JOURNAL OF PAKISTAN PSYCHIATRIC SOCIETY
(Reviewed Manuscript - Version of Record to Follow)

ORIGINAL ARTICLE:

The Frequency and Type of Adverse Childhood Experiences (ACEs) in Patients with Known Psychiatric Illness

Maham Irfan[1], Syed Muhammad Mehdi Taqvi[2], Chooni Lal[3], Laiba Khan[4], Yusra Abdul Haque[5], Musfirah Khalid[6].

[1,3-6]Department of Psychiatry & Behavioural Sciences, Jinnah Postgraduate Medical Centre, Karachi, Pakistan.

[2]Sindh Medical College, Jinnah Sindh Medical University, Karachi, Pakistan.

CORRESPONDENCE: DR MAHAM IRFAN EMAIL: dr.mahamirfan@gmail.com

Submitted: 27 May 2025
Accepted: 31 December 2025

ABSTRACT

OBJECTIVE

To determine the frequency and types of adverse childhood experiences (ACEs) among psychiatric outpatients in Karachi, Pakistan.

STUDY DESIGN

Cross-sectional

PLACE & DURATION OF STUDY

This study was conducted at the Psychiatry Outpatient Department of Jinnah Postgraduate Medical Centre, Karachi from January to May 2025.

METHOD

A total of 300 psychiatric patients were included in the study. Participants completed a culturally adapted Adverse Childhood Experiences-International Questionnaire (ACE-IQ), which assesses 13 ACE domains. ICD-11-diagnosed patients (excluding active psychosis) were evaluated. Data analysis used SPSS v23.0.

RESULTS

Emotional neglect was the most prevalent ACE (26.57%), followed by physical abuse (17.87%) and emotional abuse (17.87%). Sexual abuse was underreported (6.7%). Household dysfunction included physical neglect (11.11%) and household mental illness (11.11%), while parental separation/divorce was rare (0.48%).

CONCLUSION

ACE patterns in Pakistani psychiatric patients reflect cultural norms, including normalized emotional neglect and familial preservation despite dysfunction. Trauma-informed care addressing these culturally mediated adversities is critical for improving mental health outcomes.

KEYWORDS

Adverse childhood experiences; Mental disorders; Cross-sectional studies; Pakistan; Trauma-informed care.

INTRODUCTION

Adverse childhood experiences (ACEs) encompass a range of stressful or traumatic events occurring before the age of 18, including various forms of abuse, neglect, and household dysfunction[1]. These experiences represent some of the most intensive and frequently occurring sources of childhood stress with potentially far-reaching consequences[2]. Since the landmark ACE Study by Felitti and colleagues, extensive research has demonstrated the profound impact of childhood adversity on health outcomes

throughout the lifespan[2].

The prevalence of ACEs varies across populations but remains consistently high in psychiatric samples. Recent studies examining forensic psychiatric patients have revealed higher than previously reported average and cumulative rates of childhood adversity compared to the general population[1]. In clinical samples, approximately 45% of patients with psychiatric disorders report experiencing at least one ACE, with 5.5% reporting four or more ACEs[3]. The most frequently reported ACEs include feelings of abandonment, parental divorce or separation, and witnessing domestic violence[3].

Robust evidence demonstrates that adverse childhood experiences significantly alter the developing brain through neurobiological, psychological, and physiological mechanisms[4]. Preclinical and clinical studies have established that repeated early-life stress leads to alterations in central neurobiological systems, particularly in the corticotropin-releasing factor system, resulting in increased stress responsiveness[5]. Neuroimaging research has identified frontal volume alterations in trauma-exposed individuals independent of psychiatric morbidity. These structural and functional brain changes may contribute to deficits in cognitive and affective domains among those with extensive trauma histories. When faced with traumatic situations, children's neurological systems frequently activate "fight, flight, freeze, or fawn" responses[4]. This state of hypervigilance, if chronically activated, can lead to difficulties with emotional regulation, cognitive processing, and interpersonal functioning. The neurobiological consequences of ACEs help explain why conventional treatments that do not address underlying trauma may have limited efficacy in achieving sustained remission for many psychiatric patients.

