

**Mental Health and Wellbeing Unit
Victorian Health Promotion Foundation**



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**VicHealth Research Report on
Children at risk in families affected
by parental mental illness**

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Introduction and Background to this Report

The Victorian Health Promotion Foundation, VicHealth, is an independent statutory body established in 1987. VicHealth works towards the development of innovative responses to the complex social, economic and environmental forces that influence the health of all Victorians. VicHealth has a particular focus on a flexible, responsive and evidence-informed approach to working with partners from across different sectors in the community to create environments which improve population health.

In 1999, in recognition of the growing human, economic and community costs associated with mental ill health, VicHealth identified mental health as a priority and established a program for the development of activity relevant to the promotion of mental health and wellbeing.

Mental health is defined as:

'the embodiment of social, emotional and spiritual wellbeing. Mental Health provides individuals with the vitality necessary for active living, to achieve goals and to interact with one another in ways that are respectful and just' (VicHealth 1999).

The VicHealth Mental Health and Wellbeing Unit is responsible for managing activity relevant to mental health promotion including:

- Research, monitoring & evaluation
- Direct participation programs
- Organisational development (including workforce development)
- Community strengthening
- Communication & social marketing
- Advocacy
- Legislative & policy reform.

Activity is directed towards strengthening three key areas for promoting mental health and wellbeing:

- **Social inclusion** (having supportive relationships, opportunity for involvement in community and group activity, civic engagement).
- **Valuing diversity and working against discrimination and violence** (having physical security and opportunity for self determination and control of one's life).
- **Access to economic resources** (access to work, education, housing, money).

In order to increase social inclusion of children and young people who have parents with a mental illness, VicHealth, in partnership with the Victorian Department of Human Services and beyondblue, supports children and young people participating in two main projects (VicChamps and PATS – Paying Attention to Self).

The implementation, evaluation and documentation of these activities will provide examples of good practice in the area of responding to the needs of children and their families as well as young people who have a parent with a mental illness.

To further assist in planning the development of a state wide approach to responding to the needs of these children and young people, VicHealth commissioned research to determine the extent and distribution of children and young people whose parents have a mental illness. The findings of this investigation are included in the following report.

Children at risk in families with parental illness

Abstract

Policy and service delivery to children of parents with a mental illness (COPMI) is often based upon the premise that risks to children are equivalent. This paper proposes that children living in disparate family circumstances are exposed to varied levels of risk. Population estimates of children living at moderate to extreme levels of risk are proposed according to the level of parental mental illness disability and number of parents in the household. Two approaches are used to triangulate estimates: A top down population approach employing Australian Bureau of Statistics data and a bottom up, actual service usage (Victorian Mental Health) assessment. Implications for policy and service delivery are outlined.

Introduction

Children living in a home with a mentally ill parent show higher rates of behavioural, developmental and emotional problems compared with other children (Beardslee, Versage & Gladstone, 1998; Brotman Band & Weisz, 1988; Cicchetti, Rogosch & Toth, 1998; Klimes-Dougan et al., 1999; Rubovits, 1996). A review of the key risk factors associated with parental mental illness is presented in this paper, in terms of a parent's mental illness diagnosis, severity and chronicity, and type of family unit. Recommendations are then made regarding the risk factors used to estimate the different categories of families and children. Previous top down (population based estimates; Nicholson, Biebel, Katz-Leavy, & Williams, 2002) and bottom up approaches (service usage data; Cowling, 1999; Farrell, Handley, Hanke, Hazelton, & Josephs, 1999; Hearle, Plant, Jenner, Barkla, & McGrath, 1999) are then presented. The unique contribution of this paper combines these approaches making an estimate based on pertinent risk categories for COPMI in Australia. An estimate is then reported, of the numbers of Victorian and Australian families and children living in single and two parent households, according to mental illness risk factors, by employing top down and bottom up data sets. Such information provides valuable information to policy makers regarding future service foci and delivery.

Risks associated with parental mental illness

Nicholson, Biebel, Kinden, Henry, and Stier (2001) point out that the presence of parental mental illness does not alone guarantee poor outcomes for children, but instead it is the interaction of the parental mental illness with other variables that will enhance resilience or confer risk upon children. For instance, mentally ill parents often experience concurrent difficulties with interpersonal relationships, including marital difficulties and family disruption, social isolation as well as financial stresses. Consequently, families affected by parental mental illness are not all the same; parents will experience different types of mental illness, levels of illness severity and chronicity, and their children will thus require different levels and types of support.

The following variables of risk for COPMI were chosen on two grounds. First, variables were selected according to the likely risk they might engender to children,

and second according to availability of data, that allowed for top down and bottom up estimates. For example, issues such as marital satisfaction or parenting quality were not examined as no population data is currently available. The literature was subsequently reviewed according to the type of parent mental illness diagnosis, level of severity and chronicity and the level of support accessible to the family, specifically in terms of being a one or two parent family. While it was necessary to limit the review to these specific variables, the interaction of these factors with other issues is also highlighted. For example, how a parent's mental illness diagnosis impacts on parenting behaviours is presented, in the recognition that there is interplay of variables that impact on the wellbeing of children living in families affected by parental mental illness. However, it should be noted that while these risk variables are highlighted here, other variables, perhaps not so easily calculated will also impact on children's outcomes, including but not limited to their exposure to domestic violence or a parent's dual diagnosis of a mental illness with a drug or alcohol addiction.

Type of mental illness

While the diagnoses of a mental illness impacts on parenting behaviour and capacity in different ways, parental mental illness in general has been shown to impact on parenting behaviour and capacity. Even though Risley-Curtiss, Stromwall, Trueet Hunt, and Teska (2004) found that with appropriate diagnosis, support, treatment and medication, most people with a serious mental illness experience widespread improvement in many areas including parenting behaviours, Oyserman and colleagues (2000) found that mothers with a severe and persistent mental illness have significantly less adequate parenting skills than mothers who do not have a mental illness.

Several studies have examined the association between parenting behaviours and specific diagnoses. While most research has focused on the impact of maternal depression, other diagnoses are now often considered more severe, in terms of impact on functioning (Goodman & Brumley, 1990). For example, Lapalme, Hodgins and LaRoche (1997) found that children whose parents have bipolar disorder are 2.7 times more likely than other children to develop a mental disorder. Webb, Abel, Pickles and Appleby (2005) found that the offspring of women with psychoses have an almost twofold higher risk of fetal death or still birth, due to a combination of genetic, antenatal and obstetric factors. Children of mothers with schizophrenia may have more anxious attachment patterns than mothers without schizophrenia (Naeslund, Persson-Blennow, McNeil, Kaij, & Malmquist-Larsson, 1984) and may exhibit unusual or inappropriate affective responses to their child/ren (Jacobsen, Miller & Kirkwood, 1997).

