

IN-DEPTH TOPIC: CHILDREN OF PARENTS WITH MENTAL ILLNESS AND ALCOHOL AND OTHER ADDICTIONS (COPMIA)

Introduction

The recent report on Health Loss in New Zealand [1] observed that “we are living longer, but not all of this time is spent in good health” and noted that mental health disorders were the third leading condition group contributing 11.1% of health loss. Within this group the main conditions were anxiety and depressive disorders, alcohol use disorders and schizophrenia. Among youth (15–24 years) and young adults (25–44 years) mental disorders were the leading cause of health loss, and for women of reproductive age (15–44 years) over 25% of health loss was attributed to mental disorders.

In New Zealand and internationally, improvements in pharmacotherapy and a move from institutional to community care for adults with mental illness has resulted in an increase in children living with a parent with mental illness [2]. An estimated 15–20% of young people live in families with a parent who has mental illness or addiction [3,4]. Data on the actual number of children living with parents with alcohol or other addictions is scant.

The 2007/08 Alcohol Use in New Zealand Report noted that over one quarter (29%) of women consumed alcohol during their pregnancy [5]. Babies exposed to alcohol in utero are at risk of a range of developmental abnormalities collectively termed Fetal Alcohol Spectrum Disorder. The more severe form is termed Fetal Alcohol Syndrome, and includes growth deficiency, facial anomalies and neurological abnormalities [6]. International reviews estimate that fetal alcohol exposure conservatively affects nearly one in every 100 births [7]. Currently in New Zealand there is no reliable prevalence data for fetal alcohol spectrum disorders or fetal alcohol syndrome.

The risks for children with a mentally ill parent have been recognised for several decades [8] but the children’s needs have often been neglected or hidden. Furthermore, families affected by mental illness are more likely than other families to be affected by other adversity such as financial stress, parental conflict and social isolation [9]. Despite this, services for children of parents with mental health and addiction (COPMIA) in New Zealand are scarce and have only recently received focus from mental health services. Negative impacts on children of parents with mental illness and addiction are not necessarily inevitable, however the psycho-social context of many parents with mental illness put many children at risk of adverse outcomes [10].

This in-depth topic considers the current issues experienced by the children of parents with mental health issues and alcohol and other addictions in New Zealand and identifies evidence-based effective programmes that could be implemented to reduce risk and enhance resilience in these children. The following questions are addressed:

1. How many children and families are affected by having a parent with mental illness and/or addiction in New Zealand?
2. What are the outcomes for these children?
3. What are the optimal services and effective models that could be implemented?
4. What health and support services are currently being implemented to support these children and families internationally?
5. What is the New Zealand situation for services for these children and what are the potential ways forward?



In answering these questions, this in-depth topic is broken into five parts.

1. Part 1 reviews the New Zealand prevalence of children of parents with mental illness and addiction issues.
2. Part 2 reviews the health and support needs of children of parents with mental illness and addiction.
3. Part 3 reviews outcomes for these children including health, development and psychosocial impacts.
4. Part 4 reviews optimal service delivery models from an international perspective based on the best evidence currently available followed by a best practice systems model.
5. Part 5 reviews New Zealand strategies and plans followed by an overview of services for children of parents with mental illness and addiction in New Zealand and the implications for paediatric and adult services for these children.

The Prevalence of Children of Parents with Mental Illness and Addiction in New Zealand

Exact data on children of parents with mental illness and addiction in New Zealand is not available. Adult mental health services currently do not routinely collect data or report on the numbers of children of their clients [11]. However, we can obtain some estimates from other surveys.

Parental mental illness

The New Zealand General Social Survey (2012) [4] reports that 15% of households with children, have parents with moderate to severe poor mental health. A report from Hutt Community and Mental Health Service (CAMH) notes that in 2008, 42% of children and adolescents in the CAMH service had a parent with mental illness (6% of those parents were known and receiving treatment via the adult CAMH service, a further 10% were under GP care, 10% were not receiving treatment and 15% did not answer or their status was not known) (Dr H Thabrew, personal communication).

Te Rau Hinengaro: The New Zealand Mental Health Survey 2003/2004, a national household survey of residents aged 16 years and over reported that 39.5% met criteria for a mental disorder (DSM-IV) at any time in their life, and 21% had experienced a disorder in the past 12 months. These disorders included: anxiety, mood, substance use, and eating disorders. Māori and Pacific people had a higher prevalence of disorders and were less likely to attend services for treatment [12]. The 2011/2012 NZ Health Survey reported that 16% of adults aged 15 years and over in New Zealand had been diagnosed with depression, bipolar disorder and/or anxiety in their lifetime. Depression was the most common diagnosis at 14%. Women were 1.7 times more likely than men (20% vs. 12%) to have been diagnosed with a common mental disorder after adjusting for age, with a peak prevalence of diagnosed mental health disorders in women aged 35–44 years of 24%.