The relationship between ACEs and psychiatric disorders is well-established across diverse populations. ACEs have been linked to increased likelihood of lifetime psychiatric disorders, including but not limited to depression, anxiety, posttraumatic stress disorder, and schizophrenia[6]. Among psychiatric in-patients with severe and early-onset disorders, ACE prevalence rates are particularly elevated[7].
Research using validated ACE assessment tools like the Adverse Childhood Experiences-International Questionnaire (ACE-IQ) has shown significant associations between ACE scores and depressive symptoms ($r = 0.26$-0.29) and anxiety symptoms ($r = 0.22$-0.24)[8]. Additionally, studies consistently demonstrate that as ACE scores increase, so does the risk for mental health difficulties, with dose-dependent relationships observed across multiple psychiatric conditions[9].

Patients with significant trauma histories often present with complex symptom profiles that may include anxiety, depression, maladaptive coping strategies, emotional dysregulation, and psychosomatic complaints[10]. These individuals frequently experience difficulties engaging effectively with healthcare systems and may be at risk for re-traumatization during treatment. Conventional biological interventions through psychotropic medications may address symptomatic manifestations but often leave underlying trauma unresolved, potentially leading to incomplete recovery and chronic service utilization[10].
Despite growing international recognition of the importance of trauma-informed approaches to psychiatric care, significant gaps remain in the local literature regarding the prevalence and patterns of ACEs among Pakistani psychiatric patients. Most existing ACE research has been conducted in Western contexts, with limited data available from South Asian populations[11,12]. Understanding the specific ACE profiles within local psychiatric populations is essential for developing culturally appropriate trauma-informed interventions and service delivery models. The current inquiry aimed at assessing the frequency and type of childhood adverse experiences (ACEs) in patients with known psychiatric illness

attending the Psychiatry Outpatient Department of a government-run tertiary care hospital in Karachi, Pakistan.

METHOD

Participants

This cross-sectional study held at Department of Psychiatry and Behavioral Sciences, Jinnah Postgraduate Medical Centre (JPMC), Karachi, Pakistan employed 300 psychiatric patients through non-probability consecutive sampling technique. Psychiatric patient is operationally defined as individual being prescribed psychiatric medication and/or undergoing psychological intervention and having a primary diagnosis meeting the ICD-11 criteria, not experiencing psychosis at the time of interview, or having compromised mental faculties. While Adverse Childhood Experiences (ACEs) is defined according to the American Psychiatric Association Foundation and the Centers for Disease Control and Prevention, ACEs are potentially traumatic events occurring in childhood (before age 18), such as experiencing or witnessing abuse, neglect, and household dysfunction, that can disrupt healthy development and have long lasting negative consequences[13,14].

The sample size was estimated using the World Health Organization sample size calculator. Based on a previously reported ACE prevalence of 28% among psychiatric outpatients[15] with a 95% confidence level and a 5% margin of error, the calculated sample size is 300 participants.

Inclusion criteria are as follows:

- Patients with diagnosed mental illness (as defined in the operational definition) presenting to the Psychiatry OPD of Ward 20 at JPMC
- Patients aged 18 years and above who consent to participate in the research
- Male, female, and other gender patients
- Treatment duration of at least 6 months Exclusion Criteria:
- Patients who refuse to provide informed consent
- Patients with moderate to severe intellectual disability or compromised mental faculties due to dementia, delirium, traumatic or acquired brain injury
- Patients experiencing active psychosis at the time of assessment

Instruments

A semi-structured proforma was used to collect demographic and clinical information, including: sociodemographic characteristics (age, gender, religion, mother tongue, education, occupation, marital status, monthly income, area of residence), family structure, family history of psychiatric illness, personal psychiatric history and type of adverse childhood experiences.

For ACE assessment, the culturally adapted version of the Adverse Childhood Experiences-International Questionnaire (ACE-IQ) was utilized. This instrument has demonstrated good psychometric properties across diverse cultural contexts, with adequate reliability and validity reported in multiple studies. The ACE-IQ assesses various domains of childhood adversity, including physical, emotional, and sexual abuse; physical and emotional neglect; and various forms of household dysfunction.

