



Consultation Liaison Psychiatry in a Tertiary Care Hospital

Quratulain¹, Hazrat Ali Khan¹, Silsila Sherzad¹, Abdul Hameed¹, Noorjhan Jaffar¹,
Muhammad Naseem¹, Fiza Asif², Sana Ullah Kakar¹

¹Department of Psychiatrist, Balochistan Institute of Psychiatry and Behavioral Sciences (BIPBS), Quetta, Balochistan, Pakistan.

²Department of ENT, Bolan Medical Complex Hospital, Quetta, Balochistan, Pakistan.

ARTICLE INFO

Keywords

Psychiatry, Liaison, Treatment, Medical Illness.

Corresponding Author: Sana Ullah Kakar

Department of Psychiatrist, Balochistan Institute of Psychiatry and Behavioral Sciences (BIPBS), Quetta, Balochistan, Pakistan.

Email: sanaullah786.kakar@gmail.com

Declaration

Author's Contributions: All authors contributed to the study and approved the final manuscript.

Conflict of Interest: The authors declare no conflict of interest.

Funding: No funding received.

Article History

Received: 06-10-2024

Revised: 15-11-2024

Accepted: 23-11-2024

ABSTRACT

Background: Consultation-liaison psychiatry (CLP) is a subspecialty that bridges the gap between psychiatry and general medicine, managing the psychiatric needs of patients with physical illnesses in hospital settings. It plays a crucial role in addressing the mental health comorbidities that accompany medical conditions, improving patient care and interdisciplinary collaboration.

Objective: This study aims to explore the role of CLP services in a tertiary care hospital, examining the profile of referred patients, their reasons for referral, and the psychiatric diagnoses. It seeks to assess the effectiveness of CLP in addressing psychosocial care needs and enhancing the integration of psychiatric support in medical settings. **Methodology:** A qualitative approach was adopted, utilizing semi-structured interviews with 220 participants, including patients, healthcare staff, and psychiatric consultants. Data was analyzed to assess patient satisfaction, efficacy of interventions, and the challenges faced by medical professionals in managing psychiatric comorbidities. **Results:** Among the 220 referred patients, 60% were male. Most referrals came from the general medicine department (52%), followed by pulmonary medicine (12%) and nephrology (9%). The primary reasons for referral included psychiatric evaluation of medically ill patients (38.6%), substance use assessment (18.2%), and evaluation of self-harm/suicidal ideation (13.6%). Mood disorders were the most common psychiatric diagnosis (40.9%). **Conclusion:** CLP services in the tertiary care hospital provided significant benefits in managing patients with complex medical and psychiatric conditions, highlighting the need for integrated care to improve overall patient outcomes.

INTRODUCTION

Consultation Liaison psychiatry (CLP) may be viewed as a developmental phase that has spectacularly changed the practice of psychiatry. Alarming increases have been manifested through the facts that more generalized hospital psychiatric units have been established; mental health problems have more directly approached generalized health and community. Liaison psychiatry is the branch of psychiatry that handles this relation, and that of physical and mental health. CLP as practice area as a subspecialty of psychiatry which provides clinical service, and or teaching

and or research at the junction of psychiatry and medicine (Lipowski,1983). Thus, as a specialist of psychiatry, CLP can identify and manage general hospital patient with matched mental health conditions. There is consensus concerning the proposal that any type of physical disease, more so chronic diseases, have always implications on social and emotional status of patients together with carers (Whiteford et al., 2010). According to the assessment by the Australian Institute of Health and Welfare (2012) besides the above findings it was also realized that hospitalization of persons

who had mental health as well as physical disorder was higher than for persons who had single disorders. According to Jansen et al/preferences2018 medical mental comorbidity has the effects of prolonging hospitalizations, the cost of medical care, and readmissions. It also offers medical staff in general, non-psychiatric hospitals with conduct and education regarding mental health comorbidity research, (Lipowski 1971). It has moved psychiatry from mental asylums to general hospitals and has made a useful contribution for decreasing prejudice against people with mental disorders along with the medical profession (Grover, 2011).

