriefing, and most offered staff guidance. Services were provided outside office hours by 65% (13/20) of the respondents.

Reasons for consultation and time from referral to consultation

Among respondents from the CLP units, 45% (13/34) reported that almost all referrals were well founded, but up to 20% of the referrals were rejected. Suicidal behavior was the most common reason for referral (Table 1). *Anxiety, depressive disorders, and crisis reactions in connection with injury or acute illness* were next, followed by *substance abuse* and *psychosis*. The most common reason for referral of children/adolescents was *difficulty in coping with chronic or severe illness*, followed by *medically indeterminate conditions, severe psychosocial stress, and anxiety or depressive disorders* (Table 1).

For the adult somatic wards, 14% (7/49) reported that evaluations normally took place within three hours after a referral request had been sent, 49% (24/49) after > 24 h when the patients were referred during the daytime. When the referral was sent in the evening or at night, the rate was 9% (3/35) within 3 h and 42% (15/35) after > 24 h. During weekends and holidays, the rate was 3% (1/38) within 3 h and 73% (28/38) after > 24 h (Table 2). The pediatric/adolescent somatic wards reported similar figures for evening/night and weekends/holidays, but during the day a larger proportion of evaluations took place within 3 h, and fewer had to wait 24 h or more (Table 2). The psychiatric wards that carried out the evaluation estimated that for both adults and

children/adolescents they provided the service faster than indicated by the somatic wards.

[Table 1 about here]

[Table 2 about here]

Assessment of the scope of the service

Satisfaction with the service was considered somewhat above average by all four groups. Of all respondents, 65% (77/118) reported that the scope of the service was either *far too limited* or *slightly limited*, more than half responded that the scope had increased over the past three years, and 69% (82/118) thought the scope of the service should be increased (Table 3).

Satisfaction with the service's content, quality, and availability

Satisfaction with the service's content, quality, and availability was ranked on a scale of 1–5 (with the best score being 5 = very good). A comparison of responses from referring departments/service users and service providers showed statistically significant differences .

Satisfaction with service content

For the service for adults, the following were identified. Four of the thirteen items were considered to be significantly better by those who provided the service than by referring parties/service users. These items were: *daytime availability*, *assistance with acute admission of patients to psychiatric wards*, *assistance with referral for follow-up of psychiatric treatment*, and *assistance with medicating*. The four items were all regarded as average by referring parties/service users and good by service providers.

For services for children/adolescents, the following differences were identified. Two of thirteen items were considered to be significantly better by those who provided the service than by the referring departments/service users. These items were *assistance with acute admission of patients to pediatric/adolescent psychiatric wards* and *assistance with referral for follow-up of pediatric/adolescent psychiatric treatment*, which were regarded as average by the referring parties/service users and good by the service providers.

Satisfaction with service quality

Service quality was considered to be relatively good within office hours and below average for both *evening and night* and *weekends and holidays*. The adult psychiatric and somatic wards considered that the quality of the *provision for patients' next of kin who needed support* was quite poor, but pediatric/adolescent psychiatric and somatic wards considered it to be slightly above average. The quality of the *provision for staff debriefing* was considered to be average by all four groups.

Satisfaction with service availability

All four groups considered the **availability** of the service to be relatively poor for both *evening and night* and *weekends and holidays*.

[Table 3 about here]

Outpatient services

We found that 80–90% of somatic doctors wanted an outpatient CLP clinic to follow up patients with trauma, recently diagnosed cancer, suicidal behavior, indeterminate conditions, or other (Table 4). In the pediatric/adolescent wards, those who answered *yes* to an outpatient clinic constituted by far the largest group. The responses from the adult wards were distributed fairly evenly between *possibly* and *yes*, except for the issue of suicidal behavior, where 69% (29/42) answered *yes*. A majority believed that an outpatient clinic should be staffed with both somatic and psychiatric personnel.