Procedure

After obtaining ethical approval from the JPMC Institutional Review Board (IRB) and the Research Evaluation Unit (REU) of the College of Physicians and Surgeons Pakistan (CPSP), eligible patients from the JPMC Outpatient Department of Psychiatry and Behavioral Sciences were enrolled in the study.

Informed consent was obtained from all participants. Participants were assured of confidentiality and informed of their right to withdraw from the interview at any point without justifying. Any ethical issues encountered during the study were addressed according to international guidelines.
Based on the questionnaire responses, a database was developed using the Statistical Package for Social Sciences (SPSS Version 23.0). Qualitative demographic variables such as marital status, educational levels, occupation, religion, mother tongue, and family structure was analyzed descriptively with frequencies and percentages. Quantitative variables such as age will be presented as mean ± standard deviation.

RESULTS

Table 1
Demographic details of the sample

	FREQUENCY (n)	PERCENTAGE (%)	MEAN (SD)
SEX			
Female	157	52.3%	0.52 (0.50)
Male	143	47.7%	
AGE			
18-30	156	52.0%	0.71 (0.883)
31-44	90	30.0%	
45-58	38	12.7%	
59-70	16	5.3%	
MARITAL STATUS			
Single	122	40.7%	0.74 (0.775)
Married	149	49.7%	
Divorced	16	5.3%	
Widow	11	3.7%	
Separated	2	0.7%	
MOTHER TONGUE			
Sindhi	40	13.3%	
Balochi	13	4.3%	3.13 (1.665)
Punjabi	29	9.7%	
Pashto	73	24.35	
Urdu	94	31.3%	
Saraiki	32	10.7%	
Others	19	6.3%	
RESIDENCE			
Rural	73	24.3%	0.24 (0.43)
Urban	227	75.7%	

A total of 300 patients participated in the study. The sample comprised 157 (52.3%) females and 143

(47.7%) males. The age distribution showed that most participants were young adults aged between 18–30 years (n=156, 52.0%), followed by those aged between 31–44 years (n=90, 30.0%), 45–58 years (n=38, 12.7%), and 59–70 years (n=16, 5.3%). Regarding marital status, nearly half of the participants were married (n=149, 49.7%), 40.7% (n=122) were single, while smaller proportions were divorced (n=16, 5.3%), widowed (n=11, 3.7%), or separated (n=2, 0.7%). Mother tongue distribution indicated that Urdu was the most spoken language (n=94, 31.3%), followed by Pashto (n=73, 24.3%), Sindhi (n=40, 13.3%), Saraiki (n=32, 10.7%), Punjabi (n=29, 9.7%), others (n=19, 6.3%), and Balochi (n=13, 4.3%). Most participants resided in urban areas (n=227, 75.7%), while 24.3% (n=73) lived in rural settings.

Table 2
Frequency of ACEs per type

ACEs	Prevalence
Physical Abuse	17.87%
Emotional abuse	17.87%
Sexual Abuse	6.7%
Physical Neglect	11.11%
Emotional Neglect	26.57%
Divorce	0.48%
Substance abuse	2.9%
Mental illness	11.11%
Crime	1.45%
Coercion	3.86%

The analysis of 300 psychiatric patients revealed emotional neglect as the most prevalent ACE (26.57%), followed by physical abuse (17.87%) and emotional abuse (17.87%). A higher percentage of sexual abuse was anticipated, but, unlike our estimation, despite being asked in a private setting, in a non-judgmental way, sexual abuse was not as highly reported as we anticipated; it was reported by 6.7% of participants. Household dysfunction categories included physical neglect (11.11%), household mental illness (11.11%), household substance abuse (2.9%), household criminal behavior (1.45%), and parental divorce/separation (0.48%). Coercion was reported by 3.86% of participants.

DISCUSSION

The findings of this study contribute valuable insights into the frequency and types of adverse childhood experiences (ACEs) among psychiatric patients in a low-resource, South Asian setting. The results underscore the pervasive nature of childhood adversity in this population while revealing critical nuances in ACE distribution that warrant careful interpretation.

