The mental health and wellbeing of children and adolescents in home-based foster care

Michael G Sawyer, Josephine A Carbone, Amelia K Searle and Philip Robinson

ABSTRACT

Objective: To identify the prevalence of mental health problems, rates of suicidal ideation and behaviour, and use of professional mental health services among children and adolescents residing in home-based foster care, and to compare these rates with those reported for children and adolescents in the general Australian community.

Design: Cross-sectional survey.

Participants and setting: 326 children and adolescents (aged 6–17 years) residing in home-based foster care in the Adelaide metropolitan region between August 2004 and January 2006.

Main outcome measures: Prevalence of emotional and behavioural problems, suicidal ideation and behaviour, and use of professional services to obtain help for emotional and behavioural problems.

Results: 61.0% of children and adolescents living in home-based foster care scored above the recommended cut-off for behaviour problems on the Child Behavior Checklist and 35.2% of adolescents scored above the cut-off on the Youth Self Report. 6.7% of 13–17-year olds in home-based foster care reported a suicide attempt that required medical treatment during the previous year. Caregivers reported that 53.4% of children needed professional help for their mental health problems but only 26.9% had obtained help during the previous 6 months.

Conclusion: Children in home-based foster care experience high rates of mental health problems but only a minority receive professional help for their problems.

MJA 2007; 186: 181–184

The number of children living in alternative or out-of-home care in Australia has increased greatly over the past decade; in 2005, this applied to 23 695 people under the age of 18 years.[1] Of these, 94% lived in home-based foster care.[1] Children and adolescents living in alternative care have often experienced adversities such as physical or sexual abuse, neglect, parental psychopathology, and family breakdown.[2]

Previous studies have reported high rates of mental health problems among children in welfare systems.[3-8] For example, in 13 studies conducted between 1974 and 1994, estimates of the prevalence of mental health problems ranged from 29% to 96%.[3] Child welfare clients in Sweden are reported to be more likely than their peers to have been hospitalised for suicide attempts or serious psychiatric disorders.[9] In Australia, 60% of 11–17-year olds referred to out-of-home care in South Australia in 1998–99 had conduct problems.[4] A recent New South Wales survey of 4–11-year olds in foster care found that over half scored above the recommended cut-off on the Child Behavior Checklist.[5,10]

However, many of these studies had low response rates, small sample sizes, a lack of comparison groups, or used brief questionnaires to assess children's mental health,[3-5] making their results difficult to interpret.

Here, we describe the nature and prevalence of mental health problems in children and adolescents living in home-based foster care in the Adelaide metropolitan region. We used the same standard measures as the Child and Adolescent Component of the Australian National Survey of Mental Health and Well-being.[11] This enabled us to compare the prevalence of mental health problems in a large sample of children living in home-based foster care with that reported for children of the same age and sex in the general community.

METHODS

Study sample

The sampling frame for the study included all children and adolescents aged 6–17 years residing in home-based foster care in the Adelaide metropolitan region (effectively the Adelaide Statistical Division[12]) under a Guardianship of the Minister court order, whose cases were managed by one of the 10 metropolitan district offices of Families SA (the state child welfare agency), all of which took part in the study. To ensure that caregivers were sufficiently familiar with participating children to complete the questionnaires appropriately, we also required that children had lived with their caregivers for at least a month.

The community comparison group consisted of all children and adolescents aged 6–17 years who had participated in the Child and Adolescent Component of the National Survey of Mental Health and Well-being. Full details of this community sample are available elsewhere.[11]

Procedure

Data collection took place between August 2004 and January 2006. Several approaches were used to ensure that all eligible children and adolescents were identified, including electronic searches of relevant databases in the central office of Families SA, and reviews of records kept in district offices. To ensure that children had not moved between the time that they were identified as potential participants and the time when questionnaires were completed, data were collected from participants in each district in sequence. A research assistant brought questionnaires to the homes of caregivers who had agreed to participate in the study. Informed consent was obtained from caregivers and older children before the questionnaires were completed.