Other research has found that depressed mothers are less likely to be emotionally available and affectionate (Azar & Wolfe, 1998; Hammen, 1991), and are more intrusive, irritable, hostile, negative and critical when interacting with their children than are non depressed mothers (Cohn, Campbell, Matias, & Hopkins, 1990; Hamilton, Jones & Hammen, 1993). Major depression in parents was found to increase the overall risk in offspring for onset of depressive and other mental disorders such as anxiety and specific substance abuse disorders (Lieb, Isensee, Höfler, Pfister, & Wittchen, 2002). Depressed versus non-depressed mothers have been found to have significantly more problems in attachment and to have more negative relationships with children (Frankel & Harmon, 1996; Radke-Yarrow, Nottelmann, Belmont, & Welsh, 1993). Collectively, such research supports the notion that mothers with a serious mental illness experience problems in parenting and, more particularly, that the diagnosis of a parent's mental illness impacts on their parenting behaviours and capacity in different ways.

Additionally, there are other studies, albeit few, which have identified whether parenting problems, are differentially related to specific diagnoses. For example, some studies have indicated that the effects on parenting are more negative for

mothers with unipolar disorder than bipolar depressive disorder (Hamilton et al., 1993; Tarullo, DeMulder, Ronsaville, Brown & Radke-Yarrow, 1995), though one study found that mothers with a bipolar disorder showed more anger in family interactions (Inoff-Germain, Nottelmann & Radke-Yarrow, 1997).

The research comparing the impact of schizophrenia and depression on children is mixed. Some studies have found that parenting is more affected for mothers with schizophrenia than depression (Goodman & Brumley, 1990; Persson-Blennow, Binett & McNeil, 1988), while another study (Sameroff, Seifer & Barocas, 1983) found that depressed mothers were more anxious and less socially competent than mothers with schizophrenia. Additionally, Rogosch, Mowbray and Bogat (1992) found no differences in self-rated maternal sensitivity across schizophrenia and depression. Comparing the self-reported parenting behaviours of mothers with different mental illness diagnoses, Mowbray, Oyserman, Bybee and MacFarlane (2002) found that schizophrenic mothers were significantly less nurturing to their children than mothers with depression or bipolar disorder; and mothers with major depression-psychotic features were significantly more satisfied in their relationships with their children than those with either major depression or schizoaffective diagnoses. Overall, such results indicate that parental unipolar depression may be more harmful to children than bipolar disorder and that the effects of schizophrenia versus other disorders, including depression, are mixed. However, there is some question as to the validity of the child outcome measures employed in these studies. For example, Najman et al. (2000) found maternal observation bias in the reporting of child behaviour problems, as compared to child responses, in that mothers reporting was affected by their mental health, including both depression and anxiety.

Chronicity, severity and level of disability

Several studies have suggested that a mothers' diagnostic status is not a useful predictor of mothers' and/or children's functioning, and have instead emphasized the impact of severity and/or chronicity of a parent's mental illness on child and parenting outcomes (Nolen-Hoeksema, Wolfson, Mumme & Guskin, 1995; Rogosch et al., 1992; Sameroff et al., 1983; Zahn-Waxler et al., 1990). For example, Rogosch et al., (1992) found that not all parents with mental illness evidence the same degree of parenting difficulty, as those with more severe and chronic disturbance were associated with less sensitive and competent parenting behaviours than parents with less debilitating disturbances. Similarly, Warner, Mufson and Weissman (1995) have found that recurrent, early on-set major parental depression was significantly associated with major depression in offspring, particularly when accompanied by impaired functioning of the co-parent and a chaotic family environment.

The importance of symptom severity, as typified by greater impairment of functioning, has been the specific focus of other studies. For example, severity of depression was predictive of insecure attachment with infants (Teti, Gelfand, Messinger & Isabella, 1995), while women with both unipolar episodes as well as dysthymia were more negative and had young children less securely attached than women with simple depression (Frankel & Harmon, 1996). Similarly, Harnish, Dodge and Valente (1995) found that severity of depressive symptoms was inversely related to the quality of the mother-child relationship; severity of depressive symptoms was also found to be associated with less maternal emotional availability and more maternal negativity (Frankel & Harmon, 1996; Nolen-Hoeksema et al., 1995).

Chronicity of the parent's mental illness has also been shown to influence child outcomes and/or parenting behaviour, though studies vary in how chronicity is measured. For example, the number of episodes and duration of current episode (Nolen-Hoeksema et al., 1995) was not found to influence parenting behaviour, but the number of hospitalisations of the mentally ill parent (Rogosch et al., 1992) significantly predicted lower parenting sensitivity in mothers of school aged children. Campbell, Cohn and Meyers (1995) found relatively fewer positive interactions between mothers and their babies among women whose symptoms had persisted

through six months postpartum as compared to women who were depressed two months postpartum but whose depression remitted over time.

It is difficult however, to separate the effects of chronicity and severity because both are commonly compounded; Brennan et al., (2000) argues that higher levels of mental illness symptoms (severity) generally last longer (chronicity) than mild symptoms. However, Brennan et al., (2000) looked at the separate and the combined effects of severity and chronicity of maternal depression. Chronicity was assessed as persistently elevated scores throughout several follow up periods, while severity was assessed through mothers self report of symptoms. It was found that chronicity and severity alone were each related to behaviour problems in five year old children, and moreover, the interaction of the two was related to higher again levels of child behaviour problems (Brennan, et al., 2000). In other words, mothers whose depressive symptom history was both chronic and severe had children with higher levels of behaviour problems than mothers who had severe depressive symptoms or mothers with chronic depressive symptoms alone. However, in a more recent study, and in an adolescent sample rather than young children, Hammen and Brennan (2003) found that severity of maternal depression was a better predictor than duration, to adolescent's risk for depression.

In an attempt to disentangle these variables, Mowbray et al., (2002) investigated the differential effects of diagnosis, clinical history, severity and chronicity on self reported parenting behaviours of mothers. Diagnosis was found to have a small but significant negative effect on parenting attitudes and behaviours, particularly for schizophrenic mothers. However, Mowbray et al., (2002) found that current symptomatology and community functioning partially mediated the effects of diagnosis. In another study, Mowbray et al., (2004) found that outcomes for adolescents of mothers with a mental illness related to the mothers social supports, or lack thereof, and other environmental variables, rather than mental illness diagnosis or number of hospitalisations. Such research highlights the importance of the living arrangements and social support of such families.

Although difficult to disentangle illness severity and chronicity it appears that higher levels of illness disability puts children at higher levels of risk compared to children whose parent's mental illness is not severe and/or chronic. Such outcomes are probably an interplay of various issues including parenting, socioeconomic circumstances and social supports. Much less clear is the impact of a parent's illness diagnosis on children. The literature offers conflicting reports regarding the influence that specific mental illness diagnosis on children, which is then further confounded by the level of illness disability. Consequently, level of disability rather than type of disorder is the primary focus of this study.