Emotional neglect emerged as the most prevalent ACE (26.57%), followed by physical abuse (17.87%) and emotional abuse (17.87%). This pattern diverges from Western studies, where household dysfunction and physical abuse typically dominate ACE profiles.[16,17] The elevated rates of emotional

neglect may reflect cultural normalization of emotional unavailability in caregiver-child relationships within collectivist societies, where material provision often overshadows emotional attunement[18,19]. However, underreporting of more stigmatized ACEs, particularly sexual abuse (6.7%), likely persists due to patriarchal norms and legal barriers to disclosure in Pakistan[20].

The remarkably low reporting of parental separation/divorce (0.48%) contrasts sharply with global psychiatric samples[17,18] potentially indicating cultural pressures to maintain familial structures despite dysfunction. This aligns with regional studies highlighting extended family networks as buffers against formal marital dissolution, even in high-conflict households[21]. Conversely, the substantial rates of household mental illness (11.11%) and physical neglect (11.11%) suggested intergenerational transmission of trauma in families lacking access to mental health resources[22].

Limitations

Several limitations temper interpretation for example cross-sectional design or recall bias that might have given forth estimates of ACE other than actual happening, particularly for stigmatized experiences like sexual abuse[18,20]. The single-center sampling limited generalizability to Pakistan's diverse regions, while the ACE-IQ's focus on overt trauma might have overlooked culturally specific adversities like forced child labor or dowry-related abuse[21].

Notably, the lack of a control group prevents direct comparisons with non-clinical populations. However, the 26.57% emotional neglect rate substantially exceeds the 10-15% reported in Pakistani community studies[20], reinforcing ACEs' clinical relevance[17].

Implications

These findings advocate for systemic reforms in Pakistan's mental healthcare infrastructure. The high ACE burden necessitates universal trauma screening using validated, culturally adapted tools like the ACE-IQ[19,23]. Clinicians must recognize that emotional neglect—often minimized as "strict parenting"—constitutes a potent risk factor requiring intervention[18,24].

Future Directions

Longitudinal studies tracking ACE trajectories across developmental stages could clarify causal pathways in this population[17,22]. Qualitative research is urgently needed to explore cultural constructs of emotional neglect and validate ACE measures against local experiences of adversity[20,21]. Neuroimaging investigations may elucidate why Pakistani patients exhibit frontal lobe changes despite lower cumulative ACE scores than their Western counterparts[23,24].

Intervention trials testing trauma-focused cognitive behavioral therapy (TF-CBT) adaptations for South Asian contexts should prioritize scalability in resource limited settings[21,25]. Policymakers must address structural drivers of ACEs through poverty alleviation programs and legislative reforms against child corporal punishment, still legally permitted in Pakistan's educational and domestic spheres[20].

CONCLUSION

ACE patterns in Pakistani psychiatric patients reflect cultural norms, including normalized emotional neglect and familial preservation despite dysfunction. Trauma-informed care addressing these culturally mediated adversities is critical for improving mental health outcomes.

CONFLICT OF INTEREST

All authors declared no conflict of interest exist.