The life time prevalence of mental disorders (50.7%), and in the past 12 months (29.5%), was higher for Māori. Pacific people also had a higher lifetime prevalence (46.5%) and past 12 month prevalence (25.0%) compared to the overall New Zealand population. In addition, both Māori and Pacific people were less likely than other groups to access treatment when severity was accounted for (9.4%, 8.0% and 12.6% respectively) indicating unmet need for mental health services for Māori and Pacific people [13].

International reviews are consistent with New Zealand data. The World Health Organization World Mental Health Survey Initiative [14] reported an estimated lifetime prevalence of having one or more mental health disorders including anxiety, mood, impulse control and substance use from 12% to 47.4%. Countries reported between one sixth and one third of respondents being affected [14]. The Australian National Survey of Mental Health and Wellbeing reported that 45% of adult Australians have a lifetime mental disorder including anxiety, affective, and substance use disorders, and one in five had a mental disorder in the previous 12 months [15]. About 40% of adults with any 12-month

mental disorder were in households with children [15]. Australian studies estimate that between 16–55% of adult mental health service clients are parents [16], and 21–23% of Australian children may be affected by parents with mental illness [17]. In the United States the prevalence of adults with a 12-month mental disorder was about 30% [18] and a similar survey in the Netherlands reported a 12-month mental disorder including alcohol or drug-related problems prevalence of 23.5% [19].

A 2008 Cochrane Review on Antenatal psychosocial assessment for reducing perinatal mental health morbidity [20] recognises mental health problems associated with pregnancy, childbirth and the first postnatal year as a major public health issue, with up to 15% of childbearing women likely to develop a new episode of major or minor depression between conception and the first three months postpartum [21]. Disorders include minor and major depression, anxiety, post-traumatic stress, bipolar, schizophrenia, and puerperal psychoses. Comorbid disorders are also common in this population with mental illness commonly complicated by drug and alcohol abuse and domestic violence [20]

Parental Alcohol and Substance Use

The Alcohol Liquor Advisory Council Drinking Behaviours report 2009–10 [22] reported that the majority of adults (84%) 18 years or older in New Zealand drink alcohol to some extent. There were 21% of adults classified as ‘Binge drinkers’ defined as those who consumed seven or more standard drinks on the last occasion they drank alcohol. In this survey 40% of drinking adults and 45% of binge drinkers lived in families with children aged under 15.

The New Zealand Alcohol and Drug Use Survey 2007/8 reported that among women who had been pregnant in the previous three years, almost 30% had consumed alcohol while pregnant [5]. A recently published study of 723 post-partum women in New Zealand reported that overall 34% of women drank alcohol at some time during their pregnancy, and 12% of pregnancies were at high risk of heavy alcohol exposure early in the pregnancy [23]. The pregnancies that were most at risk were those of younger women, less educated women, Māori women, Pacific women, smokers and drug users. Almost one quarter of women also continued consuming alcohol after pregnancy recognition [23].

Heavy episodic drinking (binge drinking) is the pattern of drinking most harmful to the fetus [24] although low amounts of alcohol such as one standard drink (10 g alcohol) have been associated with adverse child behaviours [24,25]. The true incidence and prevalence of Fetal Alcohol Spectrum Disorder in New Zealand is unknown. As yet there are no nationally consistent definitions or diagnostic criteria, specific services, or routine screening and preventive protocols to protect the unborn child [26]. The New Zealand Paediatric Surveillance Unit briefly monitored the new incidence of Fetal Alcohol Syndrome (July 1999–December 2001) and found an incidence of 2.9 per 100,000 children aged under 15 years per year [27]. Fetal alcohol syndrome persists progressively through childhood, adolescence and adulthood with lifelong associated physical, mental and behavioural problems [28].

Mental illness and addiction thus affects a considerable proportion of adults at any one time, many of whom are parents. It is likely that 15–20% of children in New Zealand are living in families where parents are affected by mental illness and addiction.

Health and Support Needs of these Children

The relationship and impact of parental mental illness on children has been well recognised for several decades [8]. While parental mental illness does not universally lead to adverse effects, mental illness can hinder parenting and parent-child interactions [29], and children are at higher risk of developing psychopathology and adjustment problems [30]. Furthermore, families affected by mental illness are more likely than other families to be affected by other adversity such as financial stress, parental conflict and social isolation [9]. Several studies have also shown that severity and chronicity of parental mental illness may confer additional risk to their children [31]. Added factors that may deter families from seeking adequate support are stigma of mental illness [32,33], and fear that children may



be removed by authorities, which often occurs for mothers with serious mental illness [34]. Parents are also often concerned about the impact of their mental illness on their children and may perceive children's 'normal behaviour' as signs of developing psychological problems due to their illness [35].

