Original research paper

Somatization in children: teaching a difficult subject to medical students

Hemamali Perera[1]

Abstract

The article describes a specific teaching / learning assignment for medical undergraduates on somatization in children. The setting for learning for the students was a non-specialist paediatric outpatient service. The students followed a selected working definition in identifying their cases for study and used a semi-structured questionnaire to further investigate the presenting complaints, possible aetiology and the impact of symptoms in the child's life. The students then presented their findings at a seminar with an ensuing discussion to understand the relevant diagnoses, psycho-physiological processes in symptom generation and the clinical management. The challenges in learning about somatization for the undergraduate and in applying this learning to clinical practice are discussed.

Introduction

This article discusses the specific focus given to teaching / learning of somatization in children in the clinical training programme in Psychiatry for medical undergraduates. The concept of "somatization" implies a clinical phenomenon where a patient presents with one or more physical complaints but explanatory patho-physiological mechanisms are not evident on assessment, investigation or follow up. Furthermore, it is noted that the quality of the somatic complaints and the degree of impairment of function resulting from the symptoms are grossly exaggerated when compared to the extent of the physical findings (Lask & Fossen, 1989).

The term "medically unexplained somatic symptoms" is also frequently used in literature to indicate this clinical state.

Symptoms of this nature in patients are considered to represent emotional distress and sometimes medical help seeking behaviour (Lipowsky, 1988). This article describes a teaching / learning activity conducted for the final year medical students on recognising and understanding "somatization" and its management in the general medical setting.

[1]*Faculty of Medicine*
University of Colombo,
Sri Lanka

The rationale for teaching somatization

Why does somatization in children deserve special focus in an undergraduate medical curriculum? The students are trained to function effectively in general medical practice (as stated in the Medical Student Handbook 2006), where encountering children with somatization in significant numbers is unavoidable.

Empirical evidence for the high prevalence of somatization is available from research on both general and clinic populations. For example, 95% to 98% of children with mental health problems complain of some form of physical symptom (Goldberg, Novack & Gask, 1992); 50% of 3 to 12 year olds were found to complain of at least one physical symptom in the previous two weeks of which, prevalence of recurrent abdominal pain (RAP), limb pain, chest pain and fatigue was found in 25 to 30% (Kramer & Garralda, 2000) among children who presented with RAP, only 4 out of 111 developed an organic illness on long term follow up (Stickler & Murphy, 1979). Clinical presentations with pseudo-neurological signs are said to be commoner in Asian cultures (Walker, Garber & Greene, 1991).

Furthermore, it is recognised that children with somatization are at risk of being subjected to iatrogenic problems from inappropriate management and invasive interventions (Srinath et al., 1993). Hence, it is important that medical students acquire adequate knowledge and skills in managing somatization for effective practice later as healthcare professionals. In addition to ensuring the well being of these children, appropriate management also helps in reducing an unnecessary financial burden to the health services from costly investigations.

The learning assignment in somatization

The students participated in the learning activity in groups of 25. The setting for learning for the students was a non-specialist paediatric outpatient service. The students first screened the patients to select cases with somatization for further study. The aim was to select children who had repeatedly visited doctors with the same somatic complaint/s for 3 months or more, where a cause or a diagnosis has not been arrived at despite examinations, investigations and trials of medication.

The students then administered a semi-structured questionnaire for further information gathering, which focused on the type of symptoms, duration, attributed cause for the symptoms by the parent and the impact of the symptoms on child's daily functioning. Lastly, any possible stressful experiences currently operating in the child's life that were causing emotional distress were explored.

Each group of students later presented their findings in a classroom setting with an ensuing discussion with the author to understand the relevant psycho-physiological processes in symptom generation and the clinical management. The presentations were sometimes enriched by the students role-playing a medical consultation with a somatizing child.

What the students learnt

Altogether, 192 students were involved in the initial programme which was conducted in the academic year 2004 / 2005. Each student had the opportunity to administer the semi-structured questionnaire to two or more children who had persistent symptoms for 3 months or more. Here, the students experienced a self learning exercise that was structured, and reinforced by relevant learning activities.

Different groups of students reported that one out of 5 to 10 patients they screened fell within the working definition of somatization used by them. Of the 125 children who were given detailed screening and assessment by the students, the commonest single symptom was abdominal pain and the second commonest was headache; 54 (43.3%) had the same symptoms continuing for 6 months or more with no positive investigation findings, no diagnosis being made and no relief obtained from the treatments received; 1/3 had made 6 or more visits to doctors for the same symptom; the symptoms had an adverse effect on school attendance in 72 (57.6%) of children; parents recognised marked emotional distress due to the symptoms in 55 (44%) of children; even though only 5 (4%) of parents considered the possibility of a psychological aetiology for the symptoms, a possible connection between the symptoms and a stressful experience was identified by them in 64 (51.2%) of children.

