

ORIGINAL ARTICLE

Spectrum of psychosomatic disorder in children at the children hospital and the institute of child health Multan.

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ABSTRACT... Objective: To explore the Spectrum of Psychosomatic Disorders in Children Presenting to CH & ICH Multan. **Study Design:** Descriptive Cross Sectional. **Setting:** Developmental- Behavioral Pediatric, Out Patient Department (OPD) at CH & ICH Multan. **Period:** September 2022 to September 2023. **Methods:** After informed consent of participants & approval of ethical committee, (306/22) total of 80 Patients, age group 5-15 years, of both genders were recruited in this study according to inclusion criteria. After detailed history and examination by Physician and Psychologist, evaluated the presenting complaints, underlying stress factors and consequences of these stressor in these children. The information was entered into pre-formed Performa. Data were analyzed through SPSS 21. **Results:** Total study participants were 80, male [59 (73.2%)] with male to female ratio of 1.3:1and age group 5-10years [62(76.8%)] were prominent. Most common presenting complaints were headache 80 (100%), dizziness 76 (95%), Fits like activity 78 (96%), limbs Pain 75 (87.6%), Pain Abdomen 72 (84%) & Nausea 58 (72%). These symptoms occur isolated or combination of two or more. Psychosomatic disorder found mainly in families with low Socioeconomic status 52 (64.5), & school attending students 68 (84%). Children who left school due to these stressors were 71 (88.8%). Other consequences were depression, low self-esteem and irritable behavior. **Conclusion:** Psychosomatic disorder is commonly present in children particularly in age group 5-10 years, male gender with headache as most common presentation. Pre dominant results are School dropout, Depression, Low Self-esteem & Irritable behavior.

Key words: Depression, Headache Psychosomatic Disorder, Socioeconomic Status, School Dropout.

INTRODUCTION

Psychosomatic disorder is a psychological condition in which physical symptoms present without any medical evidence and logic. People with this condition may have high concern about symptoms, excessive thoughts and feelings about not feeling well, which affects their ability to function appropriatly.^{1,2}

Children may also be affected by this mental health disorder. These children worry a lot even about somatic symptoms of headaches, stomachaches, or being tired, although physical feelings of these issues are pretty normal.^{1,2,3} In children, psychosomatic disorders may represent as number of symptoms like stress, anxiety, difficult breathing, weakness, gastrointestinal manifestation, pain involving any organ e.g.,

headaches (migraine and tension), abdominal/pelvic, dermatitis, and learned behaviors to gain attention or benefits. Often children develop physical symptoms when another family member is seriously ill. Patients' daily activities are affected negatively with prolonged physical symptoms.^{4,5}

These physical symptoms are thought to develop unintentionally in response to a psychological stress.⁶ There are certain factors which predispose and precipitate somatic symptoms in pediatric patients, like developmental transitions, school pressures, high-achieving families, dysfunctional family patterns, internalizing coping mechanisms, child temperamental issues, psychiatric comorbidities, and a history of trauma and physical illness itself.⁷

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For making a diagnosis complete history and thorough examination is needed but essential investigations must be carried out to rule out any organic cause of symptoms.^{8,9} Criteria from diagnostic and statistical manual of mental disorders V(DSM-V) is a best approach to make a diagnosis.^{4,8}

Beneficial management approach focusses to get children back into normal life, includes Psychotherapy and symptomatic rehabilitation. Physiotherapy may also be beneficial for these children specially with motor manifestations. Medications may be needed sometimes, to relieve the symptoms selective serotonin reuptake inhibitors (SSRIs), H2 receptor blockers, paracetamol, ibuprofen may be used to relieve pain or the anxiety or depression that can accompany these disorders. 10

Identify psychosomatic disorder are important because this may lead to certain consequences which can make family life miserable. There is limited local and international data available, and clinical guidelines about this disorder are lacking, that's why this study was planned to explore psychosomatic disorders including its manifestations, aggravating factors and consequences of these symptoms on child and whole family.