Living Arrangements

Women with a mental illness are twice as likely to report having dependent children in their care and hence are also more likely to have custody compared to males with a mental illness (Caton, Cournos & Dominguez, 1999). However, parents with a mental illness are more likely to be living without partners (White, Nicholson, Fisher, & Geller, 1995) or suffering from marital discord within the family (Downey & Coyne, 1990). It has been found that for a parent with a mental illness, negative relationships with significant others in their lives and being unmarried without a co-habiting partner is often associated with poor outcomes for children (Wilson, Bobier & Macdonald, 2004). When in relationships, nearly half of couples describe difficulties in their relationships (Manderson & McCune, 2004) and the family stress and marital turmoil may in itself exacerbate symptomatology and family dysfunctionality (Downey & Coyne, 1990). Adjustment issues in children can worsen following marital conflict and divorce. However, in COPMI families with minimal marital discord, problem behaviours in children have been shown to be equivalent to children from non mental illness families (Emery, Weintraub & Neale, 1982). Rutter and Quinton (1984) conducted a pivotal prospective study to explore the factors associated with a

parent's mental illness that result in future psychopathology in the child. Children of parents with a mental illness entered the study under the age of fifteen and were consequently followed for four years. They found that the process by which the parental mental illness results in disturbance in children is due more from indirect effects like marital discord and disturbed family relationships in the home than from the mental illness alone.

Single-parent households have additional worries because they are more likely to experience financial stresses¹ and role overload (Mowbray, Bybee, Hollingsworth, Goodkind & Oyserman, 2005). In a Finnish prospective birth cohort study, children that were living in single-parent households or were 'only children' presented the highest risk for behavioural problems and probable psychiatric disturbance (Taanila, Ebeling, Kotimaa, Moilanen & Jarvelin, 2004). Protective factors in the cohort were associated with two-parent households and being the oldest in a sibling series. Additionally, living arrangements that include co-habitation with extended family has been shown to benefit parents with a mental illness. Those living with relatives had fewer financial stresses, less stress from parenting and from hassles and reported greater satisfaction in their relationships with their children (Mowbray et al., 2005). The extent of familial influences on the developmental outcomes of children tends to be strongest in high-stress settings (O'Connor, Dunn, Jenkins, Pickering & Rasbash, 2001).

In summary, although research regarding the impact of single versus two parent families for COPMI is limited, it is considered here that a single parent family (where that parent has a mental illness) poses a higher risk to children than a two parent family, where one parent has a mental illness. Consequently, an estimate of the number of children living with a parent with a mental illness, according to level of the parent's mental illness disability and single versus two parent family underpins the following analysis.

Previous population estimates and methodologies

Two different population methodologies, described here as 'top down' and 'bottom up' have been employed to estimate the numbers of COPMI. The top down approach extrapolates population parameters about mental health and parenthood status to estimate the number of COPMI in the general community (e.g. Nicholson et al., 2002 using US data to estimate parenthood). Alternately, a bottom up approach examines 'captured' cohorts of mental health consumers (e.g. numbers of parents with depression or schizophrenia attending mental health institutions). Several Australian studies (Cowling, 1999; Farrell et al., 1999; Hearle et al., 1999) have sought to extrapolate the number of children with parents from specific cohorts of mental health clients in regard to their parenting status.

Nicholson and colleagues (2002) estimated numbers based on parent characteristics and mental illness using the 1992 US National Comorbidity Survey. This major, nationally representative, mental health survey was completed during 1990-1992 with a household sample of non-institutional civilians (as cited in Nicholson et al., 2002; for details see Kessler et al., 1994). For psychiatric disorders generally (without substance abuse) they found that women (68.0%) and men (54.5%) were both more likely than those without a disorder to be parents (compared to 62.4 and 52.9% respectively). These authors also examined mother and father status in those with severe and persistent mental illnesses according to type of disorder. They found that during their lifetime, 67 percent of women and 58 percent of men had had an affective disorder; 68 and 58 percent had anxiety disorders and 62 and 55 with non affective psychosis and had been parents during their life time (Nicholson et al., 2002).

¹ Notable here is research by Ostman and Hansson (2002) showing that dual parent families also come under economic pressure due to employment problems in the well parent.

Extrapolating these parenthood numbers to the Australian context where approximately 12.5 percent of the population experiences a mental illness (other than substance abuse) in any 12 month period would mean that approximately eight percent (calculated at 66.6 percent of those with a mental illness) of the population would be a parent with a mental illness. However, there are several methodological problems with extrapolating data in this way. In the first instance, such an estimate does not differentiate between dependent and adult children. In addition, a life time prevalence of the disorder includes parents who experienced a one-off episode occurring prior to having children. For instance, the average age of onset for any psychiatric disorder is over four years prior to the average age of birth of their first child (Nicholson et al., 2002).

Other studies within an Australian context have used what is described here as a bottom up approach. For example, Hearle and colleagues (1999) took a 'snap shot' of clients undergoing treatment at a nominated facility and then related these data to their parental status. When summarising these studies (Cowling, 1999; Farrell et al., 1999; Hearle et al., 1999), the Australian Infant, Child, Adolescent and Family Mental Health Association (2001) suggested that between 29% and 35% of adult mental health service clients were female with dependent children under the age of 18. Such data provide a much lower estimation of parent status compared to that of Nicholson et al (2002, e.g. women 68% and men 54.5%) using a top down approach perhaps because Nicholson and colleagues calculated child status and mental illness across the adult life span. However, there are also problems in this bottom up methodology, as it employs relatively small numbers (for instance, from n=342 Hearle and colleagues, 1999, found only 20 of these participants to be parents with dependent children living in their home).

Methodology

Top down and a bottom up approaches were employed to triangulate and confirm numbers of COPMI in Australia. Using these approaches data is reported and/or estimated according to the level of severity of the parents' mental illness and according to number of parents in each household.

Throughout the results and discussion we employ the expression severity as a general term encompassing several key concepts in the mental health field, literature and associated with the current data sets. The term severity is commonly associated with the number and degree of symptoms and how impairing or debilitating the illness. DSM IV indicates that a severe episode of major depression is "...characterised by the presence of most of the criteria symptoms and clear-cut, observable disability (e.g. inability to work or care for children)" (2000, p.412). A severe manic episode has features "...characterised by the need for almost continual supervision to protect the individual from harm to self or others" (p. 416).

In the research literature, Brennan et al., (2000) add a further complexity, arguing that it is difficult to separate the effects of chronicity from severity because both are commonly compounded. In reference to depression they suggest that

Depression is extremely heterogeneous in its manifestations, ranging from mild and transitory mood distress that is entirely normal to persisting and severe depressed mood accompanied by somatic, cognitive, and behavioral disturbances that impair normal role functioning. In between these extremes may be chronic but relatively mild symptoms or one or more periods of intense symptoms of various durations with normal functioning in between (p.759).

