

Article

Understanding the mental health needs of secondary school children in Manchester

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ABSTRACT

Background In a time of limited resources and the need for cohesive services, understanding levels of need and prevalence is key. Manchester has a diverse range of cultures and socio-economic groups; national data is valuable but not always representative of local need.

Aim To assess the prevalence of mental health needs in secondary school pupils in Manchester.

Method Parents and teachers in three secondary schools were invited to complete the Strengths and Difficulties Questionnaire (SDQ) and a tool examining unmet needs.

Results Initially, 560 pupils were chosen. Having excluded families that opted out, 503 question-

naires were distributed. Teachers returned 200 questionnaires and parents returned 127. Higher than average levels of need were identified with teachers reporting that 18% of pupils scored abnormally on the SDQ. Parent rates were also higher than the national average at 13.4%.

Discussion Parents and teachers wanted children to be seen at home and at school, the need for consultation and outreach from mental health into schools is emphasised.

Keywords: mental health, needs assessment, secondary school

Introduction

At a time when service provision and effective allocation of resources are particularly relevant, understanding the mental health needs of children and young people is key. Sayal *et al*¹ note that children affected by poverty and deprivation are particularly vulnerable to mental health problems. Manchester is a rapidly developing city; families have a diverse

range of lifestyles, cultures and resources. There are areas of significant poverty with limited infrastructure.

The national studies from Meltzer *et al*² and Green *et al*³ have highlighted that 10% of children and young people have unmet mental health needs. The proportion of children and adolescents with any

mental disorder was greater among boys than girls (11% compared with 8%), in both younger and older children. Among 5–10 year olds, 10% of boys and 6% of girls had a mental disorder. In the older age group (11–15 years), the proportions of children with any mental disorder were 13% for boys and 10% for girls. Nearly 10% of white children and 12% of black children were assessed as having a mental health problem, whereas the prevalence rates among Asian children were 8% of the Pakistani and 4% of the Indian participants. Children living in lone-parent households and in low-income families were more than twice as likely to have a mental health problem (16%), compared with other families. This resonates through the National Service Framework for Children and Families⁴ which also emphasises the need to undertake local studies to understand local needs.

A national survey of the adult population,⁵ revealed a prevalence of mental health disorders (including substance misuse) of 23%. In the 16–19-year-old population, the prevalence was even higher at 29% nationally. Seven percent of the young people (aged 16–19 years) had more than one diagnosable disorder. Given that in this survey the prevalence of mental disorders was highest in the northwest (29% compared with 23% nationally) it can be assumed that the prevalence in the 16–19-year-old population in Manchester is also higher than the national average.

To ensure that the Manchester study can be viewed in the context of national literature, the Strengths and Difficulties Questionnaire (SDQ)⁶ was used. The SDQ was developed by Goodman,⁷ and versions are available for parents, teachers and pupils. The 25 items of this brief screening tool generate five subscales; emotional symptoms, peer problems, hyperactivity, conduct disorder and prosocial behaviour. Additionally, there is a score illustrating the impact of the symptoms. The tool can be downloaded from the SDQ website free of charge in many languages, consequently it has been used in a range of studies. A key example is the 2004 Stansfeld *et al*⁸ study. This examined whether ethnic differences in the prevalence of psychosocial distress were associated with psychosocial dysfunction. The SDQ was used to good effect in this ethnically diverse sample.

Goodman *et al*⁹ used the SDQ in a community sample. They identified that for all diagnoses, the combination of parent and teacher and young person self-report questionnaires had the greatest sensitivity. If one questionnaire is dropped, the combination of parent and teacher produces the best results; this combination also has greater sensitivity than either the parent or teacher questionnaire used alone. Furthermore, teacher questionnaires are more effective than parent questionnaires at

identifying externalising disorders, although this is only significant for conduct disorders. Parent questionnaires are more effective at identifying internalising disorders, although this is only significant for anxiety disorders. Goodman *et al* conclude that information from parents or teachers is of comparable value.

Fazel and Stein¹⁰ used the Teacher SDQ to compare rates of disturbance in refugee children with a group of children from ethnic minorities who were not refugees. It is important to note that they were able to identify differences in caseness, and also in emotional symptoms. The Relachs Study¹¹ looked at the health of young people in years 7 and 9 in east London. Mental health was assessed with a range of instruments including the self-report SDQ. In this ethnically diverse sample of children aged between 11 and 12 years, 16.1% of boys and 16% of girls scored abnormally on the SDQ.

The aim of our study was to assess the prevalence of mental health needs in secondary school pupils in Manchester.