Historical Background of CLP

JM Mosher developed the structure of the operational general hospital psychiatric unit (GHPU) in the year 1902 at Albany Hospital, and he introduced the CLP or clinical psychosomatic medicine. The concept of the GHPU was to place mental health doctors and other sorts of medical care doctors side by side for training and psychiatric purposes (Lipsitt 2001). He, most probably was the one who used this phrase "liaison psychiatry" in the year 1930 (Parker SR, Dawani, 2001). In fact, until 1930, mental health care for this nation were only in mental hospitals if seen from the Indian perspective. C-L psychiatry has its origin in general hospital psychiatry as general hospital psychiatric units were established in early 1930s. The first GHPU was established in 1933 by Dr. Girindra Shekhar of R.G.Kar Medical College & Hospital Calcutta-India. Not many GHPUs were set up in the period to 1960. These were first developed along with work with the Department of Neurology and were frequently referred to as neuropsychiatric clinics. However, the number of GHPUs grew to about ninety in the late 1960s and early 1970s (Menon, 2005). The first facility that was so designated under the GHPU was the All India Institute of Medical Sciences. However, the fast expansion in C-L psychiatry services in India appeared to mirror other developed parts of the world for the same period as Menon 2005 in describing the advancement of C-L psychiatry services in India in relation to the rest of the world.

Importance of CLP

While a significant percentage of individuals with medical ailments also have mental health issues, those with mental disorders are more likely to be impacted by physical conditions (De Hert et al.,

2011, Moussavi et al., 2007, Stein, 2020). General hospital patients with mental health comorbidities can be assessed and treated by CLP, a specialist of psychiatry. CLP is affordable and has a beneficial influence on mental health issues (Wood & Wand, 2014, Sartorius, 2010). The greatest approach to close the current gap between medical disciplines and psychiatry appears to be collaborative collaborations involving medical and psychiatric practitioners.

Consultation liaison psychiatry was recognized by the American Board of Medical Specialties in 2003, and the American Board of Psychiatry and Neurology was granted subspecialty certification in "Psychosomatic Medicine" with the aim of "promoting the psychiatric care of patients with complex medical, surgical, obstetrical, and neurological conditions" and improving training and research in consultation liaison psychiatry. (Gitlin DF, Levenson JL, Lyketsos CG; 2004) As psychiatry moves toward a more medical model and general hospital psychiatry units are rapidly established worldwide, this subspecialty of psychiatry is receiving increasing attention. With the increasing numbers of general hospital psychiatric units all over the international, consultation- liaison psychiatrists have a busy working career. Liaison psychiatry is now recognised as a subspecialty of psychiatry which has contributed immensely to the shift of psychiatry from mental hospitals to general hospital. Besides it has also expanded to a new increased referrals from other no psychiatric departments and also has exposed the psychiatrists to have direct working relationship with patients who have physical illnesses. This is different in regards to mentally ill patients with an addition of physical diseases where their differentiation is not as clear. For this reason, mental health specialists are of necessity in the participation of patients with different ailments. This paper therefore sought to find out the profile of referred patients, their source, reason for referral and psychiatric diagnosis They examine psychiatric referrals within the tertiary care hospital as they have made it mandatory for consultation-liaison services to prove their worth amidst the rising value of evidence-based practice.

LITERATURE REVIEW

Consultation-liaison (C-L) psychiatry, also known

as psychosomatic medicine, is an important part of the care of patients with medical comorbidities in tertiary care hospitals. The current study focuses on controversies surrounding C-L psychiatry, its advancement, its functions, and positive aspects in hospitals with teaching programmes. In C-L psychiatry, Psychiatrists work with other health care professionals to manage psychiatric disorders that manifest in patients who are admitted in hospitals for other medical ailments (Leentjens, Hanewald, Sauer, & Schutke, 2015). It is also multidisciplinary, and mental health specialists offer their perspectives on issues, such as delirium, sadness or anxiety. These illnesses often worsen physical health of the patients who are admitted in the hospitals (Fischer & Smith, 2016).