Questionnaires

Mental health problems

The Child Behavior Checklist (CBCL) was completed by caregivers of all children and adolescents, and the Youth Self Report (YSR) was completed by adolescent participants aged 13–17 years.[10] Ratings on each questionnaire are summarised as a *total behaviour problems* score comprising all items on the checklist; an *externalising problems* score, which rates antisocial or undercontrolled behaviour; and an *internalising problems* score, which rates inhibited or overcontrolled behaviour. Syndrome scores provide ratings in specific problem areas. For the

1 Proportion of children and adolescents with scores in the clinical range on the Child Behavior Checklist (CBCL) and the Youth Self Report (YSR)

	Children and adolescents (aged 6–17 years)*				Adolescents (aged 13–17 years)†			
	Home-based foster care ($n = 323$)‡	Community ($n = 3255$)	χ^2	*P*	Home-based foster care ($n = 91$)	Community ($n = 1273$)	χ^2	*P*
Total behaviour problems	61.0%	14.1%	427.3	< 0.001	35.2%	18.9%	13.2	< 0.001
Externalising problems	60.1%	12.7%	464.8	< 0.001	40.7%	19.6%	21.6	< 0.001
Internalising problems	44.9%	13.3%	214.9	< 0.001	22.0%	16.4%	1.5	0.22
Mental health problems								
Attention problems	44.0%	6.4%	463.9	< 0.001	24.2%	6.7%	33.6	< 0.001
Social problems	41.8%	4.8%	531.0	< 0.001	18.7%	3.7%	39.4	< 0.001
Delinquent behaviour	40.9%	6.9%	373.4	< 0.001	26.4%	11.6%	15.5	< 0.001
Aggressive behaviour	38.1%	5.2%	421.8	< 0.001	19.8%	7.5%	15.4	< 0.001
Thought problems	36.2%	3.1%	561.0	< 0.001	6.6%	3.0%	2.5	0.12
Withdrawn	22.9%	4.5%	171.0	< 0.001	5.5%	3.0%	1.0	0.31
Anxious/depressed	20.1%	3.8%	151.7	< 0.001	13.2%	6.7%	4.5	0.03
Somatic complaints	18.3%	7.5%	42.2	< 0.001	14.3%	6.8%	6.1	0.01

* Scores for children and adolescents aged 6–17 years are from the CBCL scale. † Scores for adolescents aged 13–17 years are from the YSR scale. ‡ Three of the 326 caregiver reports were not properly completed. ◆

purpose of this study, children and adolescents were considered to have a mental health problem if their score on the relevant CBCL or YSR scale was above the recommended cut-off score for the checklist.[10] Use of this approach enabled us to compare rates of mental health problems identified in this study with those reported in the Child and Adolescent Component of the National Survey of Mental Health and Well-being.[11]

Depression

Levels of depressive symptoms among adolescents were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D), which was completed by participants aged 13–17 years. The CES-D consists of 20 items describing depressive symptoms experienced during the past week. Scores range from 0–60, with higher scores indicating higher levels of depression.[13]

Suicidal ideation and behaviour

Adolescent participants aged 13–17 years completed the Youth Risk Behavior Surveillance System questionnaire,[14] which assesses suicidal ideation and behaviour during the previous 12 months.

Perceived problems and need for professional help

Caregivers were asked to identify (by a Yes/No response) whether children and adolescents had emotional or behavioural problems, had more problems than others of the same age and sex, needed professional help for emotional or behavioural problems, and whether they received professional help for their problems. These items have been used in several surveys of child mental health, including the Australian national survey.[11,15] Adolescent participants aged 13–17 years also responded to these questions about themselves.

Ethical approval

The research ethics committees of the Children, Youth and Women's Health Service, the South Australian Department of Health, and the Aboriginal Health Council of South Australia approved the study.

Statistical analyses

Data were analysed using SPSS for Windows, version 12.0 (SPSS Inc, Chicago, Ill, USA). χ^2 analyses were used to test the statistical significance of differences in the rates of mental health problems in the home-based foster care and community samples. Mann–Whitney *U* tests were performed to test for the significance of differences in CES-D scores, which were not normally distributed. Confidence intervals around estimates are not presented as some children had the same caregiver, which violated independence assumptions.