METHODS

This Cross-Sectional Descriptive study was carried at the Developmental - Behavioral Pediatric department, of the CHICH Multan, from September 2022 to September 2023. After informed consent of participants & approval of ethical committee (306/22), total of 80 Patients were recruited by convenient sampling.

Children of both genders, age group 5-15 years, fulfilling DSM-V criteria of Psychosomatic Disorder were included. Children with chronic systematic and Psychiatric illness, and familial refusal were excluded. All patients were diagnosed by history, examination and available investigations.

Clinical data was collected included demographics, detailed presenting complaints,

medical & psychiatric history of child and family, coping styles, and underlying stress factors at home, school, madrassa and anywhere else were evaluated. Consequences of these stressors in children and family was also evaluated. All the data was entered on preformed Performa. SPSS 21 was used to analyze Data which find frequency and percentages of all variables. Stratification of age was done and standard deviation was also calculated.

RESULTS

Out of 80 study participants [59 (73.2%)] were male with male to female ratio of 1.3:1. Age group 5-10years [62(76.8%)] was prominent. Psychosomatic disorder found mainly in families with low Socioeconomic status 52 (64.5%) (Table-I). Most common presenting complaints were Headache 80 (100%), dizziness 76 (95%). Fit like activity 78 (96%), Limbs Pain 75 (87.6%), Pain Abdomen 72 (84%) & Nausea 58 (72%) (Table-II). These symptoms occur isolated or combination of two or more. In 68(85%) children precipitating factors were present in school, then at madrassa and home. Commonly found factor was corporeal punishment. Children who left school due to these stressors were 71 (88.8%). Other consequences were depression, low selfesteem and irritable behavior. (Table-III)

Variable	Frequency	Percentage
Age 5-10yrs >10-15yrs	61 19	78.2% 21.8%
Gender Male Female	57 23	73.1% 26.9
Socioeconomic status Low High	52 28	65% 35%

Table-I. General characteristics of participants (n=80)

DISCUSSION

A medical person dealing with pediatrics should be trained to identify and manage the children with psychosomatic disorder, because there is a considerable percentage of children presenting with physical symptoms, hide their mental health problem behind these symptoms.

Complaints	Frequency	Percentage
Headache	80	100%
Fit Like Activity	78	96%
Vertigo	76	95%
Limb's pain	75	87%
Abdominal Pain	72	84%
Nausea	58	72%
Fatigue	58	72%
Sensory Loss	41	51.3%
Sleep Disturbance	32	40%
Chest Pain	12	15%
Speech Problem	12	15%
Poor Early Rising	10	12.6%

Table-II. Presenting complaints (n=80)

Sources of Stress				
	Frequency	Percentage		
School	68	85%		
Home	60	75%		
Madrassa	56	70%		
Consequences of Stress				
School Left	71	88.8%		
Depression	53	66.3%		
Lack of Confidence	42	52.5%		
Irritability	40	50%		

Table-III. Sources of stress and consequences

According to our study Psychosomatic disorder are commonly present in children. Other researchers also favor our finding that most of the times children diagnosed with psychosomatic disorder presented with somatic symptoms.^{11,12}

We found male gender with age group 5-10 years are common affecters, with somatic pain, as most common presentation. Headache was leading symptom, then there was abdominal and chest pain. Psychosomatic pain in the form of headache and abdominal is also a leading presentation in Italian pediatric population¹¹ and few others. ^{13,14} Coozi also highlighted that the children presenting in emergency with pain involving any organ, is usually due to psychosomatic factors when investigated. ¹⁵

Our other significant presentations are fit like activity, vertigo, limbs pain, nausea, fatigue, sensory loss, and sleep disturbance. Similarly, Emiroğlu et al¹⁶ found somatic symptoms of headache, vertigo, and syncope in children significantly.

Pre dominance result due to psychosomatic disorder were School dropout, Depression, Low Self-esteem & Irritable behavior in our study population.

