Consultation and liaison psychiatry

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Definition

- Consultation-Liaison Psychiatry is a sub-specialty of psychiatry that incorporates clinical service, teaching, and research at the borderland of psychiatry and medicine. (Lipowski, 1983)
Where did the name (C-L) come from?

AMERICAN
JOURNAL OF PSYCHIATRY
THE BROADENED INTERESTS OF PSYCHIATRY.*

By ALBERT M. BARRETT, ANN ARBOR, MICHIGAN.

Presidential honors bring responsibilities that cannot help but weigh heavily upon the recipient. While not wishing to avoid these, I hope one may be pardoned for confessing to a feeling of inadequacy that comes to him as he prepares the address that the custom of this association expects of its presiding officer.

This feeling of inadequacy comes from a keen personal appreciation of an inability to do the task as well as he might wish and especially because of a bewilderment as he tries to collect from out the mass of present day psychiatric interests something that might be concretely considered on an occasion such as this.

There was never a time in the world's history when there was such a widespread interest in the mind and its disorders in their relation to human life in its social and medical aspects. Interest in psychology and psychiatry is no longer confined to the teachings of class rooms and laboratory investigations carried on in schools and colleges, nor to the clinics and hospitals specially concerned with mental disorders. Its scope is apparent to all who keep informed regarding present progress.

Human character and behavior is being analyzed and measured in respect to standards of mental health. Individual successes and failures, and social problems are explained, excused or condemned in terms of mental qualities. Our periodicals carry in their pages stories woven around themes of mental strangeness, and essays and discussions on social and industrial problems in which the writer sees a psychiatric problem. We have the psychological novel and the psychological play. In art and music moods and desires for expression find outlets in symbolic forms that only

* Presidential Address at the seventy-eighth annual meeting of The American Psychiatric Association, Quebec, Canada, June 6, 7, 8, 9, 1922.
What is consultation-liaison psychiatry?

- Liaison psychiatry, also known as consultative psychiatry or consultation-liaison psychiatry (also, psychosomatic medicine) is the branch of psychiatry that specialises in the interface between other medical specialties and psychiatry, usually taking place in a hospital or medical setting. "Consults" are called when the primary care team has questions about a patient's mental health, or how that patient's mental health is affecting his or her care and treatment. The psychiatric team works as a "liaison" between the medical team and the patient. Issues that arise include capacity to consent to treatment, conflicts with the primary care team, and the intersection of problems in both physical and mental health, as well as patients who may report physical symptoms as a result of a mental disorder[1]. (Wikipedia)
What is consultation-liaison psychiatry’s present position?

- The American Board of Psychiatry and Neurology: recommended subspecialty for Consultation-Liaison Psychiatry renaming it Psychosomatic Medicine
- June 2001: American Psychiatric Association Board of Trustees supported application
- 2003: American Board of Medical Specialties approved the recommendation

- *Psychosomatic Medicine became the 7th subspecialty in Psychiatry*
History of Consultation – Liaison Psychiatry

- Its early origins reflect the emergence of General Hospital Psychiatry.
- In the 1920s psychiatry became closer to medicine as hospitals started to establish psychiatric units.
- The concept of psychosomatic relationships and the role of emotions and psychological states in the genesis and maintenance of organic diseases emerged.
- Thus, Consultation – Liaison Psychiatry became an applied form of psychosomatic medicine.
Characteristics of psychosomatic medicine

1) Studies the correlations of psychological and social phenomena with physiological functions

2) Focuses on the interplay of biological and psychosocial factors in the development, course and outcome of all diseases.

3) Advocates the biopsychosocial approach to patient care.
Consultation style

- Characteristics of effective psychiatric consultant (Goldman, Lee, Rudd, 1983):

  1. Talks with the referring physician, nursing and other staff before and after consultation. Clarifying the reason for the consultation is the initial goal.