Maybery et al. [31] summarizes the needs of children of parents with mental illness:

1. Ensuring that appropriate systems are in place for the identification, assessment, referral and/or intervention for these children from primary health care settings such as GPs or community mental health or welfare settings
2. Involving the other parent or supportive adults/wider family in intervention
3. Educating parents/caregivers regarding attachment, connectedness, impact of illness on children and parenting behaviours
4. Providing support and education to the other parent (without the mental illness) and providing support to enhance relationships between parents
5. Developing a plan to manage the circumstance of ill parent hospitalization
6. Encouraging open and age appropriate discussion and education about parental mental illness
7. Ensuring adequate family financial circumstances

Children of one parent families are at higher risk and will need more support from other supportive adults.

In addition, a review of children's needs conducted in Tasmania revealed two main themes: their struggle to understand the illness and recognise the signs of mental illness; and managing the illness and the impact of their parent's hospitalization [30].

Many children act as carers for a parent with mental illness, as well as looking after themselves and younger siblings. This is often a 'hidden' or unacknowledged role and there is a need in New Zealand for firstly identifying young carers of parents with mental illness and addiction, and looking at outcomes of caring to identify those whose role is inappropriate or placing them at 'risk' [36]. How children are supported or not supported, and helped or not helped to understand their parent's mental illness can have serious consequences for their own mental health later in life [37].

Outcomes

The impact of parenting behaviours has been suggested as a link between parental psychosocial functioning and child outcomes, with worsening parental mental health and parental conflict associated with lower parenting capacity [38] and children's internalizing and externalising problems. Thus there is the potential to minimize risk and enhance resilience through developing individual and family skills and improving social and other supports [2]. Programmes that will be described later are based on this premise. The following section however briefly describes outcomes for children of parents with mental illness, before considering those with parents with alcohol and substance use.

Outcomes for Children of Parents with Mental Illness

Parental depression, particularly maternal depression is associated with a wide range of adverse outcomes for their children including behavioural problems, depressive and emotional disorders and interpersonal difficulties [8,10,39,40]. There is evidence of a genetic link between parental mental illness and that of their offspring for conditions including schizophrenia [41], and major affective disorders [42]. However, researchers have concluded that the family context with multiple risk factors may be more significant than biological vulnerability in accounting for children's outcomes [43,44]. Thus the genetic contribution and direct effects of parental mental illness may be less harmful to children than the adversity that often accompanies mental illness [40].

Risk and Resilience Factors

A number of reviews discuss factors that increase the risk of psychosocial problems in children of parents with mental illness and those factors that promote resilience [2,10,45,46,47]. Devlin and O'Brien's [2] review usefully describes these factors by different domains: child, family, parental illness, and social factors.

Factors that increase the risk of mental health problems in children of parents with mental illness:

1. Child factors including gender and temperament [8,48,49]
2. Family factors including family break-up; marital and family discord [50]; impaired parenting skills [46]; impaired relationship with mother [51]; and emotional deprivation and neglect
3. Parental illness including involvement in symptomatology (e.g. as part of parent's delusion); chronicity [45]; child's age at time of illness onset [45]; nature of disorder/comorbidity; parental hospitalization (especially if frequent, maternal illness or results in alternative care) [52];
4. Socio-economic and other adversity; and stigma and social isolation.

Conversely, factors that enhance psychosocial resilience in children of parents with mental illness include:

1. Child factors: ability to sustain psychological separation from parental illness; ability to resist over-identification with ill parent; social competence; intellectual competence; and low risk temperament
2. Family factors: effective parenting practices; child has a good relationship with at least one parent; presence of a supportive well other parent; and intact family
3. Parental illness: parental symptomatology does not involve the child; and illness is mild, brief or transient
4. Social factors: external adult role model; quality peer relationships; extended support system; and compensatory social activity.

Perinatal Exposure to Parental Mental Illness

Maternal mental illness can have an adverse impact on the cognitive, emotional, social, and behavioural development of infants [20]. Associations with adverse physical outcomes have also been found in infants and young children [53].

Research has found that antenatal maternal mood impacts on in utero fetal development, with significant associations between the levels of maternal distress during pregnancy and child behavioural outcomes [54,55].

A meta-analytic review reports that maternal depression was significantly related to higher levels of internalizing (e.g. mood, anxiety, or social withdrawal), externalizing (e.g. aggression, conduct disorders, or oppositional defiant disorder), general psychopathology and negative affect/behaviour (e.g. angry, sad, anxious or fearful) in their children although effects were small. The effects were significantly modified by other variables including the severity and duration of parental illness, age of the child and other sociodemographic factors [56]. The younger the child at first exposure to their mother's depression, the stronger the negative impact. [45]

Children of mothers with post-natal depression show: more behaviour problems in early childhood, especially if the maternal depression persists; lower IQ scores in later childhood; and increased rates of affective disorders in adolescence [57]. Depression in mothers can affect their parenting by being more likely to be inconsistent, ineffective or negatively toned with their children [58]. Although parental treatment for depression is associated with improvements in child psychopathology [59,60], recent reviews have found that the treatment of maternal postnatal depression alone may not be adequate to improve cognitive development, attachment, temperament and other development in infants and



toddlers, but that probably a clear treatment focus on the mother-infant relationship is also required [59,61].