Further to this, in terms of the data that was analysed here, the ABS Mental Health and Wellbeing survey refers to the level of illness disability, by highlighting limitations of physical function and roles that are able to be performed (1997, p. 18-19). However, the ABS point out that "Estimates of mental disorders presented in this

publication are not clinical diagnoses and are therefore dependent on the accuracy of diagnosis based on survey data” (ABS, 1998, p. 3). Regarding the bottom up data, it has been suggested that clients attending Adult Mental Health services have a severe and/or persistent mental illness, rather than a mild mental illness and/or experience a mental illness for a short duration of time (Victorian Mental Health Branch, personal communication, 2005²). Considering the plethora of distinctions and definitions used to describe patients across empirical, population and actual work, the term severity was used here as a general and all encompassing concept.

Top down estimate

The top down approach to estimating numbers of COPMI involved an extrapolation of large scale population data based on family characteristics and mental health information, similar to Nicholson et al., (2001). More specifically, an attempt was made to estimate the numbers of Australian and Victorian children living in households with a mentally ill parent by employing mental illness prevalence and family characteristics. The most appropriate and complete data on the mental health of Australians was gathered during an Australian Bureau of Statistics (ABS) study and published in ‘Mental Health and Wellbeing: Profile of Adults, Australia 1997’ (ABS, 1998). The most complete information on family characteristics is published in an ABS report titled ‘Family Characteristics Australia’ (ABS, 2003). The following section briefly describes the two ABS studies used to extrapolate the findings for the current report.

The ‘Mental Health and Wellbeing: Profile of Adults, Australia, 1997’ (ABS, 1998) is based on the National Survey of Mental Health and Wellbeing (SMHWB) of Adults conducted in 1997. This profile examined the prevalence and severity of various mental disorders in Australians over 18 years of age in the previous 12 months. A representative sample (drawn from all States and Territories) of 10,600 people voluntarily completed the survey and this information was used to generalise findings to the Australian population. The SMHWB utilised a modified computerised version of the Composite International Diagnostic Survey (CIDI) to assess mental health. It is important to note that only major mental disorders with approximate prevalence rates of over 1% were assessed in this survey. The mental disorders reported were as follows: Anxiety Disorders (including Panic, Agoraphobia, Social phobia, Generalised anxiety disorder, Obsessive-compulsive disorder and Post-traumatic stress disorder); Affective disorders (Depression, Dysthymia, Mania, Hypomania and Bipolar affective disorder); Alcohol use disorder (Harmful use and Dependence) and Drug use disorders (Harmful use and Dependence)(ABS, 1998, p.3). The ABS points out that the CIDI is a survey for research purposes and does not replace a clinician’s diagnosis. For the purposes of the current top down approach, people reporting alcohol and drug use disorders only, were removed from the estimated prevalence figures.

The Family Characteristics Australia (ABS, 2003) report was based on results obtained from the Family Characteristics Survey conducted throughout Australia in June, 2003. Survey details included “...household and family composition including demographic, labour force and family. A particular focus of the survey is families with children aged 0-17 years” (ABS, 2003, p.2). This report was particularly useful as it provided information on numbers and type of households in Australia and Victoria in conjunction with numbers of children.

Together, these two surveys allowed extrapolation of mental illness in Australia according to family status. First, an estimation of the percentage of Australians who have a mental illness was calculated from the ABS report on mental health (ABS, 1998). This suggested that 12.5% (see appendix one for calculation details) of the adult Australian population has a mental illness (excluding substance abuse only).

² Branch staff indicates that “...the constitution of our clients is actually a mixture of 'acute' and 'chronic' cases” (personal communication, 2005).

Previous researchers who have also reported on parts of the ABS study have also included an estimation of the numbers of people suffering from schizophrenia (see Andrews, Issakidis, Sanderson, Corry, & Lapsley, 2004). The inclusion of schizophrenia was essential to this study and as Jablensky et al. (2000) have estimated a rate of 3.7 per 1000 (after excluding affective disorders with psychotic features) for occurrence of schizophrenia and other non-affective psychoses, 12.9 % (12.5% + 0.37%) was used as an approximation of the percentage of adult Australians who have experienced a mental illness in the previous 12 months.

Bottom up estimate

To inform the bottom up approach, data was obtained from Victorian Mental Health branch, an organisation which collected demographical information on all adults who presented for treatment at public mental health services in the state during the 2003 to 2004 financial year. As outlined above all presenting clients to the service were considered to have severely disabling mental illness.

In terms of patient characteristics of the 38,455 adults admitted to the service in 2003-2004, 48 percent were female and 52 percent male and 40 percent were new clients to the service (not seen by the branch in the previous five years). Clients ranged in age from 15-19 (4.5%) to 60-70 years (4.1%), with most (67%) of patients between the ages of 20 and 44 years. In addition, 78 percent of the client group had not been hospitalised during the period. Of the 22 percent that had been hospitalised, 5.6 percent had spent between one and five days in hospital, 3.8 percent between six and ten days, 4.8 percent between 11 and 20 days and 7.5 percent more than 20 days. In relation to number of contacts with the Adult Mental Health agency for treatment, 37.6 had between one and five contacts, 12.3 had between six and ten contacts, 13.1 had between eleven and twenty and 35.5 percent had more than twenty contacts with the adult mental health service.

Results and Discussion

The central aim of this paper was to accurately estimate the number of children and families affected by parental mental illness and to estimate the numbers at risk according to level of parent disability and home living circumstances. Table one reports data from top down and bottom up methodologies, estimating numbers of families and children, according to single and two parent families and the level of disability conferred by the parent's mental illness.

Table One: Estimated (ABS population) and actual (Victorian Mental Health Branch) numbers of children and families living with one and two parents in Victoria and Australia according to illness severity.

Region	Level of Disability	Two Parent		One Parent		Total		Data Source
		Families	Children	Families	Children	Families	Children	
Victoria	Severe	5,862	11,138	1,967	3,265	7,829	14,403	VMH actual
	Severe	16,458	31,272	2,044	3,394	18,502	34,666	Estimate based on ABS data
	Not severe	110,142	209,281	13,681	22,710	123,823	231,991	Estimate based on ABS data
	Total	126,600	240,553	15,725	26,104	142,325	266,657	Estimate based on ABS data
Australia	Severe	23,499	44,705	8,755	14,620	32,254	59,325	Estimate ³ based on VMH actual data
	Severe	65,977	125,516	9,099	15,196	75,076	140,712	Estimate based on ABS data
	Not severe	441,535	839,994	60,896	101,696	502,431	941,690	Estimate based on ABS data
	Total 12 months	507,512	965,510	69,995	116,892	577,507	1,082,402	Estimate based on ABS data

Building on data in Table 1 we then estimated the percentage COPMI in the total child population, and the number of COPMI children according to family status and the level of parental mental illness. We then hypothesise a level of risk to children (low to extreme) for these types of living circumstances (see Table Two below). Finally, we outline some implications for intervention, once again according to each living circumstance.