  2. Establishes the level of urgency.
ASSESSMENT

The consultant should establish the **URGENCY** of the consultation (i.e., emergency or routine—within 24 hours).

Commonly, requests for psychiatric consultation fall into several general categories:

1. Evaluation of a patient with suspected psychiatric disorder, a psychiatric history, or use of psychotropic medications.
2. Evaluation of a patient who is **acutely agitated**.
Requests for psychiatric consultation

3. Evaluation of a patient who expresses suicidal or homicidal ideation.

4. Evaluation of a patient who is at high risk for psychiatric problems by virtue of serious medical illness.

5. Evaluation of a patient who requests to see a psychiatrist.

6. Evaluation of a patient with a medicolegal situation

7. Evaluation of a patient with known or suspected substance abuse.
Reasons for consultation (own data)

- Not known: 57%
- Psychiatric symptoms: 19%
- No organic basis for the symptoms: 8%
- Noncompliance: 4%
- Positive psychiatric history, therapy revision request: 3%
- Legal reason: 1%
- Follow up: 3%
- More contemporaneous reasons: 1%
Common psychiatric symptoms as reasons for consultation

- Depression
- Agitation
- Disorientation
- Hallucinations
- Anxiety
- Sleep disorder
- Suicide attempt or threat
- Behavioural disturbance
No organic basis for symptoms (8%)

- Conversion disorder: different neurologic symptoms (anesthesia, paresthesia, seizures, etc) with autonomic nervous system symptoms
- Somatization disorder (Briquet sy): multiple body complaints
- Factitious disorder: wish to be hospitalized (wish for attention)-provoking physical symptoms (e.g. fever, hypoglycaemia)
- Malingering: obvious secondary gain (compensation case)
Prevalence of somatization

- Medically unexplained symptoms
  - Common in community samples
    - General practice / New out-pt referrals
      - Up to 40% have symptoms for which no organic cause is identified
    - ‘Much less common’ in in-pt samples (8%)
  - Majority of patients reassured
    - Minority persist or develop other symptoms
      - Strong association between number of somatic symptoms reported and likelihood of underlying mental illness
Aetiological factors

- Childhood experience
  - Illness
  - Lack of parental care
    - Physical illness triggers care and attention which otherwise they would not receive
- Lack of social support
- Family re-inforcement
  - Over-solicitous care or ‘helpful advice’
- Iatrogenic causes
Iatrogenic causes

- Medicalisation of pt’s symptoms
  - Over-investigation
  - Inappropriate treatment
    - Especially by junior doctors
  - Failure to provide clear explanation for symptoms
    - Increasing uncertainty and anxiety
  - Failure to recognise and treat emotional factors
Consequences of somatisation

- Unnecessary use of healthcare
  - Investigations
  - Admissions for treatment / operations
    - Often making matters worse
- Prescribed drug misuse and dependence
- Disability and loss of earnings
  - Social disability payments
- Poor quality of life
  - Impact on family / social network
Functional somatic syndromes

**Gastroenterology**  Irritable Bowel Syndrome
Functional dyspepsia

**Cardiology**  Atypical chest pain

**Neurology**  Common Headache
Chronic fatigue syndrome

**Rheumatology**  Fibromyalgia
Complex regional pain syndromes
(Reflex sympathetic dystrophy)

**Gynaecology**  Chronic pelvic pain

**Orthopaedics**  Chronic back pain
Approach to management

- Identify features of organic disease
  - Overlaying psychological elements
- Establish degree of insight
  - Extent to which they recognise
    - Psychological basis for their problems
  - Extent to which they ‘want out’
- Determine the appropriate programme
  - Physical / psychological / both
Characteristics of effective psychiatric consultant (Goldman, Lee, Rudd, 1983):

3. Reviews the chart and the data thoroughly.
4. Performs a complete mental status exam and relevant portions of a history and physical exam.
5. Obtains medical history from family members or friends as indicated.
6. Makes notes as brief as appropriate.
7. Arrives at a tentative diagnosis.
8. Formulates a differential diagnosis.
9. Recommends diagnostic tests.
Characteristics of effective psychiatric consultant (Goldman, Lee, Rudd, 1983):

10. Has the knowledge to prescribe psychotropic drugs and be aware of their interactions.

11. Makes specific recommendations that are brief, goal oriented and free of psychiatric jargon and **discusses findings** and recommendation with consultee – **In person** whenever possible.