Method

Participants

Having obtained ethical approval from Wroughtington, Wigan and Leigh Local Research Ethics Committee, the full study encompassed children's centres, nurseries, primary and secondary schools, two colleges and Connexions. Connexions provides training and career advice for all 13–18 year olds in the United Kingdom. Special schools serving children and young people with learning difficulties and those with emotional and behavioural problems were included in the sample. The mainstream sample, Special Schools and nurseries sample were chosen by an assistant education officer. The sample of children in the 11–16 age group was selected from three secondary schools. The authors consulted a statistician to ensure that the sample would have adequate power to be representative. Meltzer *et al*² indicated a national prevalence of mental health problems in children and young people of approximately 10%. If 1400 children were studied, the confidence interval for this percentage would be in the region of two percentage points. This would mean that if the sample of 1400 children identifies a 10% prevalence, we could be 95% confident that the real prevalence is between 8 and 12%. To obtain a sample of greater accuracy would require recruiting a much larger group of children and young people. The researchers

were mindful of the administrative burden that the research would place on schools.

Tools

The views of affected families are central to an assessment of need. This exploration is, of course, enhanced by the views of universal services working with families. Consequently, a small questionnaire asking parents and teachers what they would want was distributed with the SDQ.

To ensure that schools were aware of the reasons for the project, the assistant education officer wrote to head teachers and a brief description of the study was included. This was followed by a letter from the research team. The research assistant and one of the psychiatrists then met with the head teachers. The aims and objectives of the study were communicated with an explanation of the research methodology.

The research assistant then randomly selected pupils from the register, parents of those chosen received a letter with a tear-off, opt-out slip and an information sheet. After two weeks, parents who had not returned the opt-out slip were sent a letter. This thanked parents for giving the letter their attention and once again summarised the research information. Enclosed with the letter was a copy of the SDQ and a needs questionnaire. This opt-out method was the same as that used in the two national studies. The information sheet clearly outlined the purpose of the study and this was reiterated by the letter sent with the questionnaires. By using an opt-out method, busy parents were able to participate with the minimum of effort, in addition, the returned questionnaires did not have any identifying information, enhancing anonymity. We are aware that informed consent requires a clear appreciation of the facts and ideally capacity, and we acknowledge that we did not know if all participants fulfilled this criterion. We would argue that the opportunity to participate and anonymity are valuable.

The teachers of the selected children were also provided with an information sheet. If parents did not opt-out, the relevant teacher received a Teacher SDQ.

Careful measures were put in place to protect information. The researcher recorded the pupils chosen, and this list was then stored securely within the schools. Young people were then allocated a unique identification number. This number was the only means of identification taken out of the educational establishments.

Full information on scoring the SDQ can be found on the website. This includes information on how to score the subcategories, namely hyperkinetic problems, emotional problems, conduct problems, peer problems and levels of prosocial behaviour. The summative score of the first four subcategories can be used as an indicator of mental health need. In addition, as its name implies, the impact question asks teachers to assess the impact of children's mental health needs using the categories of normal, borderline and abnormal.

Results

Initially, 560 pupils were chosen (Table 1). Having excluded families that opted out, 503 questionnaires were distributed. Teachers returned 200 questionnaires (response rate 59.6%) and parents returned 127 (response rate 25.2%).

Teachers

Using the teacher questionnaires, 18% (54) of pupils scored in the abnormal range for the summative score on the four subdivisions. Of these, 10% (30) were male and 8% (24) were female. A further 9% (27) of young people received scores indicative of borderline mental health (Table 2). National normative data are shown in Table 3 for comparison.

It can be seen that boys score more highly than girls on all of the subscales except for emotional disorders (Table 4). Some pupils scored on several of the subdivisions, the most common overlap was for conduct and hyperkinetic disorders, where 6.7% (20) of males and 5.7% (17) of females scored in

Table 1 Questionnaires from secondary schools returned by parents and teachers

Total (<i>n</i>)	Opt-out and omissions (<i>n</i>)	Sent (<i>n</i>)	Teacher questionnaires <i>n</i> (%)		Parent questionnaires <i>n</i> (%)	
			Returned	Missing	Returned	Missing
560	57	503	300 (59.6)	203 (40.4)	127 (25.2)	376 (74.8)

Table 2 Mental health needs as reported by teachers

Study sample	Normal <i>n</i> (%)	Borderline <i>n</i> (%)	Abnormal <i>n</i> (%)	Missing <i>n</i> (%)	Total <i>n</i> (%)
Male	79 (63)	16 (13)	30 (24)	0	125 (100)
Female	100 (74)	11 (7)	24 (18)	0	135 (100)
Missing cases	0	0	0	40 (100)	40 (100)
Total	179 (59.6)	27 (9)		40 (13.3)	300 (100)

Table 3 National normative data for British 11–15 year olds – teacher scores

	Normal (%)	Borderline (%)	Abnormal (%)	Total (%)
Male	77.3	9.1	13.6	100
Female	88.2	6.2	5.6	100