Increased calls for psychiatric consultations but with limited resources make it hard for C-L psychiatry in tertiary practice. Smith and Raina (2019) notes that because of poor staffing and low awareness in non-psychiatric medical personnel, the efficiency of C-L services may not be optimum to meet the needs of tertiary care hospitals. To this gap we have found the need to design and implement educational and training initiatives to prepare healthcare professionals at tertiary care centres to evaluate a patient needing psychiatric consultation when required (Walker et al., 2020).

C-L psychiatry has gradually extended its concern to such problems as delirium, substance dependency, and psychological distress due to chronic disease, such as diabetes or cardiovascular disease (Lipowski 1983; Bolton et al. 2019). It also makes C-L psychiatry services also establish preventative basic mental health coping strategies that patients should employ while they are in the hospitals (Oldham et al., 2014). There is sufficient enough evidence that supports the fact that this proactive strategy Research objective

Tekkalaki in a cross sectional study done in 2017 among the patients, 52% of the patients were referred from internal medicine department 28% from the neurological sciences and 20% from the surgical divisions The remaining about 30% did not meet the DSM IV criteria of any mental illness. Psychiatric consultation for medicated patient with psychiatric symptoms was the commonest referral followed by drug induced psychoses, suicidal ideation and a past psychiatric history. As per the afore mentioned research by Sandeep Grover et al, in 2015, dementia one of the three most frequent

diagnosis in the institutes, 79(87.8%), other common disorders are substance use, 70%, other disorders such as self-harm, 60% and depression, 38.9% according to the three most common observed psychiatric syndromes in the CLP settings.

According to Bhogle et al., (2000), outside referred Patients, 62.75% failed to explain any sign while 47.57% inside referred Patients had signs that were not explained at all. The following patients were allocated to this group: outpatients; patients with immunosuppressive therapy; elderly patients with active physical diseases and symptomatology not corresponding to their general condition. In these patients the most frequent indoor diseases were neurotic stress related somatoform 36.76% and the outdoor troubles were 52.29 Next to them were indoor mood disorders 21.08% and the outdoor troubles were 18.95% of the final diagnosis. Bhogale GS et al., 2000) Finally, emerging evidence suggests that C-L psychiatry has substantial benefits for medical staff by alleviating the psychological burdens they may face when treating critically ill patients (Oldham et al., 2014). The consultative role provides healthcare staff with strategies to manage their emotional responses to patient suffering, which improves team morale and supports effective patient care.

RESEARCH OBJECTIVE

This qualitative study is aimed at finding out the range, hurdles and effects of CLP at but it has Bolan medical complex a tertiary care hospital. In particular, the following research objectives are proposed: To examine the contribution of CLP in improving interdisciplinary teamwork to determine how CLP can meet the psychosocial care needs of patients in various medical/surgical wards and engaging with healthcare professionals to manage patients with complicated psychiatric disorders. To this end, this study aims to explore the factors that make-or-break CLP interventions in a real-world multi-site study that administers qualitative interviews with patients, families, and other healthcare stakeholders, including care providers. In the end, the findings are anticipated to aid in understanding how CLP services can be enhanced in order to enhance patient prospects and enable a more client-centered healthcare arrangement within tertiary healthcare systems.

METHODOLOGY

Research Design

This study employs a qualitative research method to explore the functioning and significance of consultation-liaison (C-L) psychiatry in a teaching hospital. The qualitative approach was chosen to provide an in-depth understanding of the integration of psychiatry with medical care for complicated medical and psychiatric patients. The research was conducted in a large tertiary health care facility located in a major urban center, ensuring a diverse population and relevance to real-world clinical settings.

Study Setting

The research was carried out in a tertiary teaching hospital situated in an urban area. This hospital serves as a major referral center, dealing with a wide range of medical and psychiatric cases, making it an ideal location to evaluate the role of C-L psychiatry. The setting allowed the inclusion of a multidisciplinary team and varied patient demographics, contributing to the richness of the data.