12. Respects patient’s rights to know that the identified “customer” is the consulting physician. (maintaining absolute Doctor-Patient confidentiality is not possible for a psychiatric consultant)
Characteristics of effective psychiatric consultant (Goldman, Lee, Rudd, 1983):

13. Follows-up patient until they are discharged from the hospital or clinic or until the goals of the consultation are achieved. Arranges out-patient care-if necessary.

14. Does not take over the aspects of the patient’s medical care unless asked to do so.

15. Follows advances in the other medical fields and is not isolated from the rest of the medical community.
The "formal" consultant

Works in a the traditional psychiatric setting, starts, and arrives back there

The liaison psychiatrist

Works on the "Terra incognita" field between somatic and psychiatric care.
The "formal" consultant

- Set up the diagnose
- Treat
- Act as a dispatcher

The "liberating troop"

The Liaison psychiatrist

- Consultation
  - patient centred
- Liaison
  - team centred

- Member of the team
Patterns of liaisons

- **Primary care physician**
  - **Patient** <-> **Consultant**
    - *Traditional setting*
    - *Consultation-Liaison model*

- **Primary care physician**
  - **Patient** <-> **Consultant**
    - *Consultation model*
Psychiatric disorders in the medical setting

- As many as 30% of patients have a psychiatric disorder.

- 2/3 of patients who are high users of medical care have a psychiatric disturbance.

- Delirium is detected in 10% of all medical inpatients & in over 30% in some high risk groups.

- The presence of a psychiatric disturbance is associated with increased hospital length of stay OR an increased medical readmission rate.
Psychiatric disorders in the medical setting

- Only a small subset of patients is currently being identified.

- The percentage of patients receiving psychiatric consultation varies from 1% to 10%.

- There is a great disparity between the amount of psychiatric pathology that exists in the medical setting and that which is identified by medical staff.
Psychiatric diff diagnoses in medical settings

Psychiatric presentations of medical conditions
Psychiatric complications of medical conditions or treatments
Psychological reactions to medical conditions or treatments
Medical presentations of psychiatric conditions
Medical complications of Psychiatric conditions or treatments
Comorbid Medical and Psychiatric conditions
The Consultation note

Is best if **brief and focused** on the referring physician’s concerns with attention to all domains.

Avoid using **jargons or other wording** that is likely to be unfamiliar to other physicians.

The note needs to be titled with mention “**Psychiatry**” and “**Consultation**”.

The history of present illness should include the relevant data from the history that may have **significance**.

The consultant’s objective findings on mental status

The formulation, diagnosis, recommendations should be written **concisely**.
The consultant should organize the diagnosis section according to the **DSM-IV’s multiaxial guideline**.

**Axis I or II diagnosis cannot always** be made at the time of the initial consultation.

Only the one or two central medical diagnoses should be included on Axis III.

Significant medical and psychological stressors can be noted and documented on Axis IV.

Axes IV and V may be omitted if the consultant feels they will not be useful or familiar to the consultee.
DSM-IV axes

- **Axis I**: Clinical disorders, including major mental disorders, and learning disorders
- **Axis II**: Personality disorders and mental retardation
- **Axis III**: Acute medical conditions and physical disorders
- **Axis IV**: Psychosocial and environmental factors contributing to the disorder
- **Axis V**: Global assessment of functioning
The C-L consultant must be familiar with diagnostic testing regarding:

- The indications for anatomic brain imaging or neurophysiological screening by CT, MRI, EEG, etc.
- The indications for the administration of neuropsychological testing
Follow-Up

The scope, frequency, and necessity of follow-up visits depend on the nature of the initial diagnosis and recommendations.