³The ABS ratio of children to family was used to calculate the number of children for the VMH estimate.

Table Two: Percent of all and COPMI children living family structures, estimate of risk and implication for future interventions.

Family and Illness	% of all children	% of COPMI	Est. of Risk	Implications for Intervention
Two Parent Not Severe	18.46	78.48	Low to Moderate	<p>Ensure that appropriate systems are in place for the identification, assessment, referral and/or intervention for COPMI and their parent from community settings such as G.P.'s, community mental health/welfare settings.</p> <p>Involve other parent (attachment figure) in intervention.</p> <p>Educate both parents regarding attachment and connectedness, impact of illness on children and parenting behaviours.</p> <p>Provide support and education to the other parent (without the mental illness) and enhance relationship between the two parents.</p> <p>Develop a plan to manage the circumstance of ill parent hospitalisation.</p> <p>Encourage open and age appropriate discussion and education about parental mental illness.</p>
One Parent Not Severe	2.00	8.52	Moderate to High	<p>Develop and maintain attachments and connections from within and out of the family unit for both parent and children (e.g. with mother, siblings, grandparents, friendship groups).</p> <p>Educate parent about attachment and connectedness, impact of illness on children and parenting behaviours.</p> <p>Develop a plan to manage the possible event of parent's hospitalisation.</p> <p>Encourage open and age appropriate discussion and education about parental mental illness.</p> <p>Ensure adequate family financial circumstances.</p>
Two Parent Severe	0.98 to 2.76	4.18 to 11.73	Moderate to High	<p>As for two parent, not severe.</p> <p>Ensure that there is constant support for the other parent (without the mental illness).</p> <p>Review plan for parent hospitalisation on a regular basis.</p>
One Parent Severe	0.29 to 0.30	1.22 to 1.27	Extreme	<p>As per one parent, not severe.</p> <p>Identification, assessment, referral and/or intervention for COPMI and parent through Adult Mental Health services.</p> <p>Review plan for parent hospitalisation on a regular basis.</p>
Total	21.73 to 23.52	100		

The following discusses the numbers of children at suggested levels of risk according to family status and parent illness severity categories outlined in the tables above. Then outlined are suggestions regarding policy and practice for these children according to risk categories.

Estimated numbers at risk

In total, it is estimated that there are between 21.73 and 23.52 percent of children living in Australian and Victorian households where at least one parent has a mental illness. This means that there are just over one million children in Australia and just over a quarter of a million in Victoria. These figures add to previous reports that approximately 30% of the Australian Adult Mental Health clients were female with dependent children under the age of 18 (Australian Infant, Child, Adolescent and Family Mental Health Association, 2001) and the life time estimation of Nicholson et al., (2002) that 68 percent of North American women and 54 percent of men with disorders have children. This is a substantial number of children and considering the higher rates of mental health issues that they are known to experience, compared to other children (Beardslee et al., 1998; Brotman Band & Weisz, 1988; Cicchetti et al., 1998; Klimes-Dougan et al., 1999) it highlights an important target group for preventive programs.

The current data also add important information about sub groups of COPMI children at different levels of mental health risk. Four categories are highlighted according to mental illness severity and level of family support which proffer variable risks within the population of COPMI children. Table 2 highlights that just over three quarters of COPMI children (18.46 percent of all children) are in two parent families where the level of mental illness is not severe. We suggest that these children are at risk but in the low to moderate category. In addition, we also estimate that just over eight percent of COPMI who live in single parent families where the mental illness is not severe are at a moderate to high risk of developing future mental health problems. Within the former risk category there are 209,281 children in Victoria and 839,994 in Australia and in the latter there are 22,710 and 101,696 children respectively.

While 87 percent of COPMI are accounted for in the above risk categories, the numbers of children in the most profound, including extreme risk categories are nontrivial. Employing the dual approximation methodology, it is estimated that between just over four percent (Victorian Mental Health Branch data) and just fewer than 12 percent (estimates based upon ABS data) of COPMI live in two parent families, where one parent has a severe mental health problem. This accounts for between 0.98 and 2.76 percent of all children. It is calculated that between 11,138 and 31,272 children in Victoria and 44,705 and 125,516 in Australia live in such circumstances and we propose that these children are at moderate to high risk to their mental wellbeing.

The final category of single parents with a severe mental illness, contains the smallest number of children, but includes those, who we argue, are at extreme levels of risk for future mental health issues. It is estimated that this group accounts for 1.22 to 1.27 percent of COPMI and includes approximately three in every one thousand Australian children. In Victoria, it is estimated that there are 3,265 to 3,394 children and in Australia 14,620 to 15,196 children who live in these circumstances. While relatively small numbers, this is nonetheless a significant number of children who face compounding, risk variables. Without some form of intervention these children potentially face considerable risks in terms of their future mental health. It is imperative that future policy and programs be targeted towards such children. Possible interventions are discussed below.

In terms of estimation methodologies, it is interesting to note differences between approaches according to family structure. When two to one parent households are compared, a discrepancy between the use of Adult Mental Health services (bottom up) is found, compared to those likely (top down) to be requiring care for their mental illness. The data show that while there are 5,862 individuals in two parent families (11,138 children) actually receiving treatment, the extrapolation from ABS data points to over twice this many (estimate between 16,458 and 31,272) who do not receive treatment from adult mental health services. However, single parent households who use state mental health services show 1967 families and 3285 children, almost identical to the top down ABS estimate of 2,044 and 3,394. Overall, this suggests that there are only 77 sole parents with a severe mental illness in Victoria with children in their care who **do not** attend Adult Mental Health services.

Although these figures remain estimations, this implies that almost all severely ill parents with sole care of their children utilise Adult Mental Health clinics. Conversely, a significant number of parents with a severe mental illness, who have a partner, do not. The former might be best explained by the often limited financial circumstances of sole parents who have few options for private psychiatric care. Perhaps the most important implication of this data is for Adult Mental Health services across Australia. An opportunity exists for intervention to a particularly vulnerable group of children, given the estimate that almost all severely mentally ill sole parents attend Victorian Adult Mental Health services for treatment and the subsequent extreme risk status conferred to their children (implications for policy and practice are discussed in detail below).

While there are large numbers of children in the low-moderate risk categories and fewer in the higher risk groups, it is important to note here that level of risk is not rigid; potential changes might occur for example, when a parent leaves the household, a new partner arrives and/or the severity of the illness changes.