The discussions on the data gathered by the students focussed on learning the following management issues.

1. How to provide a rational explanation for the symptoms to the child and family, look for positive evidence for psychological issues and avoid further investigations "just in case" there is a physical problem.

2. How to explore certain popular cultural attributions to explain the symptoms that are directly related to anxiety and repeated help seeking in the parents. How to manage any such myths and misconceptions about the symptoms.

3. How to extend the assessment further to make a psychiatric diagnosis such as depression and adjustment disorder in cases where there are severe disabling symptoms and impairment in the day to day functioning in the child.

Student feedback

In providing feedback on the learning experience, the students expressed their opinion on a 4 point scale of very satisfied, satisfied, dissatisfied and very dissatisfied. The majority expressed satisfaction in the domains that were evaluated (Table 1). It is not possible to comment separately on the impact of this learning on later performance at the written and clinical examinations faced by the students as the assessments were combined with other aspects of child mental health.

In terms of comparing with similar programmes, five knowledge domains have been recommended for recognition and management of somatization (Menahem, 1988). Our programme complied with most of these recommendations.

Table 1: Proportions of students who were satisfied and very satisfied with the training programme

Domain of feedback	
Knowledge gained	69.8%
Skills developed	72.7%
Communicating about the illness	61.3%
Management	63.2%
Group discussion	73.6%
Facilities for learning	64.1%

The difficulties in teaching / learning somatization

All aspects of learning about somatization are challenging, as it demands development of adequate knowledge and understanding about related psycho-physiological phenomena, assessment skills in several different clinical domains, and good communication skills. In addition, a change of attitude is needed to overcome prejudice and stigma about psychiatry, to rise above the popular simplistic belief that symptoms without an organic cause are “put on” for attention and to avoid giving ambiguous advice.

Also, students may model similar negative attitudes as their clinical teachers in other specialities. Somatizing has a significant association with the temperament of the child, experience of life events and psychiatric morbidity (Bury, 1987), all of which should be recognized for proper management. It is known that belief in a physical cause despite lack of medical evidence often comes from the parent (Goodwin, Simms & Bergman, 1979), to which the doctors may passively submit if they are not adequately resourceful and clinically competent.
Doctors may find it difficult to challenge this belief for fear of upsetting the parent if a psychological condition is implied. Also, the anxiety about missing a physical disorder may prevail.

Conclusions

This activity should be integrated into paediatric clerkship as well as to child mental health clerkship for maximum benefit to be achieved in learning appropriate clinical care of children with somatization.

References

Bury, R. G. (1987) A study of 111 children with recurrent abdominal pain. *Australian Paediatric Journal*, 23, 117-119.

Goodwin, J., Simms, M. &Bergman, R. (1979) Hysterical seizures: a sequel to incest. *American Journal of Orthopsychiatry*, 49, 698-703.

Goldberg, R. J., Novack, D. H. & Gask, L. (1992) The recognition and management of somatization: what is needed in primary care training? *Psychosomatics*, 33, 55-61.

Kramer, T. & Garralda, M. E. (2000) Child and adolescent mental health problems in primary care. Advances in Psychiatric Treatment, 6, 287-294.

Lask, B. & Fosson, A. (1989) Childhood illness: the psychosomatic approach. Chichester, U.K.: Wiley.

Lipowsky, Z. J. (1988) Somatization: the concept and its clinical application. *American Journal of Psychiatry*, 145, 1358-1368.

Menahem, S. (1988) The extended paediatric assessment – an approach to a child with psychosomatic symptoms. *Child Psychiatry and Human Development*, 19, 132-144.

Srinath, S., Bharat, S., Girimaji, S. & Seshadri, S. (1993) Characteristics of a child inpatient population with hysteria in India. *Journal of the American Academy of Child and Adolescent Psychiatry*, 32, 822-825.

Stickler, G. B. & Murphy, D. B. (1979) Recurrent abdominal pain. *American Journal of Diseases of Children*, 133, 486-489.

Walker, L. S., Garber, J., & Greene, J. W. (1991) Somatization symptoms in paediatric abdominal pain patients: relation to chronicity of abdominal pain and parent somatization. *Journal of Abnormal Child Psychology*, 19, 379-394.