Table 4 Teacher information on subscales of the SDQ

	Male (%)		Female (%)		All (%)	
	Abnormal	Borderline	Abnormal	Borderline	Abnormal	Borderline
Emotional disorders	3.3	1.7	4	4	3.65	2.85
Conduct disorders	9	3.3	7.7	1.7	8.35	2.5
Hyperkinetic disorders	10.3	3	7.7	2	9	2.5
Peer problems	6	3.3	4.7	1	5.35	2.15
Prosocial behaviour	13.3	6	8	6	10.65	6

Table 5 National normative data for British 11–15 year olds – teacher scores

	Male (%)		Female (%)	
	Abnormal	Borderline	Abnormal	Borderline
Emotional disorders	3.2	1.8	2.4	2
Conduct disorders	8.7	3.9	3.2	2.6
Hyperkinetic disorders	12.1	5	3.5	4.1
Peer problems	5	3.8	2.8	2.2
Prosocial behaviour	21.3	17.1	7.9	9.6

both. National normative data are shown in Table 5 for comparison.

In 11% (33) of cases, teachers reported that the child had received professional help. In 72.7% (218) of cases teachers did not know and 16.3% (49) of questionnaires were missing answers for this question. Teachers were also asked whether they considered that the child's difficulties required professional help. Of 84.3% that responded, 25.3% (76) of teachers did believe this, while 59% (177) did not. In 15.7% (47) of cases this information was missing.

Teachers who believed that the pupils needed help had the opportunity to suggest the appropriate professional. In a large number of cases, teachers identified educational psychologists, this was followed by professionals from behaviour support, professionals from child and adolescent mental health services (CAMHS) and those from children, families and social care. Where the teachers identified other professionals, these included speech therapists, one-to-one educational support including mentors, counsellors, school nurses and anger management specialists.

The teachers were also asked what sort of help they would like to help them deal with children's difficulties. Behaviour management advice was requested most frequently, followed by respite, advice on building self-esteem and confidence, counselling, intensive language help, mentoring and support for organisation skills. Teachers were also asked where they would like this help to be offered, school was most common venue recorded, followed by home and community clinics.

Parents

Of the 127 questionnaires returned by parents, 13.4% (17) of pupils scored in the abnormal range

for the summative score. Of these, 7.9% (10) were boys and 5.5% (7) were girls (Table 6). National normative data are shown in Table 7 for comparison.

Looking at the subscores (Table 8), boys scored more highly than girls in all sections aside from peer problems. National normative data are shown in Table 9 for comparison.

Parents were asked if their child had received professional help. Of the 88.2% who responded, 10.2% (13) reported that the child had received professional help, 78% (99) did not know. Finally, 11.8% (15) of questionnaires were missing answers for this question. Parents were also asked whether they considered that their child's difficulties required professional help. Of the 83.5% who answered, 14.2% (18) believed that their child's difficulties required professional help, while 69.3% (88) did not. In 16.5% (21) of cases this information was missing.

Parents wanted help from teachers, behaviour support professionals and educational psychologists. The main type of help identified was behaviour management advice. Respite and medication were also recorded. Parents were also asked where they would like this help to be offered. Once again, the top two places identified were school and home. General practitioners' surgeries and community clinics were also identified.

Discussion

While we acknowledge that the low return rates from parents and teachers reduce the representativeness of our findings, we do feel that there are useful generalisable themes in the responses. Parents and

Table 6 Mental health needs as recorded by parents

	Normal <i>n</i> (%)	Borderline <i>n</i> (%)	Abnormal <i>n</i> (%)	Total <i>n</i> (%)
Male	39 (65)	11 (18)	10 (17)	60 (100)
Female	54 (84)	6 (9)	7 (10)	67 (100)
Total	93 (73.2)	17 (13.4)	17 (13.4)	127 (100)

Table 7 National normative data for British 11–15 year olds – parent scores

	Normal (%)	Borderline (%)	Abnormal (%)	Total (%)
Male	79.4	9.4	11.2	100
Female	85.8	91.9	8.1	100

Table 8 Parent information on the summative subscales of the SDQ

	Male (%)		Female (%)		All (%)	
	Abnormal	Borderline	Abnormal	Borderline	Abnormal	Borderline
Emotional disorders	9.4	3.9	6.3	4.6	7.85	4.25
Conduct disorders	9.4	9.4	6.3	10.2	7.85	9.8
Hyperkinetic disorders	10.2	3.9	5.5	3.9	7.85	3.9
Peer problems	6.3	4.7	8.7	3.9	7.5	4.3
Prosocial behaviour	5.5	5.5	1.6	0.8	3.55	3.15

Table 9 National normative data for British 11–15 year olds – parent scores

	Male (%)		Female (%)	
	Abnormal	Borderline	Abnormal	Borderline
Emotional disorders	6.3	3.9	8	5.9
Conduct disorders	8.2	5.9	5.9	4.3
Hyperkinetic disorders	12.6	5.1	4	3.8
Peer problems	7.1	7	6	5.3
Prosocial behaviour	3.3	3.8	2	1.6

teachers would like children to be seen at home and at school, and want help to support children with their behaviour. This echoes national drivers around consultation and outreach in schools and illustrates the need for CAMHS to cascade their skills to universal practitioners; allowing for cost-effective dissemination of expertise and effective pathways into specialist services for identified children.