[Table 4 about here]

Research

Of all respondents, 23% (27/117) had 1–2 research projects in collaboration with a psychiatric and somatic ward, while one pediatric/adolescent psychiatric ward had > 10. There were (77% (64/83) from the somatic wards and 58% (20/34) from the psychiatric wards) who reported no research collaborations.

Discussion

All four groups consider both the quality and availability of the service to be relatively good during

daytime, but not outside normal working hours. The need for a comprehensive CLP is not completely met and the scope of service should be increased. The adult and pediatric/adolescent somatic wards were significantly less satisfied than their psychiatric collaboration partners regarding *assistance with acute admissions* and *assistance with referral for follow-up of psychiatric treatment*. This also applied to *assistance with medicating* and *daytime availability* of adult services.

CLP rejects up to 20% of the referrals. Our study does not reveal the reasons for this.

For conditions that most often trigger use of the CLP, a long wait can be a huge strain. Shortening the time from referral to consultation is therefore important. We think it is reasonable that the need for acute consultations in somatic departments be met by the CLP. The long wait outside ordinary working hours is a particular concern, because most often the conditions leading to referrals and consultations are acute.

The length of hospitalization for most somatic disorders is decreasing, and there is less time available to deal with mental health problems during a hospital stay. The CLP should therefore have the capacity to treat patients who need short-term follow-up after discharge. An outpatient CLP clinic would provide short-term follow-up of patients who, in our clinical experience, will not be treated by the district psychiatric centers and pediatric/adolescent outpatient psychiatric clinics. This may include patients with severe crisis reactions or severe somatic disorders, patients who are traumatized following an accident, have a psychiatric disorder that can impact on the course of their somatic disorder, or have psychosomatic problems. An outpatient CLP clinic would also enable the provision of a CLP to patients who receive outpatient treatment in a somatic ward. Collaboration between somatic and CLP personnel would ensure a more integrated diagnostic procedure and follow-up, and an outpatient CLP can be of vital importance in whether psychiatric problems are treated. Most somatic doctors recognized a need for an outpatient CLP clinic.

Although there has been much recent international research in this area, international standards for measuring the impact of a CLP have not been established [12]. However, early admission is used to

measure one aspect of CLP quality [6], and early involvement of CLP in the process is associated with cost-effectiveness and reduced length of stay [13]. Continuity in psychiatric follow-up before and after discharge can increase compliance with medical advice [14].

After the previous survey of Norway's CLP [10], the conclusion was that the service was underdeveloped, that there was a need for further education of both physicians and psychiatrists, and that an extension of the service could provide both health and economic benefits. It was also believed that the CLP should be linked to a psychiatric hospital, and not to an outpatient clinic that would necessitate travel.

This survey also found that the service is limited and currently not extensive enough. We did not ask about the need for further education; we did ask whether the CLP assisted the different departments with psychiatric issues, and in some cases, it did. This new survey focused on outpatient services and staffing and research.

There was, with few exceptions, little research collaboration between somatic and psychiatric wards. Joint research projects could provide a better understanding of the importance of psychological factors in somatic disorders, greater knowledge of the needs that the CLP should address, and broader agreement about how it should be implemented. Collaborative research between psychiatric and somatic wards should therefore form part of the further development of the CLP.

Strengths and weaknesses of the study

If we exclude adult somatic wards, the response rate can be considered satisfactory. Many adult somatic wards that probably did not have much need for the CLP were invited to participate, which may be an indication that respondents consisted of those with the greatest need and those with the most experience with the service.

In the somatic departments, we tried to use respondents who knew the service well. Many respondents were therefore recruited via those who provide the CLP. It is possible that those who provide the service recruited representatives who they know might share their views, in which case

the validity of the results may be impaired. We do not know if those who were recruited knew the service well. The cover letter indicated that the survey could be forwarded to a colleague who was better able to answer. This may have reduced the differences and strengthened the results. It is a strength of the study that it covers all of Norway, and that responses were received from all counties. Our data do not cover all hospitals; only larger hospitals were invited to take part. Local conditions in smaller hospitals may mean that acute psychiatric problems are solved in ways that could not be identified in our study.