Sampling Method

A purposive sampling technique was used to recruit 220 participants. This sampling method was chosen to ensure the inclusion of individuals directly involved with the C-L psychiatry unit. The participants included patients, medical staff, and psychiatric consultants. The selection criteria focused on individuals who had direct experiences with the unit, providing diverse perspectives and comprehensive insights into its functioning.

Data Collection

The primary data source consisted of semi-structured interviews. This method allowed participants to share their experiences and perspectives openly. The interview guide covered key aspects such as:

- Patient and staff satisfaction
- Perceived efficacy of C-L psychiatry interventions
- Challenges encountered by clinicians

Each interview lasted 30–45 minutes, enabling participants to elaborate on their experiences in detail. To maintain accuracy and clarity, the interviews were recorded with the participants' consent.

Ethical Considerations

Written informed consent was obtained from each participant or their legally responsible representative before the interviews. The consent process ensured that participants were aware of the study's purpose, their rights, and the confidentiality of their data. Additionally, ethical approval was obtained from the relevant institutional review board.

Role of Consultant Psychiatrist

All referred patients were assessed by a consultant psychiatrist. This assessment was integral to the study, as it helped identify and manage common mental health vulnerabilities. The consultant psychiatrist's involvement also enhanced the rate of recovery by addressing psychiatric aspects in medical conditions, demonstrating the practical benefits of the C-L psychiatry model.

Significance of the Study

The integration of psychiatric services in a medical setting, as explored in this study, plays a crucial role in addressing the mental health needs of patients with complex conditions. This approach prevents common mental health issues caused by vulnerability and ensures a holistic recovery process (Yates and Holmes, 2013).

RESULTS

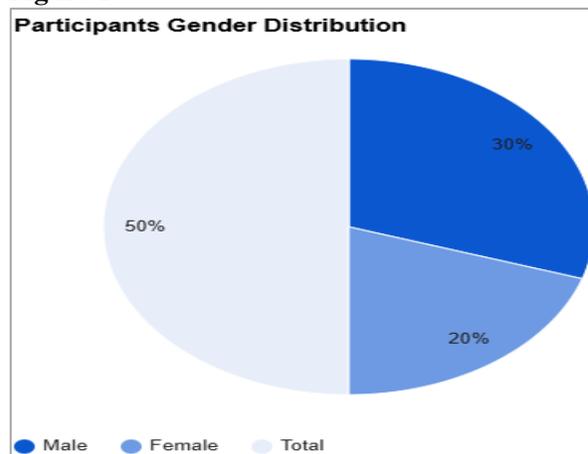
The data which was obtained was analyzed by using descriptive statistical methods

Table 1

Participants gender

Male	132	60%
Female	88	40%
Total	220	100%

Figure 1



A Total number of 220 of patients were referred to the psychiatry unit from various departments during the study period. Among them majority were male. Table 1 shows, out of 220 patients, 132 were male and 88 were female. The Male: Female ratio was 3:2.

Table 2
Age distribution of participants

Age	Number	Percentage
<10 years	13	5.9%
11-25 years	32	14.54%
26-40 years	107	48.63%
41-65 years	54	24.54%
>65 years	14	6.36%

Figure 2

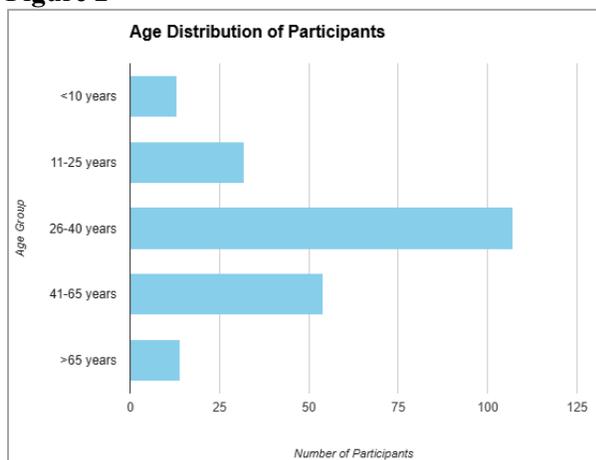


Table 2 shows, the average age of patients was 38.99 years with the age range being 5 to 72 years. Majority (48.63%) of patients belonged to adult (26-40) age group followed by 24.54% in the age group 41-65 years, 14.54% in the age group 11-25 years. While elderly, more than 65 years comprised 6.36%, children less than 10 years age constitute 5.9%.