Childhood and Adolescent Exposure to Parental Mental Illness

Children who are older when they are first exposed to parental mental illness may have had more years of healthy development and therefore may not be as vulnerable as those exposed at a younger age. In addition, older children are less exclusively dependent on their mothers which may lessen some of the effects of living with a depressed mother as fathers, teachers and peers have more influence. Older children may also be better able to understand parental symptoms and be better able to emotionally and socially regulate and process their situation [56].

Outcomes for Children of Parents with Alcohol and Substance Use

Parental substance misuse can have a profound effect on child health and development, with children exhibiting higher rates of externalizing and internalizing problems including conduct disorders, emotional difficulties, underachievement at school, social isolation, antisocial activity, early alcohol and drug use, and 'precocious maturity' [62,63]. Both antenatal and postnatal exposure to a mother with substance abuse puts children at high risk for poor outcomes, with mother's having difficulties in providing nurturing environments, intensified by concomitant economic and social problems. Maternal substance abuse has also been associated with child abuse and neglect [64]. Some of the problems of childhood and adolescence can continue into adulthood including a much higher risk of substance misuse.

As noted earlier, antenatal alcohol use impacts on the developing fetus and may result in Fetal Alcohol Spectrum Disorder or other cognitive and behavioural problems. Even low levels of alcohol consumption are adversely related to child behaviour with externalizing and aggressive behaviours. Moderate to heavy levels of alcohol exposure are associated with higher delinquent behaviour scores, with children 3.2 times more likely to have delinquent behaviour scores in the clinical range compared to non-exposed children [25]. Child cognition is affected for children born of binge drinking mothers.

A review by Broning et al. [65] reported that children of parents with substance abuse problems often have an earlier onset of substance consumption, earlier drunken experiences, increased rates of binge drinking, and are at higher risk of developing substance use disorders themselves. They noted that family issues including relationship problems, conflict, or absence of a supportive parent contribute to the transmission of substance problems to their children. Protective factors include a nurturing parent with good parental attachment, monitoring, and communication of positive family values and expectations.

The Christchurch Health and Developmental Study is a longitudinal study of a birth cohort of 1265 New Zealand children born in 1977. At aged 15 years Fergusson et al. reported on the childhoods of the three percent of adolescents who had multiple problems including conduct disorder, police contact, substance abuse behaviours, early onset of sexual activity, suicidal ideation, mood disorders and lowered self-esteem. These children tended to come from disadvantaged homes with the accumulative risk of parental substance abuse, impaired parenting, family instability and marital conflict adversely impacting the children as adolescents [66].

Optimal Service Delivery Models

Given the high prevalence of mental health issues and hazardous alcohol use among parents and the potentially serious consequences for their children, the section which follows reviews the international literature for service delivery models and interventions that may meet the needs of COPMIA. The section is divided into two parts, with the first reviewing interventions specifically developed for children of parents with mental illness, and/or parents with alcohol or other addiction issues. The second part then describes interventions of a more general nature, which may be of benefit to parents and children in

families affected by mental illness and/or addiction but which have not been specifically developed for or evaluated in COPMIA.

International Models

Programmes with a Focus on Children of Parents with Mental Illness

A review published in 2012 by Reupert et al. [67] on intervention programmes for children whose parents have a mental illness explored programmes from Australia, Europe and North America. They focused on programmes that targeted children aged 5–18 years and collated them into (i) family interventions, (ii) peer-support programmes, (iii) online interventions and (iv) bibliotherapy. They found that the core component across programmes was the provision of psychosocial education to children about mental illness.

(i) **Family interventions** ranged from two to 20 sessions and focused on reducing family dysfunction and enhancing children's support networks and competencies. Overall the evaluations, mainly randomised controlled trials, showed positive results in reducing psychosocial symptoms and improving coping mechanisms.

(ii) **Peer-support programmes** were offered as school holiday programmes, after-school programmes or camps and targeted children aged 7–18 years. They aimed to increase children's knowledge about mental illness and enhance coping skills using a strengths-based preventive approach. To date evaluations of these programmes has not been rigorous and longitudinal data are not often available so outcomes remain unclear. However, evidence shows that the programmes are increasing knowledge about mental illness, enhancing levels of self-esteem and decreasing psychosocial symptoms.

(iii) **Online interventions** targeted older children and young adults and found an increase in knowledge, and self-reported life skills, but one found no change in coping skills. There were only two such programmes reviewed and future evaluations need to focus on child outcomes.

(iv) **Bibliotherapy** uses literature involving characters in a similar position to the children, allowing the children to 'normalise their situation, gain insight into the problem-solving techniques of those characters and apply this learning to their own lives'. However, a certain level of literacy is required and there is the potential for misinterpretation. To date there is no evidence that bibliotherapy is effective in children of parents with mental illness.