Implications for Policy and Practice

Previous literature indicated that children with a severely mentally ill parent (Frankel & Harmon, 1996; Harnish et al., 1995; Teti et al., 1995; Nolen-Hoeksema et al., 1995) and/or who have only one parent (Wilson et al., 2004) are at increased risk of later mental health and adjustment problems than other children whose parents might have a mild or moderate mental illness and/or who live in a two parent family. Thus, a considerable number of 'at risk' children might be identified via their parents attending an Adult Mental Health clinic. This constitutes an opportunity for Adult Mental Health workers to intervene with both children and their families who might be considered some of the most vulnerable in society.

Accordingly, Adult Mental Health policy needs to be directed at identifying and targeting such clients, with appropriate interventions developed for both children and their parents. For clients who are parents, for example, parenting capacity might need to be assessed and parenting programs that acknowledge the responsibilities and difficulties in sole parenting developed. There is some literature which highlights the need for specifically tailored parenting programs for clients with a mental illness, rather than the generic parenting programs that community centres might offer (Craig, 2004; Tebes, Kaufman, Adnopo & Racusin, 2001), which subsequently need to be delivered to the parent clients of Adult Mental Health facilities. The single parent status of these clients would also need to be acknowledged and incorporated into their rehabilitation plans.

Due to the single parent status of these clients, Adult Mental Health workers would also need to encourage support systems for these clients, by encouraging friendships, family supports and community networks. Cochran and Brasard (1979, as cited in Rogosch et al., 1992) described how social support networks provide various types of assistance for all parents, such as role modelling, providing emotional support, companionship and practical assistance. Accordingly, Rogosch

and colleagues (1992) demonstrated that the presence and strength of mentally ill mothers' current supportive relationships predicted adaptive parenting attitudes. Ackerson (2003) found that those parents with a strong social support network, such as family, friends or church, coped better with crises than those who were socially isolated. Such support was especially critical when alternative care was needed, such as when the parent was hospitalized or very unwell (Ackerson, 2003). In comparison, parents who did not have such support were more likely to have lost custody of their children (Ackerson, 2003). Given that the proportion of Adult Mental Health service clients who are parents are also single, and have a severe mental illness (thereby increasing likelihood of hospitalisation) it would appear important for workers to encourage a support network (extended family and community) for such clients, if none exists.

For the children of these adult mental health clients, support systems might need to be initiated or/and enhanced, given that they have only one parent to access support from, and this parent has a severe mental illness. While Rutter (1979) showed that a positive relationship with at least one parent, especially during infancy and early childhood, is a protective factor for children's psychological health, this might not always be possible for these sole parents, unless the other parent is available. The need to develop networks is underlined by Masten and colleagues (1988), who found that social and emotional connections with others were a significant moderator on the effects of a variety of disadvantages, including parental mental illness. Children do not only access support from their parents however. Howes (1999) argues that children have the potential to form many different kinds of relationships and Harrison (2003) emphasizes the role of child care workers and teachers in a child's social network. As well, siblings within families which experience disadvantage also have the potential to provide support to each other (Maybery, Ling, Szakacs, Reupert, 2005; Widmer & Weiss, 2000).

Several studies have shown (Fudge & Mason, 2004; Maybery et al., 2005) that positive peer relations and having someone to talk to on a regular basis was an important coping mechanism for COPMI. Overall, such research indicates that if or when the primary adult is not able to appropriately support the child, meaningful social and emotional connections, from within and outside of the family, might be effectively made elsewhere. This study has shown that nearly all sole parents with a severe mental illness become at some point clients of Adult Mental Health services and subsequently, provide workers an opportunity to intervene with children in developing alternative support systems, or enhance current supports such as extended family members, teachers and/or peers, if or when the primary adult is not available.

On the other hand, there are a significant number of children with a parent with a severe mental illness, from two parent families. The majority of these parents do not utilise adult mental health clinics. The current research does not indicate how these parents might access support and/or psychiatric care. However, possible services might consist of general practitioners, primary mental health teams, community mental health and welfare professionals, private psychiatrists and psychologists in the general community. Table 2 indicates some possible mechanisms for interventions with dual parent families. It is argued here that intervention for this group of children must involve the other parent (attachment figure), to enhance connectedness and attachment patterns within the family.

Additionally, it is likely that in two parent families, the mentally ill parent draws support from their partner. Nicholson, Sweeney and Geller (1998) found that caregiver responsibilities often fall on mentally ill parents' spouses or partners (when present). However, they also found that while the partner and other relatives might be a resource for the mentally ill parent (for example, assisting in household tasks and child care) they may also be a source of stress, by taking over a parent's responsibilities without consulting the parent (Nicholson et al., 1998). Merikanages,

Prusoff and Weissman (1988) showed depression in one parent is frequently associated with depression and other psychopathology in the other parent. Such literature mirrors other caretaker research (for example, Nankervis, Bloch, Murphy, & Herrman, 1997) that highlights the stress of family care giving, the psychological and physical needs of carers and the subsequent importance of caregiver education in how to best support themselves and the mentally ill parent. Overall, we suggest that intervention for this group enhances parents' knowledge regarding attachment/connectedness, the impact of mental illness on children, parenting skills and finally, aim to enhance and support the relationship between the two parents. Other issues that could be targeted include planning for the hospitalisation of the ill parent, and age appropriate discussions about parental mental illness.

As most children come from two parent families, the support that they might access from the other parent needs to be encouraged and enhanced, rather identifying and developing support from agency workers. The other parent (without the mental illness) will most likely require education and support in dealing with their partner's mental illness. Furthermore, as the mental illness is not severe, the attachment between the mentally ill parent and child also needs to be encouraged and enhanced. Tebes et al., (2001) found that parenting performance and the parent-child bond accounted for much of children's adaptability; consequently, intervention needs to focus on improving parenting, reducing negative parent-child dysfunctional interactions and parental distress, regardless of a parent's mental illness diagnosis or level of severity.

Finally, families affected by parental mental illness are more likely to experience crises, such as the hospitalisation of a parent, or acute mental illness episode and the likelihood of this occurrence is higher again for families in which a parent has a severe mental illness (e.g. 22 percent of Adult Mental Health Branch clients were hospitalised during 2003-4). As prior planning is the key to optimum management of a critical incident in any setting (Kirkland & Maybery, 2001) it is important for all members of a family to plan for future episodes of hospitalisation or periods of illness. An example of one such approach is the 'Supporting Our Family' Kit developed by COMIC, and available from <http://www.howstat.com/comic/>. These plans are most relevant for families in which the parent has a severe mental illness, in which case the plan needs to be reviewed regularly. Once again, the responsibility for initiating and reviewing these might be Adult Mental Health workers, given that most single parents with a severe mental illness are their clients.

Overall, the results suggest a clear focus for intervention within Adult Mental Health agencies. The data indicates a high priority for Adult Mental Health services to identify and provide specific interventions that acknowledge the single parent status and subsequent parenting responsibilities of their parent clients. These clients also provide an opportunity for agency workers to identify, intervene and/or refer on, an 'at risk' group of children, given that many of their parents have a severe mental illness and are single parents.