Follow-up visits reinforce the consultant’s recommendations and allow the consultant to
Evaluate results of recommendations
Prioritize relative importance of particular interventions
Prevent breakdowns in communication between consultants and consultees.
Follow-Up

At least daily follow-up should be considered for several types of patients:

Those in restraints
Constant observation
Agitated, potentially violent, or suicidal
Delirium
Psychotic or psychiatrically unstable.

Acutely ill patients started on psychoactive medications should be seen daily until they have been stabilized.
Psychotherapy:

- The modality introduced should be primarily selected in response to the patient’s needs.

- No single psychotherapeutic modality will be effective with all patients, at all times, in the medical setting.
Pharmacotherapy and Other Somatic Therapies

- 35% of psychiatric consultations include recommendations for medications.

- About 10%–15% of patients require reduction or discontinuation of psychotropic medications.

- Appropriate use of psychopharmacology necessitates a careful consideration of the underlying medical illness, drug interactions, and contraindications.
Pharmacotherapy of the medically ill often involves modification in dosage because of liver, kidney, or cardiac disease, or because of potential for multiple drug–drug interactions.

Pregnancy presents another challenge, with concerns regarding potential teratogenicity.

The C-L psychiatrist must be knowledgeable about electroconvulsive therapy (ECT).
Important field of C-L activity 1: Noncompliance

- Negative transference between patient and primary care doctor
- Fear of medication or procedure
- Impaired cognitive capacity
Noncompliance study
(retrospective chart review)

1020 consultations between 11/99 and 11/04.
In 22 cases the reason of the consultation was:
noncompliance (2.2%)
Psychiatric syndromes behind noncompliance

- 9; 40%: Schizofrenia
- 4; 18%: Dementia
- 4; 18%: Org.psychosyndrome
- 2; 9%: Affective disorder
- 1; 5%: Addiction
- 1; 5%: Adjustment disorder
- 2; 5%: No psychiatric diagnosis
Basic somatic disorders

percent

Non compliance

all cases
Conclusions

In patients with chronic illness

- Illness behavior frequently negative (ambivalence, psychosocial factors)
- Noncompliance can result rapid somatic deterioration (DM) that can result hospital admission
- Noncompliance can be a symptom of a hidden psychiatric disorder
Important field of C-L activity 2: delirium

- Delirium is COMMON
- Symptoms are alarming
- 10-15% of patients on surgical ward and 15-25% on general ward experience episode of delirium during hospital stay.
- 30-40% of hospitalized patients over age 65 have had an episode of delirium.
- 30%-90% patient in ICU experience delirium.

Definition of Delirium

A. Disturbance of consciousness

B. Change in cognition

C. Develops over a short period of time (usually hours to days). Tends to fluctuate during the course of the day.

D. There is evidence from history, physical exam, or laboratory findings that the disturbance is caused by the direct physiological consequences of a general medical condition, Substance Intoxication or Withdrawal, use of a medication, or toxin exposure, or a combination of these factors.

DSM-IV-TR, 2000
Associated Features

Psychomotor disturbance
Agitation (related to disorientation or confusion)
Apathy and Withdrawal
Emotional disturbances and instability
Sleep Impairment

Merck Manual of Geriatrics
Course

- Symptoms usually develop over hours or days
- In some they begin abruptly (e.g. after head injury)
- More typically, prodromal syndromes such as restlessness, anxiety, irritability, disorientation, distractibility, sleep disturbance progress to full-blown delirium within a 1-3 day period.
- May resolved in few hours to days or may persist for weeks to months, part in elderly or people with pre-existing dementia.
- Duration largely controlled by course of underling condition

Symptoms of delirium typically become most severe at night.