2 Mean scores (SD) for adolescents (13–17 years old) on the Center for Epidemiologic Studies Depression Scale*

	Home-based foster care ($n = 91$)	Community ($n = 1251$)	*z*	*P*
All adolescents	15.0 (10.3)	10.9 (10.4)	−4.89	< 0.001
Boys	14.5 (8.0)	9.7 (9.8)	−5.13	< 0.001
Girls	15.7 (12.9)	12.2 (10.7)	22.01	0.04

* Score range is 0–60, with higher scores indicating higher levels of depression. ◆

3 Number (%) of adolescents (13–17 years old) reporting suicidal ideation and behaviour*

Suicidal risk behaviour	Home-based foster care ($n = 91$)	Community ($n = 1269$)	χ^2	*P*
Suicidal ideation	13 (14.4%)	149 (11.8%)	0.4	0.55
Suicide plan	12 (13.3%)	110 (8.7%)	1.7	0.20
Suicide attempt	9 (10.0%)	54 (4.3%)	5.0	0.03
Suicide attempt requiring treatment	6 (6.7%)	11 (0.9%)	18.3	< 0.001

* Denominator in some cells varies slightly due to missing responses. ◆

RESULTS

Demographic characteristics

Four hundred and sixty young people were identified as being eligible to participate in the study. Of these, Families SA district office supervisors excluded 35 because they felt the children were too distressed to participate in the study. Caregivers of 85 children declined to participate, mainly because they felt they lacked the time to complete the study questionnaires, and the caregivers of 14 children could not be contacted. This left 326 participating children and adolescents (71% response rate) who were residing with 234 caregivers. Ninety-one of the 124 participants aged 13–17 years completed the self-report questionnaires (73% response rate).

The mean age of participants was 11.4 years (SD, 3.3); 62% were aged 6–12 years; 54% were male; and 15% were identified as being either Aboriginal or Torres Strait Islander. More than half the children (56%) had been in their current placement for more than 4 years; 31% for 1–3 years; 9% for 6–11 months; and 4% for 1–5 months.

The only significant difference between the study group and the comparison group was that a higher proportion of children in the home-based foster care group were identified as Aboriginal or Torres Strait Islander (15.2% v 3.9%).

Mental health problems

Child Behavior Checklist

Children in home-based foster care consistently had a higher prevalence of mental health problems on all the CBCL scales than children in the community group (Box 1). The proportion of children in home-based foster care with problems on the externalising syndrome scales (such as *attention problems*, *aggressive behaviour* and *delinquent behaviour*) was six to seven times that of children in the community group. Within the home-based foster care group, there were twice as many children with problems on the externalising syndrome scales as those with problems on the internalising syndrome scales (such as *withdrawn* and *anxious/depressed*). There was no significant ($P < 0.05$) difference in the prevalence of mental health problems reported between males and females in the home-based foster care group. However, children aged 6–12 years in this group had a higher prevalence of *attention problems* (47.8% v 37.7%) and *social problems* (46.8% v 33.6%) than the 13–17-year-old adolescents.

Youth Self Report

The prevalence of mental health problems identified on the YSR by 13–17-year-old adolescents in home-based foster care was also consistently higher than that for adolescents residing in the community (Box 1). However, the differences across the groups were somewhat smaller than those identified on the CBCL. This was particularly evident on the *thought problems*, *withdrawn* and *anxious/depressed* scales. Consistent with results on the CBCL, adolescents in the home-based foster care group had a higher prevalence of problems on externalising syndrome scales than on internalising syndrome scales. Once again, there were no significant differences between the prevalences reported for males and females in the home-based foster care group.

Depression

Adolescents in home-based foster care had a significantly higher mean CES-D score than those in the community (Box 2). This difference between mean CES-D scores across the foster care and community groups was particularly evident for boys. There was no significant difference between the mean CES-D scores for boys and girls within the home-based foster care group.

Suicidal behaviour and ideation

A significantly higher proportion of 13–17-year olds in home-based foster care than in the community reported attempting suicide in the past year (Box 3). Adolescents in home-based foster care also reported much higher rates of suicide attempts that resulted in an injury, poisoning or overdose requiring treatment by a doctor or nurse.