Parenting Programmes for Children of Parents with Mental Illness Issues

A systematic review and meta-analysis of preventive interventions in mentally ill parents on the mental health of their offspring by Siegenthaler et al. reported that cognitive, behavioural, or psycho-educational interventions appear to be effective, decreasing the risk on mental health problem in children by 40% [68]. Beardslee et al. [69] reviewed preventive interventions for children of parents with depression and reported on two systematic national programmes (see **Table 1** below). Programmes reviewed included:

1. The Effective Child and Family Programme (ECFP), implemented with families with psychiatric problems, substance use issues, physical health problems, and more recently poverty and criminality issues. Under Finnish health and child welfare law, services for adult patients must also attend to the needs of their children [70,71,72]. Included in the methods is a low-threshold intervention "Let's Talk About Children" described in the table below.
2. In Australia, the COPMIA National Initiative has developed resources to support families where a parent has depression. The Australia COPMIA Initiative has identified primary care settings as a focus for time-limited, evidence-based interventions including The Family Focus intervention based on the Family Talk Intervention (described in the table below). This includes a DVD for families and an online workforce education resource for training mental health professionals which is currently being piloted [69]. Beardslee et al. note that most parents seeking help for depression will present to primary care physicians so key factors for physicians are: recognising



depression; appropriate treatment; understanding children's concerns and needs; offering psycho-education; providing parental guidance; and follow up.

Table 1: Preventive interventions for children of parents with depression (adapted from Beardslee et al. [69])

Intervention	Development and implementation	Target group	Description	Outcomes
Family Talk	Developed in the USA by Beardslee et al. [73] and implemented in the US, Finland, Holland, Sweden, Norway, Costa Rica	Families where a parent has depression	Family Talk (6–11 sessions) and a two-session public health lecture – focusing on providing education to parents.	Long-term RCT showed positive sustained effects for Family Talk and lecture.
Family group cognitive behavioural intervention	Developed and implemented in the US by Compas et al. [74,75]	Family groups where a parent has experienced depression	10-sessions family group model seen in parent or family groups. Participants taught to understand and cope with depression	At 24-month follow up significant benefits for parents and children including few depressive episodes in children.
Family cognitive behavioural preventive intervention	Developed and implemented in the US by Garber et al. [76].	Adolescent groups that have a parent with depression	8-session cognitive behavioural preventive intervention	Fewer depressive episodes in adolescents unless the parent currently depressed. Longer term follow up underway.
Let's Talk About Children	Developed and implemented in Finland by Solantaus [70,71]	Parents/families where a parent has depression/other psychiatric problems	Manual-based, two-session intervention with parents	RCT comparing Family Talk and Let's Talk About Children – not effective. Family Talk more effective in reducing emotional symptoms

Research suggests behavioural family interventions founded on social learning models that target family relationships and parenting have the greatest empirical support [77].

Lundahl et al's meta-analysis of 63 peer-reviewed studies of parent training report that generally, parent training for modifying disruptive child behaviour is effective with moderate effect sizes immediately following treatment. However, parents and children facing higher levels of adversity did not benefit as much as non-disadvantaged families, with parent training the least effective for economically disadvantaged families [78]. Further investigation of factors associated with success among financially disadvantaged families showed that individually delivered behavioural parent training was far better than group delivered training [78].

Home Visiting Programmes for Children at Risk of Adverse Childhood Experiences Including Having Parents with Mental Health and Addiction Issues

Health Families America (Home Visiting for Child Well-being) (HFA) is a home visiting programme for families who are at risk for child abuse, neglect and other adverse childhood experiences. It is designed to work with families who may have mental health and/or substance abuse issues, histories of trauma or intimate partner violence. A review of 33 HFA evaluations by Harding et al. [79] reported consistent positive impacts on parenting outcomes such as parental attitudes but mixed results for other domains including child health and development, maternal life course, and child maltreatment.

A Cochrane Review by Dogget et al. on *Home visits during pregnancy and after birth for women with an alcohol or drug problem* [80] found six studies comparing home visits (mostly after birth) with no home visits. Visitors included health professionals, trained counsellors, paraprofessional advocates and lay visitors. Although individual studies reported a significant reduction in involvement with child protective services, there were no other positive differences found. Many of the studies had methodological concerns. They concluded that there was insufficient evidence to recommend the routine use of home visits for pregnant or postpartum women with a drug or alcohol problem and recommended further large, high-quality trials.

Programmes for Children of Parents with Substance Abuse Problems

Broning et al's [65] review of preventive programmes for children of substance-affected families including family-based, school-based and one community-based intervention considered outcomes such as knowledge, self-worth, coping and social behaviour. Program-related knowledge increased substantially in all interventions however other outcomes had some promising but mixed results. Family-based programmes showed the value of including children and parents in the intervention compared with school-based interventions where only children were involved. The authors recommend carefully planned programme evaluations and more longitudinal research to evaluate long-term outcomes of programmes.