FUNDING

None

REFERENCES

1. McLachlan K, Roters J, Ahmed D, Moulden H, Marshall L. Adverse childhood experiences in forensic psychiatric patients: Prevalence and correlates from two independent Canadian samples. The Journal of Forensic Psychiatry & Psychology [Internet]. 2024 May 3 [cited 2025 May 20];35(3):406–24. Available from: https://www.tandfonline.com/doi/full/10.1080/14789949.2024.2338905
2. Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, et al. REPRINT OF: Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. Am J Prev Med. 2019 Jun;56(6):774–86.
3. Arunothong W. Prevalence of Adverse Childhood Events (ACEs) and Its Relationships to Life-Satisfaction Among Patients with Psychiatric Disorders. AJP [Internet]. 2020 [cited 2025 May 20];6(4):421. Available from: http://www.sciencepublishinggroup.com/journal/paperinfo?journalid=380&doi=10.11648/j.ajp.20200604.15
4. Weiss MJ, Wagner SH. What explains the negative consequences of adverse childhood experiences on adult health? Insights from cognitive and neuroscience research. Am J Prev Med. 1998 May;14(4):356–60.
5. Kibitov AA, Trusova AV, Vyshinsky KV, Mazo GE, Kibitov A. |O. Development and Analysis of Psychometric Properties of a New Russian Version of the Adverse Childhood Experience — International Questionnaire (ACE-IQ). Counseling Psychology and Psychotherapy [Internet]. 2024 May 7 [cited 2025 May 20];32(1):29–57. Available from: https://psyjournals.ru/en/journals/cpp/archive/2024_n1/Kibitov_Trusova_et_al
6. Arunothong W. 2.18 PREVALENCE OF ADVERSE CHILDHOOD EVENTS (ACES) AND ITS RELATIONSHIP TO LIFE-SATISFACTION AMONG PATIENTS WITH PSYCHIATRIC DISORDERS. Journal of the American Academy of Child & Adolescent Psychiatry [Internet]. 2019 Oct [cited 2025 May 20];58(10):S176–7. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0890856719315679
7. Benarous X, Raffin M, Bodeau N, Dhossche D, Cohen D, Consoli A. Adverse Childhood Experiences Among Inpatient Youths with Severe and Early-Onset Psychiatric Disorders: Prevalence and Clinical Correlates. Child Psychiatry Hum Dev. 2017 Apr;48(2):248–59.
8. Chen W, Yu Z, Wang L, Gross D. Examining Childhood Adversities in Chinese Health Science Students Using the Simplified Chinese Version of the Adverse Childhood Experiences-International Questionnaire (SC-ACE-IQ). Advers Resil Sci [Internet]. 2022 [cited 2025 May 20];3(4):335–46. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9580443/

9. Pace CS, Muzi S, Rogier G, Ballestracci E, Mazzola G. The adverse childhood experiences—International questionnaire in clinical and at-risk samples worldwide: A systematic review (part II). Child Abuse Review [Internet]. 2024 May [cited 2025 May 20];33(3):e2883. Available from: https://onlinelibrary.wiley.com/doi/10.1002/car.2883
10. Van der Feltz-Cornelis CM, de Beurs E. The 10-item Adverse Childhood Experience International Questionnaire (ACE-IQ-10): psychometric properties of the Dutch version in two clinical samples. Eur J Psychotraumatol [Internet]. [cited 2025 May 20];14(2):2216623. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10274524/
11. Pace CS, Muzi S, Rogier G, Ballestracci E, Mazzola G. The adverse childhood experiences—International questionnaire in clinical and at-risk samples worldwide: A systematic review (part II). Child Abuse Review [Internet]. 2024 May [cited 2025 May 20];33(3):e2883. Available from: https://onlinelibrary.wiley.com/doi/10.1002/car.2883
12. Chen W, Yu Z, Wang L, Gross D. Examining Childhood Adversities in Chinese Health Science Students Using the Simplified Chinese Version of the Adverse Childhood Experiences-International Questionnaire (SC-ACE-IQ). Advers Resil Sci [Internet]. 2022 [cited 2025 May 20];3(4):335–46. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9580443/
13. Tumlin KI, Crowley A, Turner B, Riley E, Lyons J. Detection of traumatic stress in the presence of traumatic experiences: the role of resilience factors in foster care children five years or younger. Int J Ment Health Syst [Internet]. 2023 Nov 15 [cited 2025 May 20];17:39. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10648362/
14. Wilson DH, Nelson KE, Gresh A, Ricker A, Littlepage S, Krienke LK, et al. The Preimplementation Process of Adapting a Culturally Informed Stress Reduction Intervention for Native American Head Start Teachers. Glob Implement Res Appl [Internet]. 2023 [cited 2025 May 20];3(1):16–30. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9827016/
15. Koirala R, Iyer Søegaard EG, Kan Z, Ojha SP, Hauff E, Thapa SB. Exploring complex PTSD in patients visiting a psychiatric outpatient clinic in Kathmandu, Nepal. Journal of Psychiatric Research [Internet]. 2021 Nov 1 [cited 2025 May 20];143:23 9. Available from: https://www.sciencedirect.com/science/article/pii/S002239562100529X
16. A comprehensive evaluation of adverse childhood experiences, social–emotional impairments, and neurodevelopmental disorders in cannabis-use disorder: Implications for clinical practice - PMC [Internet]. [cited 2025 May 22]. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10594251/
17. Mijnster T, Boersma GJ, van Veen MM, Liemburg E, Cath D, Pijnenborg GHM, et al. Sleep disorders in a naturalistic cohort of Dutch psychiatric outpatients: prevalence rates and associations with psychopathology symptom severity and well-being. J Sleep Res. 2024 Apr;33(2):e14009.
18. Gloger S, Martínez P, Behn A, Chacón MV, Cottin M, Diez de Medina D, et al. Populationattributable risk of adverse childhood experiences for high suicide risk, psychiatric admissions, and recurrent depression, in depressed outpatients. Eur J Psychotraumatol [Internet]. [cited 2025 May 22];12(1):1874600. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8118528/