Perceived problems and need for professional help

Significantly more adolescents in home-based foster care than in the community were perceived by caregivers as having emotional and behavioural problems and needing professional help for their problems (Box 4). However, only half of those living in home-based foster care who were identified by caregivers as needing professional help had received it during the previous 6 months. In this area, there was a somewhat different pattern reported by caregivers and adolescents. Among caregivers who reported that their child or adolescent needed help, 50% in the foster care group and 49% in the community group reported that help had been received ($\chi^2_1 = 0.84$; $P = 0.33$). However, among adolescents who reported needing help, 65% in the foster care group versus 29% in the community group reported that they had received help ($\chi^2_1 = 7.6$; $P < 0.01$). Adolescents in home-based foster care reported somewhat lower rates of problems than their caregivers did, but the pattern of findings was very similar to that reported by caregivers.

4 Proportion of children and adolescents reported as having emotional and behavioural problems, needing professional help, and obtaining professional help during the previous 6 months

	Caregiver report				Adolescent report			
	Home-based foster care ($n = 323$)*	Community ($n = 3272$)	χ^2	P	Home-based foster care ($n = 91$)	Community ($n = 1216$)	χ^2	P
Emotional and behavioural problems	69.3%	24.4%	288.7	< 0.001	40.7%	25.8%	8.5	< 0.01
More emotional/behavioural problems than peers	55.4%	11.9%	64.2	< 0.001	20.9%	14.1%	0.01	0.89
Professional help needed	53.4%	9.6%	100.8	< 0.001	21.9%	6.8%	9.9	< 0.01
Professional help obtained	26.9%	4.7%	0.84	0.33	14.3%	2.0%	7.6	< 0.01

* Three of the 326 caregiver reports were not properly completed. ◆

DISCUSSION

We found that the prevalence of mental health problems experienced by children and adolescents in home-based foster care was two to five times higher than that reported in the National Survey of Mental Health and Well-being for children and adolescents in the general population.[11] Externalising problems, such as attention problems, delinquent problems and social problems, were more common than internalising problems, such as anxiety and depression. We also found evidence that younger children had higher rates of attention problems and social problems than older children. Rates of serious suicide attempts were much higher than those reported for adolescents in the community,[11] and only a minority of those in foster care had received professional help for their problems.

Strengths of our study are its high response rate, the use of two informants to assess mental health problems among adolescent participants, and the availability of a comparison group assessed using the same measures.

Limitations of our study include its focus on a single metropolitan region and the use of self-report measures, rather than structured diagnostic interviews, to assess mental health problems. As most participants had resided in their current placement for several years, it cannot be assumed that the results apply to children or adolescents who spend short periods of time in multiple placements. Furthermore, children identified as being too distressed to participate were excluded. If these groups of children had been included in the study, it is likely that we would have identified an even higher prevalence of mental health problems.

Many children taken into the welfare system have experienced physical or sexual abuse, and major family discord.[16] In light of this, it is not surprising that we found a high prevalence of mental health problems. Of particular concern is the high prevalence of disruptive behaviour problems, which often persist into adulthood, cause substantial distress to individuals and their families, and are a significant economic burden on the whole community.[17]

Our findings provide a major challenge for the community and for welfare services. Australia relies heavily on volunteer caregivers to provide homes for children and adolescents in the welfare system. While home-based foster care remains the preferred alternative for the care of these young people, many caregivers are being expected to provide homes for children and adolescents with serious psychiatric disorders. It is unrealistic to expect volunteer caregivers to provide 24-hour care and support for these young people unless they receive high-quality professional support and adequate respite. Welfare staff are struggling to cope with large numbers of children and adolescents with severe mental health problems, declining numbers of suitable placements to accommodate them, and difficulty accessing professional help for them. The relatively high proportion of children and adolescents in both the foster care and community groups who had not accessed professional help suggests that there are generic problems in access to care, rather than a specific problem for those in home-based foster care.

There is a great need to develop and evaluate new interventions to address the mental health problems experienced by these young people.

ACKNOWLEDGEMENTS

The study was funded by the Australian Rotary Health Research Fund. The authors wish to thank Dr Peter Baghurst for his advice about statistical analyses and staff at Families SA for their help conducting the study.