Niccols et al. [63] review integrated treatment programmes for mothers with substance abuse issues and their children that included on-site pregnancy, parenting, or child-related services with addiction services. They included thirteen studies and reported that most pre-post design studies showed improvements in children's development, with large effect sizes on improvements of emotional and behavioural functioning. In addition, comparison group studies showed higher scores for development and most growth parameters (length, weight, and head circumference). In addition, integrated programmes were slightly better than non-integrated programmes for emotional and behavioural functioning.

One programme for parents on methadone developed *Focus on Families* (Families Facing the Future), a preventive intervention focused on relapse prevention and parenting skills training to reduce substance use disorders among their children. Shorter-term benefits of the programme trended towards reducing children's drug use and delinquent behaviour were shown one to two years following the intervention, although the children were still relatively young (age 11 years) at that time [81,82]. Haggerty et al studied the long-term effects of this group parent-training programme 12–14 years after the intervention programme and found a significant reduction in risk of developing a substance use disorder only for males compared to the control group [83].

Key Points: Evidence-based interventions for supporting children of parents with mental illness and addiction – What works?

For young children

- Good evidence for family interventions including parenting programmes although disadvantaged families may benefit more from individual rather than group parenting programmes.
- Good evidence for integrated treatment programmes including pregnancy, parenting and child services for mothers with substance abuse issues
- Some evidence for home visiting programmes with appropriately trained staff

For older children and teenagers

- Some evidence for peer support groups



General programmes that may be beneficial children of parents with mental illness

General Parenting Programmes

Parenting programmes have been shown to have a positive impact on the emotional and behavioural outcomes of children under three years of age [84], and of conduct and behaviour problems in children aged three to 10 years [85], although these reviews were focused on child problems and outcomes rather than parental issues. However, a recent Cochrane review with 48 randomised controlled trials conducted in a wide range of countries and settings including the USA, Australia, Canada, UK, China, Germany, Japan, the Netherlands and New Zealand has shown that group based parenting programmes are effective in improving parental psychosocial wellbeing [86].

A Cochrane review by Barlow et al. on *Group-based parent-training programmes for improving emotional and behavioural adjustment in children from birth to three years old* found that parenting programmes may impact on parental psychosocial wellbeing by being strengths-based, and aimed at changing parental attitudes and practices in a supportive and non-judgemental manner thus enhancing parental capacity [86]. In addition, parenting programmes may also provide strategies that directly improve parental psychological functioning as well as enhancing their parenting practices, although it must be noted that these reviews do not include programmes provided to parents with clinical mental health or psychiatric problems [86]. The findings also suggest that the benefits are short-term and that additional support to parents may be needed to sustain the improvements.

The text box below reviews a number of parenting programmes which have been evaluated overseas but which are also available in New Zealand.

The Incredible Years Programme

The Incredible Years programme was developed by Clinical Psychologist Dr Webster-Stratton in, Washington. The programme has been extensively researched over the past 30 years, and is now being delivered in many parts of the world, including Europe, Scandinavia, Australasia, and the United States. Evaluations have shown that the programme is effective across a range of ethnicities and cultures [87]. The programme is a parent management training programme developed for parents of children with conduct problems and is based on Social Learning Theory where parents share their experiences in a non-judgemental environment, view video examples and practice new parenting skills in the session. Groups of 10–15 parents with two trained group leaders usually meet for about 2 hours in 8 to 20 weekly sessions. There are specific programmes for different ages including mother and baby; toddler; pre-school and school-age groups.

Triple P Positive Parenting Program

Triple P Positive Parenting Program aims to prevent severe behavioural, emotional and developmental problems in children through improving knowledge, skills and confidence in parenting. Triple P is a multi-level family support intervention of varying intensity and with differing delivery formats that is used in more than 20 countries and has been translated into 18 languages. Triple P was developed by Professor Sanders and colleagues from the Parent and Family Support Centre at the University of Queensland, Australia and has been researched with more 150 international trials and studies showing it to be effective across different family structures, cultures and socio-economic groups. A comprehensive meta-analysis found that the programme was effective across settings, initial severity of problem from mild to severe, and across countries – for child behaviour problems, parenting behaviour, and parental wellbeing [88]. Two reviews with meta-analysis found positive benefits of the programme for severe behavioural difficulties [89,90]. A more recent review article however, challenges the overwhelmingly positive outcomes of the Triple P Parenting Program with concerns that the results have a high risk of bias and ‘no convincing evidence that the interventions work across the whole population or that any benefits are long-term’ [91]. This was strongly refuted by Sanders et al. [92], however a further commentary by Coyne and Kwakkenbos highlight the over-reliance on positive but underpowered Triple P trials that are particular susceptible to risks of bias. [93]. These authors call on clinicians and policymakers to adequately monitor and evaluate Triple P Programs to ensure resources are wisely spent.