Table 3
Distribution of department wise references

Departments	Number
General medicine	116
Pulmonary medicine	27
Nephrology	21
Pediatrics	14
Gynecology & Obstetrics	11
Orthopedics	10
Surgery	9
Causality	7
Neurology	4
ENT	1
	220

Figure 3

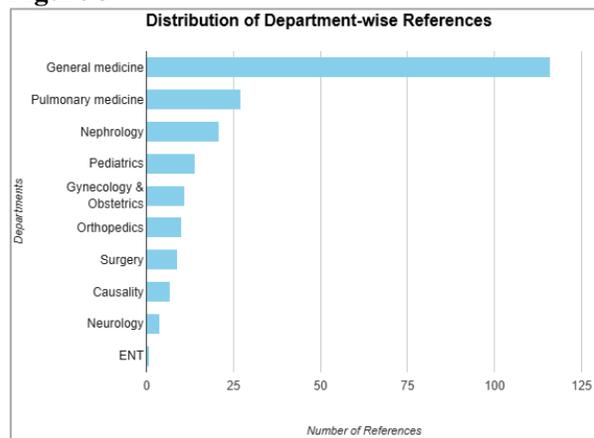


Table 3 shows Department wise patterns of references and more than half of the references by Medicine department (52.17%) followed by Pulmonary Medicine (12.27%), Nephrology (9.5%) Other departments include Paediatrics (6.3%), Gynecology and Obstetrics (5%), Orthopedics (4.5%), Surgery (4.09%), Causality (3.1%), Neurology (1.8%), ENT (0.45%).

Table 4
Primary Reasons for C-L Psychiatry Referrals

Reason for Referral	Frequency (n)	Percentage (%)
Psychiatric evaluation of medically ill	85	38.6
Substance use assessment	40	18.2
Evaluation of self-harm/suicidal ideation	30	13.6
Management of delirium	25	11.4
Psychological impact of chronic illness	20	9.1
Assistance with treatment adherence	15	6.8
Other (e.g., mood disorders, anxiety)	5	2.3

Table 2 shows the primary reasons for psychiatric referrals. Psychiatric evaluation of medically ill is the most common reason, followed by Substance use assessment and Evaluation of self-harm/suicidal ideation. Management of delirium, psychological impact of chronic illness, Assistance with treatment adherence and other were less frequent reasons for referrals.

Table 5
Psychiatric Diagnoses in Referred Patients

Diagnosis	Frequency	Percentage (%)
Mood Disorders	90	40.9%

Anxiety Disorders	60	27.3%
Substance Use Disorders	40	18.2%
Psychotic Disorders	20	9.1%
Somatoform Disorders	10	4.6%

Figure 4

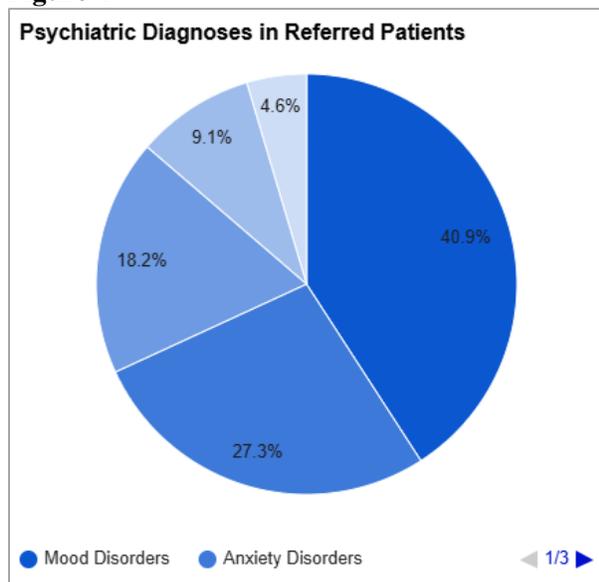


Table 4 illustrates the distribution of psychiatric diagnoses among referred patients. Mood disorders were the most common diagnosis, followed by anxiety and substance use disorders. Psychotic and somatoform disorders were comparatively less frequent.