Psychiatric disorders like depression, anxiety and somatic disorders were remarkably found in children although they initially presented with chest pain, medical work up was normal when investigated by Tunaoglu et al.¹⁷ Abdominal minimal pain was significant somatic symptom among children recruited by Campo et al.¹⁸ in a case-control study from pediatric primary care office, and final diagnosis of these patients by using standardized psychiatric interviews, were anxiety (79%) and depressive disorders (43%). While Kashikar-Zuck et al detected anxiety and mood disorders in pediatric patients presenting with juvenile fibromyalgia at pediatric rheumatology clinic.¹⁹

Psychosomatic symptoms lead to worse quality of life of children and adolescents. These children have to visit hospitals more frequently as compared to patients suffered from organic diseases, so they remain absent from school most of the days and stays at home which further increase their problem.^{12,20}

In our data stress factors leading to these problems were present mainly in school but also in madrassas and home circumstances, common factors were corporeal punishment, familial issues including addicted fathers, financial issues and learning disorders. similarly, School and peer stress, were the most important factors along with family conflict, and community violence in African American children by Shayla hart and group.⁶ Physical symptoms due to psychiatric illness were significantly associated with school related stress in school survey conducted at Japan.²¹

An appropriate approach to these patients may reduce the frequent use of emergency services and related costs by visits of these patients.²²

This work has some limitations. This was conducted at single Centre; further studies must be planned at other institutions and at community level too. Broader age group must be studied.

CONCLUSION

Psychosomatic disorder is commonly present in children, particularly in male and age group 5-10 years. Headache is the most common presentation. Pre dominance consequences are School dropout, Depression, Low Self-esteem & Irritable behavior.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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REFERENCES

- Thomson K, Randall E, Ibeziako P, Bujoreanu IS. Somaform disorders and trauma in medically admitted children, adolescents and young adults: Prevalence rates and psychosocial characteristics. Psychosomatics. 2014; 55(6):630-9. https://doi.org/10.1016/j.psym.2014.05.006
- Sun XY, Fan HM, Bai B, Song HT, Tao FY, Song ZX, et al. Psychomatic condition of children and adolescents exposed to 5.12 Wenchuan earthquake. Int J Behav Med. 2014 Aug; 21(4):730-5. doi:10.1007/s12529-013-9377-z.PMID:24337952.
- 3. Eminson DM. **Somatising in children and adolescents.** Manag Outcomes Adv Psychiatr Treat. 2001; 7(5):388-98. https://doi.org/10.1192/apt.7.5.388

- American Psychiatric Association. Somatic Symptom and related disorders. In: American Psychiatric Association, ed. Diagnostic and Statistical Manual of Mental Disorders, 5th edn. Arlington: American Psychiatric Publishing; 2013; 318-21.
- Malas N, Ortiz-Aguayo R, Giles L, Ibeziako P. Pediatric somatic symptom disorders. Curr Psychiatry Rep. 2017; 19(2):11. https://doi.org/10.1007/s11920-017-0760-3.
- Hart SL, Hodkinson SC, Balchger HM, Hyman C. Cooley-Strickland Somatic symptoms, peer and school stress and family and community violence exposure among urban elementary school children. Behav med. 2013 Oct; 36(5):454-65. doi10.1007/s10865-012-9440-2.Epub 2012 jul7.PMID: 22772584 PMCID: PMC3726557.
- Campo. Annual research review: Functional somatic symptoms and associated anxiety and depression developmental psychopathology in pediatric practice. J Child Psychol Psychiatry. 2012; 53(5):575-92.
- Cozzi G, Barbi E. Chronic school absenteeism as a diagnostic clue for pediatricians. J Paediatr Child Health. 2020; 56(2):191-3. https://doi.org/10.1111/ jpc.14689
- Heimann P, Herpertz-Dahlmann B, Buning J, Wagner N, Stollbrink-Peschgens C, Dempfle A, et al. Somatic symptom and related disorders in children and adolescents: Evaluation of a naturalistic inpatient multidisciplinary treatment. Child Adolesc. Psychiatry Ment. Health 2018; 12:34.
- Bonvanie IJ, Kallesoe KH, Janssens KAM, Schroder A, Rosmalen JGM, Rask CU. Psychological interventions for children with functional somatic symptoms: A systematic review and meta-analysis. J Pediatr. 2017; 187:272-81. https://doi.org/10.1016/j.jpeds.2017.03.017
- Cozzi Lucarelli A, Borrometi F, Corsini L, Passone E, Pusceddu S, Morabito G, et al. How to recognize and manage psychosomatic pain in pediatric emergency department. Italian Journal of Pediatrics. 2021; 47(1):74.
- Campo JV. Annual research review. Functional somatic symptoms and associated anxiety and depression-developmental psychopathology in pediatric practice. J Child Psychol Psychiatry. 2012; 53(5); 572-92. http://doi.org/10.1111/j-1469-7610.2012.02535-x.