DSM-IV-TR, 2000
Casey et al. Delirium: Quick recognition, careful evaluation, and appropriate treatment. Postgraduate Medicine, 1996, 100(1).
Risk Factors

- Advanced age
- Young age (children)
- Underlying brain disease such as dementia, stroke or Parkinson’s
- Multiple severe, acute or unstable medical problems
- Polypharmacy
- Infection
- Alcohol dependence
- Sensory impairment
- Malnutrition
- History of delirium
- Low levels of social interaction
Prognosis better if...

- Underlying etiological factor is promptly corrected.
- Patient has better pre-morbid cognitive and physical function.
- Patient has NOT had previous episode of delirium.
Elderly Patients

- Persistent cognitive deficits common in elderly suffering from delirium.
- These deficits can be due to a pre-existing dementia that was not fully appreciated.
- Delirium may be the only indication of acute illness in older patients suffering from dementia.
### Differential diagnosis

<table>
<thead>
<tr>
<th>Obs.</th>
<th>Delirium</th>
<th>Dementia</th>
<th>Depression</th>
<th>Psychosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset</td>
<td>Acute</td>
<td>Insidious</td>
<td>Variable</td>
<td>Variable</td>
</tr>
<tr>
<td>Orientation</td>
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<td>Fluctuating</td>
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<td>Impaired</td>
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<td>Usually intact</td>
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<td>Common</td>
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<td>Duration</td>
<td>Short</td>
<td>Chronic</td>
<td>Variable</td>
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</tr>
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</table>

Delirium: Quick Recognition, careful evaluation and appropriate treatment, 
Postgraduate Medicine, July 1996, 100 (1).
Diagnosis: Delirium

WHAT IS CAUSING IT?
I WATCH DEATH (acronym)

I Infection (pneumonias, UTI, sepsis, cellulitis, menigitis, encepalitis, syphilis)
W Withdrawal (bezos, ETOH, sedative-hypnotics)
A Acute metabolic (electrolytes, acidosis, renal failure, abnormal glycemic control, pancreatitis,)
T Trauma (head injury, pain, fracture, burns)
I WATCH DEATH

C NS pathology (tumor, AVM, encephalitis, abscess, normal pressure hydrocephalus, seizures, stroke)

H hypoxia from COPD exacerbation, anemia, carbon monoxide poisoning, cardiac failure

D deficiencies B-12, folate, water

E endocrine thyroid, cortisol, cancer, hyper or hypoglycemia

A cute vascular MI, stroke, intracerebral bleed

T toxins or drugs medications, pesticides, solvents

H heavy metals lead, mercury
Aim of a C-L survey conducted in geriatric inpatient population:

- To assess comorbid psychiatric syndromes in geriatric patients who are admitted to internal medicine wards
- To assess the impact of the psychiatric disorders on the length of hospital stay
## Results: dementia (own survey)

<table>
<thead>
<tr>
<th>Cognitive function (MMMS points)</th>
<th>Number of patients (n=83)</th>
<th>Mean length of hospital stay (LOS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive deterioration is possible (MMMS; $\geq 85$ pont)</td>
<td>34 (41%)</td>
<td>12.4 days</td>
</tr>
<tr>
<td>Detectable cognitive deterioration (75-84 point)</td>
<td>14 (17%)</td>
<td>14.7 days</td>
</tr>
<tr>
<td>Moderate cognitive deterioration (60-74 point)</td>
<td>21 (25%)</td>
<td>15.3 days</td>
</tr>
<tr>
<td>Severe deterioration (59 pont $\geq$)</td>
<td>14 (17%)</td>
<td>19.8 days</td>
</tr>
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</table>
Characteristics of dementia

- Deterioration of memory and other cognition functions in an alert person, impairing daily activities
- Onset is usually insidious
- Course is over months - years; little daytime fluctuation
- Deficits persist even during a clear level of consciousness
- There must be a social impairment and decline from previous functioning
Differential diagnosis

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Delirium: Quick Recognition, careful evaluation and appropriate treatment, Postgraduate Medicine, July 1996, 100 (1).
Study showed that cognitive impairment was a main factor in low Clock Drawing scores in elderly patients.