DISCUSSION OF RESULTS

The findings of this study have disclosed useful information about CLP services in a large tertiary care center. Out of all referred patients, 220 were to the psychiatry unit and the majority of patients were male at 60%. This finding is similar to the usual trend of the psychiatric referral where male get referred to psychiatric services who are more often than females due to various social and psychological factors Grover, Aggarwal, Chakraborty, Kumar, & Bhargava (2015). The average age of the patients was 38.99 years, and, accordingly, the greatest number of patients were referred from the age range of 26-40 years, which corresponds to World Health Organization data that indicate increased rates of mental health comorbidities in adulthood. The overall psychiatric referral rates from pediatric and the elderly populations are low and this may be due to either lack of awareness of the psychiatric manifestations

of their medical conditions, or patients' reluctance to seek psychiatric treatment because of their age.

Based on the department of referral the largest numbers of patients were referred by department of general medicine 52.17% followed by pulmonary 12.27% and nephrology 9.5%. This distribution shows how and where psychiatry fits in the overall care of the patient with such extended diseases which are seen in internal medicine and other specialties dealing in chronic diseases according to previous research done by Tekkalaki et al, 2017. The fact that only 4.09% of referrals originated from surgical departments could be interpreted in one of two ways – either mental health needs of surgical patients remain largely unmet or are overshadowed by patients' physical conditions. This could be an area for improvement, as Desaulniers et al., (2018) pointed out that psychiatric co-morbidities have an influence over the recovery of surgical patients.

Again, the actual reasons for psychiatric referrals supported the most common reason of admitting being referred due to the psychiatric assessment of medically-ill patient which reflects the important function of CLP service – providing mental health care in the context of medical illness (Lipowski, 1983). The second least denial of care to a patient was due to substance use assessment at 18.2%, followed by self-harm or suicidal ideation at 13.6% showing there is a lot of psychological disorder among patient requiring hospitalization. These results are in conformity with other studies that established that substance use disorders as well as suicidality are rife among patients with medical comorbidities hence the importance of integrated care (Yates & Holmes, 2013). Management of delirium, which is a common presenting issue as well as a common symptom complicating both acute illness and hospitalization, was another common reason for referral; this suggests that CLP services provide vital service in the evaluation and management of psychiatric symptoms stemming from an acute medical illness.

From the mentioned referred patients, the following psychiatric disorders were diagnosed; mood disorders at 40.9%, anxiety disorders at 27.3% and substance use disorders at 18.2%. These findings concur with other studies done showing that depression, anxiety, and substance use disorders are the most common psychiatric

conditions among people with physical illnesses (De Hert, et al., 2011). Thus, the lower rates of psychotic disorders and somatoform disorders may be attributed to the kind of medical individuals referred to the psychiatric unit in the present study as opposed to these disorders' relationships with the medical illnesses causing hospitalization (Bolton et al., 2019).

The patients diagnosed with referred patients in mental psychiatry included mood disorders 40.9%, anxiety disorders 27.3% and substance use disorders 18.2%. The present results corroborate prior studies that show that major depression, anxiety and substance dependence/abuse are the most common psychiatric disorders among patients with medical diseases (De Hert et al., 2011). The lower number of psychotic disorders and somatoform disorders might be explained by the kind of medical population seen in the psychiatric unit of this study as the two are not frequently related to the medical conditions that lead to hospitalization, according to Bolton et al. (2019).

However, the following challenges are presented concerning the optimization of CLP services. Another gap highlighted in the literature pertains to lack of appreciation of psychiatric features in medical patient by non-psychiatric medical care givers. Referral behaviors in this study indicate that some departments like general medicine as well as pulmonary medicine appreciate the need for a psychiatrist while some departments like the surgical service may need to be enlightened

on the value of psychiatric comorbidity. In addition, there is the need to GRE up more and more research to find out how best to include CLP into multi-disciplinary care delivery teams and how all patients, we all addicts, should receive appropriate mental health care regardless of their primary medical conditions.