Future research and implications

The implication for the results is principally for Adult Mental Health Services, in terms of policy and intervention, given that many of their clients who are parents are single and have a severe mental illness. Such a service might form an appropriate forum in which to identify and address the broader familial responsibilities of their parent clients, including the needs of the children. The combination of top down and bottom up methodologies has shown to be a valuable approach to examining and estimating numbers of children at risk. The combination has allowed a triangulation of actual and estimated data sets but also clearly identified a distinction regarding treatment for the severely mentally ill parent from one and two parent families.

The results, outlining the number of children according to different risk variables associated with parental mental illness, have implications for future research. Other

factors not examined include type of illness, chronicity compared to severity, dual diagnosis (co morbid mental illness and substance/alcohol abuse), age of children (currently and at illness onset), gender of child, material hardship, housing, and other negative life events. Future research that might assist in the development and enhancement of interventions for these children and families should examine the respective impact of these cohorts for variables such as parenting capacity, family functioning and child mental health and wellbeing. This would, for example, extend current research that highlights the wellbeing impact of being a child in a one parent family with a severely disabled parent compared to a dual parent family with a moderate disorder.

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Appendix One

1) Estimating Mental Illness in Australia

We needed to obtain an estimation of the percentage of Australians who have a mental illness. Using information from the table on page 29 of the previously described ABS report (ABS, 1998) we provide the following estimate of percentages of the adult population who have had the following mental illness in the previous 12 months (without substance/drug abuse only) in Australia.

▪ Mental disorders only	
• Anxiety	2.9%
• Affective disorders	1.4%
• Anxiety and affective	1.1%
• Anxiety and substance abuse only	0.6%
• Affective and substance abuse only	0.2%
• Anxiety, affective and substance abuse only	0.4%
▪ Mental disorders and physical conditions	
• Anxiety and physical only	2.6%
• Affective and physical only	0.8%
• Anxiety, affective and physical only	1.2%
• Anxiety, substance abuse and phys	0.5%
• Affective, substance abuse and phy	0.3%
• Anx, affect, subst and phys	0.5%
• Total	12.5%

This suggested that 12.5% of the adult Australian population had a mental illness (excluding substance abuse only) in the previous 12 months. Previous researchers who have also reported on parts of the ABS study have also included an estimation of the numbers of people suffering from schizophrenia (see Andrews, et al., 2004). The inclusion of schizophrenia was essential to this study and as Jablensky et al. (2000) have estimated a rate of 3.7 per 1000 (after excluding affective disorders with psychotic features) for occurrence of schizophrenia and other non-affective psychoses, 12.9 % (12.5% + 0.37%) was used as an approximation of the percentage of adult Australians who have experienced a mental illness in the previous 12 months.

2) Estimating Numbers of Families with Children

According to the ABS (ABS, 2003), there were “2.5 million families with at least one child aged 0-17 years in 2003” (p.5). The Family Characteristics Australia Report (ABS, 2003) provides the following information on the demographic split of these families as follows:

- Families with children aged 0-17 years
 - 2 509 600 families
 - 4 642 100 children

They then subdivided this broad category into five smaller categories:

- **Intact couple families**
 - “A couple family containing at least one child aged 0-17 years who is the natural or adopted child of both members of the couple, and no child aged between 0-17 years who is the step child of either member of the couple. Intact families may also include other children who are not the natural children of either parent” (ABS, 2003, p. 72).
 - 1 775 500 families
 - 3 333 800 children
- **Step couple families.**
 - “A couple family containing one or more children aged 0-17 years, none of whom is the natural or adopted of both members of the couple, and at least one of whom is the step of either member of the couple. A step family may also include other children who are not the natural children of either parent” (ABS, 2003, p. 73).
 - 98 600 families
 - 158 400 children
- **Blended couple Families**
 - “A couple family containing two or more children aged 0-17 years, of whom at least one is the natural or adopted child of both members of the couple, and at least one is the step child of either member of the couple. Blended families may also include other children who are not the natural children of either parent” (ABS, 2003, p. 70).
 - 78 100 families
 - 224 400 children

- **One parent families**
 - “A family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the household” (ABS, 2003, p. 72).
 - 542 600 families
 - 903 900 children

- **Other families**
 - “A family of other related individuals residing in the same household. These individuals do not form a couple or parent-child relationship with any other person in the household and are not attached to a couple or one parent family in the household. For example, if two brothers are living together and neither is a spouse, a lone parent or a child, then they are classified as an other family. However, if the two brothers share the household with the daughter of one of the brothers and her husband, then both brothers are classified as other related individuals and are attached to the couple family” (ABS, 2003, p. 72).
 - 14 900 families
 - 21 500 children

3) Estimating Numbers of Children Involved in Families Where a Parent/Guardian has a Mental Illness (Australia)

The following section outlines the rationale for estimation of the numbers of families and children who may be affected by a parent with a mental illness. As previously described, an estimation of the approximate rate of mental illness within the previous 12 months in the Australian adult population is 12.9%. ABS data on family characteristics in Australia (which detail the type and number of families with children aged 0-17 years of age as of June 2003) was used in conjunction with the 12.9% incidence rate of mental illness in the adult population to extrapolate the number of families and children that may be affected by having a parent/guardian with a mental illness. The following example may clarify the estimations:

- Using the ABS Family Characteristics Survey data (ABS, 2003) we know that there are 1 775 500 intact couple families with 3 333 800 children aged between 0-17 years of age in Australia. This is a ratio of 1.88 children per intact couple family.
- Using the definition of Intact Couple Family provided by the ABS (ABS, 2003) we know that there are two adult parents caring for this group of children within this category, therefore there are 3 551 000 ($1\,775\,500 \times 2$) parents/guardians.
- In this group of 3 551 000 parents and guardians we can assume that there will be a 12.9% incidence of mental illness within the previous 12 months, therefore we can estimate that 458 079 ($3\,551\,000 \times 12.9\%$) parents/guardians may have been affected.
- We now assume that 458 079 parents and guardians have been affected by a mental illness in the previous 12 months but we need to estimate the numbers of families and children that may be affected. In order to work out

the number of families that are affected we need to make an assumption regarding how many mentally ill parents/guardians would be in each family. It is possible that there are some families in this category in which both carers have a mental illness within the previous 12 months, however, we considered that this would be an extremely unlikely scenario. Consequently, we made an assumption of one mentally ill parent or guardian per family - therefore using this assumption this equates to 458 079 families that are affected.

- If 458 079 families are affected and we know that there are 1.88 children per family in this category – then the number of children living in these families is estimated to be 861 189 (458 079 x 1.88).

A similar process was used to estimate figures for all family categories in Australia and Victoria. Using the estimate of mental illness and the family characteristics data we can extrapolate the estimated numbers of families and children in Australia that include an adult member with a mental illness. We can also estimate the number of children (0-17 years of age) that would be likely to be living in these families. Table 3 below shows the number of children according to type of household (e.g. from ABS, 2003) and then extrapolates these households to those living in a family with a parental mental illness in Australia and Victoria.