- 13. Chun TH, Mace SE, Katz ER. American Academy of Pediatrics Committee on Pediatric Emergency Medicine: American College of Emergency **Physicians Pediatric Emergency** Medicine Committee. Evaluation and Management of Children with Acute Mental Health or Behavioral Problems. Part II: Recognition of Clinically Challenging Mental Health Related Conditions Presenting with Medical or Uncertain Symptoms. Pediatrics. 2016 Sep; 138(3):e20161573. doi:10.1542/peds.2016-1573. Epub 2016 Aug 22. PMID: 27550976.
- Malas N, Ortiz-Aguayo R, Giles L, Ibeziako P. Pediatric somatic symptom disorders. Curr Psychiatry Rep. 2017; 19(2):11. https://doi.org/10.1007/s11920-0760-3.
- Cozzi G, Minute M, Skabar A, Pirrone A, Jaber M, Neri E, et al. Somatic symptom disorder was common in children and adolescents attending an emergency department complaining of pain. Acta Paediatr. 2017 Apr; 106(4):586-93. doi: 10.1111/apa.13741. Epub 2017 Jan 27. PMID: 28052403.
- Emiroğlu FN, Kurul S, Akay A, Miral S, Dirik E.
 Assessment of child neurology outpatients with headache, dizziness, and fainting. J Child Neurol. 2004; 19(5):332-36. [PubMed] Google Scholar
- Tunaoglu FS, Olguntürk R, Akcabay S, Oguz D, Gücüyener K, Demirsoy S. Chest pain in children referred to a cardiology clinic. Pediatric Cardiol. 1995; 16(2):69-72. [PubMed] Google Scholar

- Campo JV, Bridge J, Ehmann M, Aitman S, Lucas A, Birmarer B, et al. Recurrent abdominal pain, anxiety, and depression in primary care. Pediatrics. 2004; 113(4):817-24. [PubMed] Google Scholar
- Kashikar-Zuck S, Parkins IS, Graham TB, Lynch AM, Passo M, Johnston M, et al. Anxiety, mood, and behavioral disorders among pediatric patients with juvenile fibromyalgia syndrome. Clin J Pain. 2008; 24(7):620-26. [PubMed] Google Scholar
- Benini F, Piga S, Zangardi T, Messi G, Tomasello C, Pirozzi N, et al. Nationwide study of headache pain in Italy shows that pain assessment is still inadequate in pediatric emergency care. Acta Paediatr. 2016; 105:200-8.
- Tanaka H, Terashima S, Borres MP, Thulesius O. Psychosomatic problems and countermeasures in Japanese children and adolescents. Biopsychosoc Med. 2012 Mar 20:6:6. doi: 10.1186/1751-0759-6-6.
- Barsky AJ, Orav EJ, Bates DW. Somatization increases medical utilization and costs independent of psychiatric and medical comorbidity. Arch Gen Psychiatry. 2005; 62(8):903-10. https://doi.org/10.1001/arch-psyc.62.8.903.

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4	Miss Nadia Iqbal: Discussion, final approval.
5	Miss Komal Ilyas: Literature search, study design, introduction.
6	Miss Maryum Razzaq: Data interpretation, discussion, final approval.