COMPETING INTERESTS

The Australian Rotary Health Research Fund and the Adelaide University Faculty of Health Sciences divisional scholarship provided funding for the study and research support, but had no role in study design, data collection, analysis or interpretation, or writing or publication of the article.

AUTHOR DETAILS

Michael G Sawyer, PhD, FRCPC, FRANZCP, Professor and Head, Research and Evaluation Unit[1]

Josephine A Carbone, BA(Hons), PhD Candidate, Research and Evaluation Unit[1] and Department of Psychology[2]

Amelia K Searle, BPsych(Hons), Research Assistant, Research and Evaluation Unit[1] and Department of Paediatrics[2]

Philip Robinson, PSM, DipAppPsych, MPsych, Executive Director, Clinical Governance, Education and Research[1]

1 Women's and Children's Hospital, Children, Youth and Women's Health Service, Adelaide, SA.

2 University of Adelaide, Adelaide, SA.

3 Families SA, Adelaide, SA.

Correspondence:
michael.sawyer@adelaide.edu.au

REFERENCES

1 Australian Institute of Health and Welfare. Child protection Australia 2004–05. Canberra: AIHW, 2006. (AIHW Cat. No. CWS 26.)

2 Rushton A, Minnis H. Residential and foster family care. In: Rutter M, Taylor E, editors. Child and adolescent psychiatry. Oxford: Blackwell Publishing, 2002: 359-372.

3 Pilowsky D. Psychopathology among children placed in family foster care. *Psychiatr Serv* 1995; 46: 906-910.

4 Barber JG, Delfabbro PH, Cooper LL. The predictors of unsuccessful transition to foster care. *J Child Psychol Psychiatry* 2001; 42: 785-790.

5 Tarren-Sweeney M, Hazell P. Mental health of children in foster and kinship care in New South Wales, Australia. *J Paediatr Child Health* 2006; 42: 89-97.

6 Landsverk J, Davis I, Ganger W, et al. Impact of child psychosocial functioning on reunification from out-of-home placement. *Child Youth Serv Rev* 1996; 18: 447-462.

7 Armsden G, Pecora PJ, Payne VH, Szatkiewicz JP. Children placed in long-term foster care: an intake profile using the child behavior checklist/4-18. *J Emot Behav Disord* 2000; 8: 49-64.

8 Leslie LK, Landsverk J, Ezzet-Lofstrom R, et al. Children in foster care: factors influencing outpatient mental health service use. *Child Abuse Negl* 2000; 24: 465-476.

9 Vinnerljung B, Hjern A, Lindblad F. Suicide attempts and severe psychiatric morbidity among former child welfare clients — a national cohort study. *J Child Psychol Psychiatry* 2006; 47: 723-733.

10 Achenbach TM, Rescorla L. Manual for the ASEBA school-age forms and profiles. Burlington, Vt: Research Center for Children, Youth, and Families, 2001.

11 Sawyer MG, Arney FM, Baghurst P, et al. The mental health of young people in Australia: Child and Adolescent Component of the National Survey of Mental Health and Well-being. Canberra: AGPS, 2000.

12 Australian Bureau of Statistics. Australian standard geographical classification (ASGC), 2000. Canberra: ABS, 2000. (ABS Cat. No. 1216.0.)

13 Radloff LS. The CES-D scale: a self-report depression scale for research in the general population. *Appl Psychol Meas* 1977; 1: 385-401.

14 Kolbe LJ, Kann L, Collins JL. Overview of the Youth Risk Behavior Surveillance System. *Public Health Rep* 1993; 108 Suppl 1: 2-10.

15 Zubrick SR, Silburn SR, Garton A, et al. Western Australian Child Health Survey: developing health and well-being in the nineties. Perth: Australian Bureau of Statistics and the Institute for Child Health Research, 1995.

16 Barber JG, Delfabbro PH. Assessment, planning and intake. In: Barber JG, Delfabbro PH. Children in foster care. London: Routledge, 2004: 3-20.

17 Scott S, Knapp M, Henderson J, Maughan B. Financial cost of social exclusion: follow up study of antisocial children into adulthood. *BMJ* 2001; 323: 191-194.

(Received 17 Jul 2006, accepted 9 Nov 2006) ❑