Table Three: Estimated Numbers of Families and Children (0-17) in Australia and Victoria Living according to family-type where one parent/guardian has had Mental Illness in the Previous 12 Months.

Family type	Total		With mental illness		With mental illness	
	Australia		Australia (12.9%)		Victoria (12.9%)	
	Families	Children	Families	Children	Families	Children
Intact Couple Families	1 775 500	3 333 800	458 079	861 189	116 874	219 723
Step Couple Families	98 600	158 400	25 439	40 956	5 831	10 204
Blend Couple Families	78 100	224 400	20 150	57 830	3 406	9 876
One Parent Families	542 600	903 900	69 995	116 892	15 725	26 104
Other Families	14 900	21 500	3 844	5536	490	750
TOTAL	2 509 700	4 642 100	577 507	1 082 403	142 326	266 657

Severity of the parent's mental illness has also been reported to have an effect on their children. The SMHWB survey also collected information on the level of disability experienced by respondents in the previous 4 weeks using the Brief Disability Questionnaire (ABS, 1999). This enabled the level of disability for respondents to be categorised as none, mild, moderate and severe (ABS, 1999). We considered it important to also provide an estimate of the numbers of families and children potentially involved in each of these disability categories.

Based on Table 14 (p.33) in the ABS Report on Mental Health (ABS, 1997) we extrapolated the percentage of Australian Adults in the various severity categories of mental illness (see Table 4). Please note that the estimated schizophrenia prevalence is not included in this estimation.

Table Four: Percentage of Australians Who Have Experienced a Mental Illness in Previous 12 Months Categorised by Their Level of Disability

Level of Disability		None in previous 4 weeks	Mild	Moderate	Severe	Total
Mental Disorder Only	Anxiety Only	2.06	0.27	0.41	0.14	2.9
	Affective Only	1.12	0.10	0.15	0.05	1.4
	Combination	1.24	0.52	0.32	0.18	2.3
Mental and Physical	Anxiety and Physical	0.76	0.48	0.86	0.49	2.6
	Affective and Physical	0.29	0.14	0.24	0.18	0.9
	Combination	0.61	0.44	0.74	0.59	2.4
TOTAL		6.1	2.0	2.7	1.6	12.4*

*NB: some differences due to rounding errors

The results indicate that approximately half the people who had experienced mental disorders in the previous 12 months reported no level of disability in the previous 4 weeks. In contrast, the percentages of people are more evenly divided among those who have experienced both a mental and physical illness in the previous 12 months.

Percentages were calculated for the categories of severity consisting of 49% of people who have had a mental illness in the previous 12 months having no level of disability within the previous 4 weeks, 16% mild, 22% moderate, and 13% were in the severe category (note slight differences due to rounding errors).

Estimations of the number of families and children affected by mental illness in Australia and Victoria were then made based on the available ABS data. Table 5 contains the estimated numbers of families (in which an adult has a mental illness in the previous 12 months) and children (0-17 years of age) in Australia categorised by the severity of the mental illness in the previous four weeks.

Table Five: Estimated Numbers of Families (in which an adult has a mental illness in the previous 12 months) and Children (0-17 years of age) in Australia Categorised by the Severity of the Mental Illness in the Previous 4 Weeks

Severity of illness		None		Mild		Moderate		Severe	
Family Structure	Region	Families	Children	Families	Children	Families	Children	Families	Children
Intact Family	Aust	224 459	421 982	73 293	137 790	100 777	189 462	59 550	111 955
	Vic	57 268	107 664	18 670	35 156	25 712	48 339	15 194	28 564
Step Family	Aust	12 465	20 069	4 070	6 553	5 597	9 010	3 307	5 324
	Vic	2 857	5 000	933	1 633	1 283	2 245	758	1 327
Blended Family	Aust	9 873	28 337	3 224	9 253	4 433	12 723	2 619	7 518
	Vic	1 669	4 839	545	1 580	749	2 173	443	1 284
One Parent Family	Aust	34 298	57 277	11 199	18 703	15 399	25 716	9 099	15 196
	Vic	7 705	12 791	2 516	4 177	3 459	5 743	2 044	3 393
Other Family	Aust	1 884	2 712	615	886	846	1 218	500	720
	Vic	240	368	78	120	108	165	64	98
TOTAL	Aust	282 979	530 377	92 401	173 185	127 052	238 129	75 075	140 713
	Vic	69 739	130 662	22 742	42 666	31 311	58 665	18 503	34 666

Appendix Two

Bottom up approach

In an effort to determine the numbers of these patients with dependent children Table 6 below provides a breakdown of gender and living status.

For the estimated number of children for actual families in VMH data calculations were based on One parent based on 1.67 children per family, Two parent 1.9024 and total 1.8743.

Table Six: Numbers and percentages of Victorian Mental Health Service clients by gender and living status.

Living Status	Female		Male		Total	
	No.	%	No.	%	No.	%
Client alone	3743	21.42	5149	27.68	8892	24.65
Partner	2608	14.93	2029	10.91	4637	12.85
Partner/parents and children	3596	20.58	2266	12.18	5862	16.25
Parents	2257	12.92	4212	22.65	6469	17.93
Others	3442	19.70	4803	25.82	8245	22.86
Dependent child	1827	10.46	140	0.75	1967	5.45
Total	17473	100	18599	100	36072	100

The table indicates that almost 22 percent of clients had a dependent child and that five percent of these clients were living solely with their children – without support from a partner. In addition the table shows that while there were slightly more males than females there were many more females living with a partner or their parents and their children (20.6 percent) compared to only 12.2 percent of males in such living circumstances. Of greater contrast was that 10.5 percent of females had a dependent child or children compared to only .75 percent of males in such circumstances. In raw terms there were 1827 mothers in single parent households compared to only 140 fathers in single parent households.

The following table highlights living status according to type of disorder.

Table Seven: Numbers and percentages of Victorian Mental Health Service clients by type of disorder according to dependent children and living status.

Lives with:	Schizophrenia		Mood		Anxiety		Other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Client alone	3469	29.04	1904	22.6	973	20.9	1798	23.8	8144	25.0
Partner	861	7.21	1315	15.6	727	15.6	966	12.8	3869	11.8
Partner/parents and children	1190	9.96	1842	21.8	1019	21.9	1177	15.6	5228	16.0
Parents	2965	24.82	1294	15.3	736	15.8	924	12.2	5919	18.2
Others	3102	25.97	1407	16.7	816	17.5	2272	30.1	7597	23.3
Dependent child	357	2.99	652	7.75	371	7.99	393	5.22	1773	5.45
Total	11944	100	8414	100	4642	100	7530	100	32530	100