Although there are uncertainties associated with this study, we believe that the main findings are representative, as summarized in the strength and weaknesses of the study. The CLP service is at an acceptable level during the daytime. The service needs to be expanded beyond normal working hours, while its outpatient activities and research need to be strengthened.

Disclosure of interest

The authors report no conflicts of interest.

References

[1] Leentjens AF, Rundell JR, Diefenbacher A, et al. Psychosomatic medicine and consultation-liaison psychiatry: scope of practice, processes, and competencies for psychiatrists working in the field of CL psychiatry or psychosomatics. [corrected] A consensus statement of the European Association of Consultation-Liaison Psychiatry and Psychosomatics (EACLPP) and [corrected] the Academy of Psychosomatic Medicine (APM). [corrected] *Psychosomatics*. 2011 Jan–Feb;52(1):19–25. Erratum in: *Psychosomatics*. 2011 May–Jun;52(3):301.

[2] Hansen MS, Fink P, Frydenberg M, et al. Mental disorders among internal medical inpatients:

prevalence, detection, and treatment status. *J Psychosom Res.* 2001;50(4):199–204.

[3] Cepoiu M, McCusker J, Cole MG, et al. Recognition of depression by non-psychiatric physicians—a systematic literature review and meta-analysis. *J Gen Intern Med.* 2008;23(1):25–36.

[4] Eskelinen S, Sailas E, Joutsenniemi K, et al. Multiple physical healthcare needs among outpatients with schizophrenia: findings from a health examination study. *Nordic J Psychiatry.* 2017;71(6):448–454.

[5] Creed F, Morgan R, Fiddler M, et al. Depression and anxiety impair health-related quality of life and are associated with increased costs in general medical inpatients. *Psychosomatics.* 2002;43(4):302–309.

[6] Tadros G, Salama RA., Kingston P, et al. Impact of an integrated rapid response psychiatric liaison team on quality improvement and cost savings: the Birmingham RAID model. *Psychiatrist.* 2013;37(1):4–10.

[7]. Leentjens AF, Lobo A. On the history of the European Association of Consultation-Liaison Psychiatry and Psychosomatics. *J Psychosom Res.* 2011;70(6):575–577.

[8] Grassi L, Mitchell AJ, Otani M, et al. Consultation–liaison psychiatry in the general hospital: the experience of UK, Italy, and Japan. *Curr Psychiatry Rep.* 2015;17(6):44.

[9] Royal College of Psychiatrists: Psychiatric Liaison Accreditation Network (PLAN) [Internet].

London, UK: Royal College of Psychiatrists; c2018. Available from:

<https://www.rcpsych.ac.uk/workinpsychiatry/qualityimprovement/qualitynetworks/>

[10] Wahlstrom L, Blomdahl-Wetterholm M. Psychiatry and psychology integrated in somatics is a profit for the clinic. Consultation liaison psychiatry important for the future of healthcare.

Lakartidningen. 2015 Oct 6;112. Swedish.

[11] Malt EA, Bille H, Ekeberg O, et al. Consultation-liaison-psychiatry in Norway. Use of psychiatric services in somatic departments. Tidsskr Nor Laegeforen. 1997;117(12):1753–1756.

Norwegian.

[12] Wand AP, Wood R, Fossey MJ, et al. Standards, efficiency and effectiveness in consultation-liaison psychiatry. Aust N Z J Psychiatry. 2015;49(2):104–105.

[13] Wood R, Wand AP. The effectiveness of consultation-liaison psychiatry in the general hospital setting: a systematic review. J Psychosom Res. 2014;76(3):175–192.

[14] Leentjens AF, Boenink AD, Sno HN, et al. The guideline “consultation psychiatry” of the Netherlands Psychiatric Association. J Psychosom Res. 2009;66(6):531–535.