Triple P Positive Parenting Program has been adapted by the Australian Central Coast Children and Young People’s Mental Health team to the Mental Health Positive Parenting Programme (MHPPP). It retains the basic sessions and adds two more sessions on ‘*The impact of mental health on parenting*’ and ‘*Children’s fears, friendships and schooling*’. It also follows up with four

weekly home visits allowing facilitators to give direct assistance to parents to apply their learnt skills, and talk with their children, where appropriate, about their parent's mental illness. A pilot study and a subsequent before- and after- intervention evaluation found a reduction in the number of dysfunctional parenting strategies and parent-reported child behaviour problems [94].

Parents as First teachers (PAFT)

Parents as First Teachers (PAFT) is a targeted programme enabling eligible families with young children from birth to 3 years to access practical support and guidance. PAFT is a low intensity home visitation programme where parent educators make visits to families to share information, practical ideas and give guidance as the child grows and develops. It was originally developed in Missouri, USA over 20 years ago and has been renamed Parents as Teachers with over 2,600 programmes throughout the USA and in six other countries [95].

Cost Effectiveness of General Parenting Programmes

A systematic review of the cost effectiveness of general parenting programmes by Charles et al. [96] noted that parenting programmes should be recognised as 'complex interventions' that therefore need complex evaluations in order to account for the actual effects and potential ripple effects of parenting programmes. Cunningham et al. [97] conducted a randomized trial comparing a large group community-based parenting programme to a clinic-based individual parenting programme. They found that parents of children with severe behaviour problems were more likely to enrol in community-based parenting programmes and that they reported greater improvements in behaviour problems. In addition the community-based programme was six times as cost effective as the clinic/individual programme. A study investigating the cost effectiveness of the Triple-P Positive Parenting Program implemented at a population level in Queensland Australia reported that it was likely to be worthwhile, although further research is required to confirm the results [98]. An Australian economic analysis of prevention in mental health programmes reported that screening children/adolescents for symptoms of depression with subsequent therapy, and parenting interventions for childhood anxiety prevention are cost effective [99].

Review of Components Associated with General Parent Training Programme Effectiveness

A meta-analytic review by Kaminski et al. [100] of components associated with parent training programme effectiveness noted that following numerous meta-analyses and systematic reviews, parent training approaches to enhance parenting behaviours and skills, and child behaviour and adjustment can be effective. Kaminski et al. then sought to disentangle the various components of parenting programmes to discover which components contributed greater effects. They found that positive parent-child interactions and emotional communication skills, teaching parents to use time out and the importance of parenting consistency, and requiring parents to practice new skills with their children during parent training sessions were associated with larger effects. Smaller effects were found for programme components such as teaching parents problem solving, teaching parents to promote children's cognitive, academic, or social skills, and providing additional services as part of the parenting programme. They concluded that existing programmes could consider changing, adding or discarding components associated with larger or smaller effects to enhance the effectiveness of the programme.

General Parent Child Interaction Therapy

Parent child interaction therapy is derived from social and developmental theories and is an individualised intervention for children aged 4–7 years with externalizing problems and their parents. It is delivered through initial didactic presentations to parents (usually two sessions) followed by direct coaching sessions of parents with the parent and child in a play therapy room being observed and coached by a therapist through a one-way mirror and a listening device in the ear of the parent [101]. A review and meta-analysis by Thomas et al. [101] evaluated and compared the outcomes of Parent Child Interaction Therapy and Triple-P Positive Parenting Program. They found moderate to large effects for both standard programmes but smaller effects for abbreviated versions or Media Triple-P.



General Home Visiting Programmes

A meta-analytic review by Sweet and Appelbaum of programmes whose primary service delivery strategy was home visits conducted in the United States, reviewed sixty such programmes. Child outcomes included cognitive, socio-emotional, and prevention of child abuse while parent outcomes included enhanced childrearing (including parenting behaviours and attitudes), and enhancement of maternal life course. In general the children and parents in families in home visiting programmes had better outcomes than the control groups. However, using Cohen's guidelines [102] for interpreting standardized effect sizes where a small effect size was defined as 0.20 or lower, a medium effect size was defined as 0.50, and a large effect size was defined as 0.80 or larger, the effect sizes were small (lower than 0.25) for child outcomes, and even smaller for parent outcomes (lower than 0.14). Further analysis on programme design, populations targeted, and primary programme goals had mixed results.

Fergusson et al. [103] reported on a nine-year follow-up of a home visitation programme (Early Start) randomised trial of 443 families in New Zealand on child abuse, child behaviour, and parental and family-level benefits. They found that families in the Early Start programme showed significant benefits in reduced risk of hospital attendance for unintentional injury, lower risk of parent-reported harsh punishment, lower levels of physical punishment, higher parenting competence scores, and more positive child behavioural adjustment scores. However, the effect sizes were small to moderate (median 0.25), and there were no significant differences on parental behaviour and family outcomes including maternal depression, parental substance use, intimate partner violence, adverse economic outcomes and life stress for families in Early Start compared to control families.