Because parent questionnaires were completed only by 25.5% of the sample, parent and teacher data could not be correlated. However, it is reassuring to note that there are parallels between the two groups, with boys having higher levels of need, and this finding echoes the national normative data, as did the fact that teachers identified higher levels of problems than parents. However, Green *et al*³ reported that nationally, 11.5% of 11–16 year olds had mental health disorders (12.6% of boys, 10.3% of girls). Using the SDQ, teachers in Manchester identified 18% of the 11–16 year olds had abnormal

mental health (24% of boys and 18% of girls). Parent data from Manchester was also higher than the national average at 13.4%. It is of note that the Relachs Study in a similar population found that 16% of children scored abnormally on the SDQ.

Looking specifically at the subscales, we see that teachers in Manchester reported similar levels of need to the national figures for boys in the subscales of emotional and conduct disorders, whereas levels of hyperkinetic disorders and difficulties with prosocial behaviour were estimated to be below the national average. It is of note that the latter category is not included in the summative scoring used to produce the indicator of mental health need. Girls in Manchester schools were perceived by teachers as having higher levels of need on all subscales, and their levels of hyperkinetic and conduct problems are notably higher than the national average, something which is different to the boys' sample. One possible explanation is that boys with hyperkinetic

disorders may be easier to identify, meaning that girls identified by this brief screening tool may represent a sample in need, whereas their male peers may be in receipt of medication.

This information has been presented orally and in the form of reports to the stakeholders and commissioners of Manchester. It has been used to expand outreach work into schools and raise awareness of the most vulnerable groups of children. Furthermore, one of the authors now works in a community based mental health team for 16–17 year olds where particular attention has been paid to screening for hyperkinetic disorders in girls. This service works closely with the careers advisory service and offers consultation to the local colleges. Although we acknowledge that conclusions should be tentative, we suggest that our study shows that there is a higher than average level of need in Manchester and also that over 100 parents and 200 teachers were keen to have their views heard.

REFERENCES

- 1 Sayal K, Tischler V, Coope C *et al.* Parental help-seeking in primary care for child and adolescent mental health concerns: qualitative study. *British Journal of Psychiatry* 2010;197(6): 476–81.
- 2 Meltzer H, Gatward R, Goodman R and Ford T. *The Mental Health of Children and Adolescents in Great Britain. Summary Report.* Report of a survey carried out in 1999 by Social Survey Division of the Office for National Statistics on behalf of the Department of Health, the Scottish Health Executive and the National Assembly for Wales, 2000.
- 3 Green H, McGinnity A, Meltzer H *et al.* *Mental Health of Children and Young People in Great Britain.* 2004; www.statistics.gov.uk/statbase/Product.asp?vlnk=3983
- 4 National Service Framework for Children, Young People and Maternity Services (NSF) www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/ChildrenServices/ChildrenServicesInformation/ChildrenServicesInformationArticle/fs/en?CONTENT_ID=4089111&chk=U8Ecln (accessed 26/8/11).
- 5 Singleton N, Bumpstead R, O'Brien M *et al.* *Psychiatric Morbidity Among Adults Living in Private Households.* Social Survey Division, Office for National Statistics. 2000. www.dh.gov.uk/en/Publicationandstatistics/Publications/PublicationsStatistics/DH_4019414 (accessed 26/8/11).
- 6 The Strengths and Difficulties Questionnaire and Normative Data. www.sdqinfo.com (accessed 26/8/11).
- 7 Goodman R. The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry* 1997;38:581–6.
- 8 Stansfeld S, Haines M, Head J *et al.* (2004) Ethnicity, social deprivation and psychological distress in adolescents: school-based epidemiological study in east London. *British Journal of Psychiatry* 2004; 185:233–8.
- 9 Goodman R, Ford T, Simmons H *et al.* Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *British Journal of Psychiatry* 2000;177: 534–9.
- 10 Fazel M and Stein A. Mental health of refugee children: comparative study. *British Medical Journal* 2003;327:134.
- 11 The Relachs Study. *Health of Young People in East London.* Institute of Community Health Sciences, Barts and The London Queen Mary's School of Medicine & Dentistry: London, 2001.

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