19. Morán-Sánchez I, Luna A, Pérez-Cárceles MD. Assessment of Capacity to Consent to Research Among Psychiatric Outpatients: Prevalence and Associated Factors. Psychiatr Q. 2016 Mar;87(1):89–105.
20. Honkalampi K, Flink N, Lehto SM, Ruusunen A, Koivumaa-Honkanen H, ValkonenKorhonen M, et al. Adverse childhood experiences and alexithymia in patients with major depressive disorder. Nord J Psychiatry. 2020 Jan;74(1):45–50.
21. Yıldırım YE. Prevalence of Prolonged Grief Disorder and Related Clinical Factors Among Turkish Psychiatric Outpatients During the COVID-19 Pandemic. Omega (Westport) [Internet]. 2023 Jun 30 [cited 2025 May 22];00302228231187296. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10315512/
22. Duran Ş, Fıstıkcı N, Keyvan A, Bilici M, Çalışkan M. [ADHD in adult psychiatric outpatients: prevalence and comorbidity]. Turk Psikiyatri Derg. 2014;25(2):84–93.
23. Byansi W, Galvin M, Chiwaye L, Luvuno Z, Kim AW, Sundararajan R, et al. Adverse childhood experiences, traumatic events, and mental health among adults at two outpatient psychiatric facilities in Johannesburg, South Africa: a cross-sectional analysis. BMC Psychiatry [Internet]. 2023 Aug 10 [cited 2025 May 22];23:581. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10413614/
24. Mendizabal A, Nathan CL, Khankhanian P, Anto M, Clyburn C, Acaba-Berrocal A, et al. Adverse Childhood Experiences in Patients With Neurologic Disease. Neurol Clin Pract. 2022 Feb;12(1):60–7.
25. Haapalahti E, Hakko H, Leppänen V, Räsänen S. One-year prevalence and psychiatric comorbidity of borderline personality disorder in a medical certificate population: a registry study of psychiatric outpatients in community mental health care in the city of Oulu. Nord J Psychiatry. 2023 Nov;77(8):811–7.

AUTHOR(S) CONTRIBUTION/UNDERTAKING FORM

Sr. #	Author(s) Names	Author(s) Affiliation	Contribution
1.	Maham Irfan	Department of Psychiatry & Behavioural Sciences, Jinnah Postgraduate Medical Centre, Karachi, Pakistan.	Conceptualisation, Study Design, IRB approval, Manuscript Drafting.
2.	Syed Muhammad Mehdi Taqvi	Sindh Medical College, Jinnah Sindh Medical University, Karachi, Pakistan.	Statistical Analysis and Manuscript Drafting.
3.	Chooni Lal	Department of Psychiatry & Behavioural Sciences, Jinnah Postgraduate Medical Centre, Karachi, Pakistan.	Literature Review, Supervising, Final Approval.
4.	Laiba Khan	Department of Psychiatry & Behavioural Sciences, Jinnah Postgraduate Medical Centre, Karachi, Pakistan.	Data Collection, Statistical Analysis, Manuscript Review.
5.	Yusra Abdul Haque	Department of Psychiatry & Behavioural Sciences, Jinnah Postgraduate Medical Centre, Karachi, Pakistan.	Data Collection, Literature Review
6.	Musfirah Khalid	Department of Psychiatry & Behavioural Sciences, Jinnah Postgraduate Medical centre, Karachi, Pakistan.	Data Collection, Literature Review