CONCLUSION

This study thus establishes the essential function of CLP in enhancing treatment outcomes by managing psychiatric disorders in chronically ill clientele. The integration of mental health services in mainstream General Hospitals enhances overall patient health care delivery, minimizes mental disorders' negative perception and leads to improved patient and health provider Positive Wellbeing. More initiatives are still required to improve training of the personnel, provision of the resources, and interprofessional teamwork to realize the potential of CLP services in the tertiary facilities. As with most complex services in a large academic setting, there is much work to be done to optimally advance the development of consultation-liaison psychiatry. Realization of these possibilities should be targeted at effective interventions increasing rates of referrals due to early detection of common psychiatric disorders; especial emphasis should be placed on increasing awareness of general practitioners who are known to be the most frequent sources of psychiatric referrals.

REFERENCES

1. Van der Hoek, R., Cooper-Stanbury, M., Brockway, I., Bishop, K., & Nargis, S. (2012). *Comorbidity of mental disorders and physical conditions, 2007*. Australian Institute of Health and Welfare.
2. Bhogale, G. S., Katte, R. M., Heble, S. P., Sinha, U. K., & Patil, B. A. (2000). Psychiatric referrals in multispeciality hospital. *Indian Journal of Psychiatry*, 42(2), 188-194. https://journals.lww.com/indianjpsychiatry/abstract/2000/42020/PSYCHIATRIC_REFERRALS_IN_MULTISPECIALITY_HOSPITAL.12.aspx
3. Bolton, J., Gray, K., & Smythe, T. (2019). "Role of Consultation-Liaison Psychiatry in Managing Delirium and Substance Withdrawal." *Psychosomatic Medicine Journal*, 15(2), 201-207.
4. DE HERT, M., CORRELL, C. U., BOBES, J., CETKOVICH-BAKMAS, M., COHEN, D., ASAI, I., DETRAUX, J., GAUTAM, S., MÖLLER, H.-J., NDETEI, D. M., NEWCOMER, J. W., UWAKWE, R., & LEUCHT, S. (2011). Physical Illness in Patients with Severe mental disorders. I. Prevalence, impact of medications and disparities in health care. *World Psychiatry*, 10(1), 52-77.