Neither the presence or severity of delirium had additional significant effect on clock drawing.

The performance of the Clock Drawing Test in elderly medical inpatients: does it have utility in the identification of delirium? J Geriatric Psychiatry Neurol. 2005 Sep; 18 (3): 129-33
Clock Drawing Test

<table>
<thead>
<tr>
<th>ELEKTROENKEFALOGRAM</th>
<th>KONSTRUKCIÓS APRAXIA*</th>
<th>MENTÁLIS ÁLLAPOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFF=1,0 HFF=7,0 V/m</td>
<td></td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Clock 1</th>
<th>Clock 2</th>
<th>Clock 3</th>
</tr>
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<tr>
<td>Normal</td>
<td></td>
<td></td>
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*Ezehhez érkezve. Rezultátus MSE során észlelhető a kérsorodás. Az ellátó szakaszményzet ritkán veszi észre a problémákat. A háztárs megemlítheti: "Valami nincs rendjén."*

*Az MSE kíros. A családtagok és az ápolószemélyzet észreveszi a zavart. A beteget ellátó orvos gyakran nem észleli azt.*

*Az MSE és a veszélyes nagyon kíros.*
Important field of C-L activity 4: chronic illnesses
chronic viral hepatitis treated with IFN

- Interferon-alfa (IFN-α) is used for the therapy of a variety of oncological and chronic viral disorders.

- The CNS effects of IFN-α are based on the induction of the cytokine-cascade and the neuroendocrine system, as well as the modulation of the several neurotransmitter pathways.

- Mood and anxiety disorders are common psychiatric sequales of that treatment. The CNS side-effects call for the dropping out of IFN-α treatment or for dose reduction.

- It is challenge for the consultation psychiatrists to find a therapeutic solution for patients who suffer from psychiatric side-effects of the IFN-α.
Time Course of IFN Side Effects

Severity

Flulike symptoms

Fatigue

Depressive/anxiety symptoms

IFN Treatment (Weeks)

0 1 2 3 4 5 6 7 8 9 10 11 12
Late-Appearing Interferon Side Effects

- Manifest as mood disturbance, anxiety, and cognitive difficulties
- Develop insidiously over weeks to months
- Worsen with time
- Coupled with fatigue, represent the principal reason for IFN discontinuation
Major Depression With Interferon alfa

- Prevalence is 30%–50%, depending on diagnostic criteria and IFN dosage
- Recent large study of patients receiving peginterferon for hepatitis C suggests rates of full major depression may be lower than previously reported

Psychiatric side effects of IFN treatment (own survey)

- 21 patients
  - 18 depression
    - Mild: 5
    - Moderate: 8
    - Severe: 5
  - 5 panic disorder (4 with co-morbid depression)
  - 1 panic disorder with agoraphobia
  - 1 delirium
Treating IFN-Induced Depression

- Peginterferon may need to be stopped until antidepressant begins to work
- Pretreatment with antidepressant shown to significantly decrease development of depression with high-dose IFN alfa
Paroxetine Pretreatment Reduces the Incidence of Major Depression During the First 12 Weeks of IFN alfa

Other important fields of C-L activity

- Transplantation (Bone marrow, heart and lung, liver, kidney)
- Oncology
- Legal issues (competency)
- HIV, AIDS
- Addictions
Cost-Effectiveness of CLP

Studies have repeatedly demonstrated that C-L service can significantly lower health care cost and at the same time improve the quality of medical care of medically ill patients with psychiatric symptoms.

There is a significant association between psychiatric or psychological AND medical comorbidity and increased length of stay.

Early detection and treatment may significantly decrease LOS and the expenditure of medical resources.
Thank you for your attention!