- <https://doi.org/10.1002/j.2051-5545.2011.tb00014.x>
5. Diefenbacher, A., & Strain, J. J. (2002). "Consultation-Liaison Psychiatry in General Hospitals: Challenges and Opportunities." *American Journal of Psychiatry*, 159(4), 655-662.
 6. Fischer, H., & Smith, M. (2016). "Psychiatric Complications in Hospitalized Patients: The Consultation-Liaison Approach." *Clinical Psychiatry Review*, 14(3), 134-146.
 7. Gitlin, D. F. (2004). Psychosomatic Medicine: A New Psychiatric Subspecialty. *Academic Psychiatry*, 28(1), 4-11.
<https://doi.org/10.1176/appi.ap.28.1.4>
 8. Grover, S., Sarkar, S., Avasthi, A., Malhotra, S., Bhalla, A., & Varma, S. (2015). Consultation-liaison psychiatry services: Difference in the patient profile while following different service models in the medical emergency. *Indian Journal of Psychiatry*, 57(4), 361.
<https://doi.org/10.4103/0019-5545.171854>
 9. Jansen, L., van Schijndel, M., van Waarde, J., & van Busschbach, J. (2018). Health-economic outcomes in hospital patients with medical-psychiatric comorbidity: A systematic review and meta-analysis. *PLOS ONE*, 13(3), e0194029.
<https://doi.org/10.1371/journal.pone.0194029>
 10. Leentjens, A. F. G., et al. (2015). "The Effectiveness of Consultation-Liaison Psychiatry in Reducing Length of Stay." *Psychosomatics*, 56(4), 439-445.
 11. Lipowski, Z. J. (1971). Consultation-liaison psychiatry in general hospital. *Comprehensive Psychiatry*, 12(5), 461-465.
[https://doi.org/10.1016/0010-440x\(71\)90086-1](https://doi.org/10.1016/0010-440x(71)90086-1)
 12. Lipowski, Z. J. (1983). Current Trends in Consultation-Liaison Psychiatry*. *The Canadian Journal of Psychiatry*, 28(5), 329-338.
 13. Lipsitt, D. R. (2001). Consultation-Liaison Psychiatry and Psychosomatic Medicine: The Company They Keep. *Psychosomatic Medicine*, 63(6), 896-909.
<https://doi.org/10.1097/00006842-200111000-00008>
 14. Malhotra, S. (2004). Liaison psychiatry in general hospitals. *Indian J Psychiatry* 26, 264-73.
 15. Menon S. (2005). Mental Health in Independent India: The Early Years. In: Agarwal SP, editor. Mental Health and Indian Perspective. New Delhi: Directorate General of Health.
 16. Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B. (2007). Depression, chronic diseases, and decrements in health: results from the World Health Surveys. *Lancet (London, England)*. 370(9590):851-8.
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(07\)61415-9/abstract?pubType=related](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61415-9/abstract?pubType=related)
 17. Oldham, R. L., et al. (2014). "Preventative Approaches in Consultation-Liaison Psychiatry for Improved Outcomes." *International Journal of Psychiatry in Medicine*, 47(2), 109-120.
 18. Parkar, S. R., Dawani, V. S., & Apte, J. S. (2001). History of psychiatry in India. *Journal of postgraduate Medicine*, 47(1), 73-76.
https://journals.lww.com/jopm/citation/2001/47010/history_of_psychiatry_in_india.22.aspx
 19. Russo, M., & Kostopoulou, M. (2017). "C-L Psychiatry in Neurology: Reducing Morbidity through Integrated Care." *European Journal of Neurology*, 24(9), 1035-1042.
 20. Sachdeva, J. S., Shergill, C. S., & Sidhu, B. S. (1986). PREVALENCE OF PSYCHIATRIC MORBIDITY AMONG MEDICAL IN-PATIENTS/1. *Indian Journal of Psychiatry*, 28(4), 293-296.

- https://journals.lww.com/indianjpsychiatry/abstract/1986/28040/PREVALENCE_OF_PSYCHIATRIC_MORBIDITY_AMONG_MEDICAL.6.aspx
21. Smith, A., & Raina, S. (2019). "Resource Challenges in Consultation-Liaison Psychiatry in Tertiary Care." *General Hospital Psychiatry*, 58, 33-39.
 22. Tekkalaki, B., Tripathi, A., Arya, A., & Nischal, A. (2017). A descriptive study of pattern of psychiatric referrals and effect of psychiatric intervention in consultation-liaison set up in a tertiary care center. *Indian Journal of Social Psychiatry*, 33(2), 165. <https://doi.org/10.4103/0971-9962.209181>
 23. Walker, L., Patel, J., & Chen, G. (2020). "Training Medical Staff in Mental Health Recognition and Referral: A C-L Psychiatry Perspective." *Hospital Psychiatry Training Journal*, 29(1), 41-49.
 24. Whiteford, H. A., Degenhardt, L., Rehm, J., Baxter, A. J., Ferrari, A. J., Erskine, H. E., Charlson, F. J., Norman, R. E., Flaxman, A. D., Johns, N., Burstein, R., Murray, C. J., & Vos, T. (2013). Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *The Lancet*, 382(9904), 1575–1586. [https://doi.org/10.1016/s0140-6736\(13\)61611-6](https://doi.org/10.1016/s0140-6736(13)61611-6)
 25. Wood, R., & Wand, A. P. F. (2014). The effectiveness of consultation-liaison psychiatry in the general hospital setting: A systematic review. *Journal of Psychosomatic Research*, 76(3), 175–192. <https://doi.org/10.1016/j.jpsychores.2014.01.002>
 26. Yates, A., & Holmes, J. (2013). "The Preventative Role of Consultation-Liaison Psychiatry in Acute Care." *Psychiatric Quarterly*, 84(2), 175-183.