Other reviews have suggested that home visiting programmes can benefit both infant and maternal health, particularly when the home-visitor was a well-trained nurse [104], the visits were frequent, and a trusting relationship was built with coaching on maternal-infant interaction [104,105,106]. One review found the results of home visiting programmes was similar for lay workers and health professionals [106].

Best Practice Service Models for Children of Parents with Mental Illness and Addiction

The entry point to services for many children of parents with mental illness will be either through primary care, or secondary adult mental health services.

In 2004, following an extensive literature search and wide-ranging consultations across Australia, the Australian Infant, Child, Adolescent and Family Mental Health Association produced the *Principles and Actions for Services and People Working with Children of Parents with a Mental Illness*. They identified several subgroups of children among families in which a parent has a mental illness including: children who appear 'well'; children who appear resilient but in need of support; children who are vulnerable and in need of services; and lastly, children who are vulnerable and in need of protection owing to risk of injury [107]. They note that these children may move in any direction along this spectrum of 'risk' during their lifetime. Therefore, the challenge to service providers is to:

- *'Strengthen and support families and children to enhance protective factors that contribute to the parents' and children's mental health, and*
- *Identify and reduce risk factors in parents with a mental illness, their family and community that contribute to their children's health and wellbeing.'*

Although ideally, enhancing mental health and wellbeing should take a broad health promotion approach, the document focuses on actions targeted to the group of the population deemed at higher risk than average.

In view of that target to the higher risk population, the areas of focus for service provision for children of parents with mental illness and addiction were:

- Early identification, in systematically identifying the parental role of many adult mental health service consumers, as well as other groups that may be at higher risk of mental health issues including refugees and migrants
- Family preservation and support for family members
- Addressing grief and loss issues
- Access to information, education and decision-making processes
- Care and protection of children
- Partnerships and cross-agency processes
- Recognition of diversity (culturally and linguistically)
- Workforce development and service reorientation; and research and evaluation

Adapted from Mrazek and Haggerty [108], as outlined in the *Australian National Action Plan for Promotion, Prevention and Early Intervention for Mental Health*, 2000 [109].

Service Action areas

Service action areas in the document are divided into those provided by individual workers and/or teams, and system responses. The following system responses are taken from the *Australian Principles and Actions for Services and People Working with Children of Parents with a Mental Illness* [107] as an example of best practice recommendations for services that would be relevant to New Zealand. The development of service requirements for individual workers or teams would also need to be developed for New Zealand use. For further detailed information please see: <http://www.copmi.net.au/>

System Responses Required for COPMIA Services

(Abbreviated from *Principles and Actions for Services and People Working With Children of Parents With a Mental Illness*. 2004, Australian Infant Child Adolescent and Family Mental Health Association [107])

Promoting wellbeing and reducing risk

Mental health services and child and family health services can support the identification of risk factors relating to children of parents with a mental illness and the promotion of wellbeing by:

- Putting in place procedures for the identification of the parental role of people who have a mental illness, including 'expectant' parents
- Assisting information services to provide appropriate information regarding referral to services for families affected by parental mental illness
- Developing and implementing policies and procedures to support workers in the promotion of the wellbeing of families and the identification and reduction of risk factors for children affected by parental mental illness

Support for families and children

Support for families is enhanced when community service providers, child and family health services, mental health services and child protection services work together to ensure that:

- Parental support groups and parenting skill programmes are available in the community that can respond to the needs of parents with a mental illness
- Planned care and flexible respite care services are available for both children and parents during parental crisis and at other times
- Supported, targeted and evidence-based early intervention programmes of sufficient duration and intensity are available to prevent or minimise the longer term consequences of disrupted or dysfunctional child-parent relationships

Addressing grief and loss issues

To prevent or minimise the feelings of grief and loss often experienced by parents with a mental illness and their family members, mental health services in association with child protection/child welfare services (and the justice sector where applicable) can:

- Ensure policy, practice and procedures recognise and support the importance of secure attachment for infant's health and future wellbeing



- Provide information, counselling and financial support to informal and formal temporary carers who care for the children during periods of parental illness or as a preventative strategy to maintain the parent's health

Mental health services (and the justice sector where applicable) can also provide family friendly facilities within adult mental health and justice sectors

Access to information, education and decision-making

The education sector, child and family health services and child/youth information services can assist in meeting children's information needs by:

- Providing information and supporting universal access for children regarding mental health, mental illness and relevant support services which is non-stigmatising and culturally and linguistically appropriate (e.g. via curriculum, help-lines, websites, library resources)

Care and protection of children

Adult mental health services can play a key role in the care and protection of their consumer's children by:

- Supporting family-oriented and family sensitive practice, through workforce development, resource allocation and organizational policy
- Ensuring parents have access to legal advice regarding child protection

The justice sector and child protection services can support children of parents with a mental illness with identified care and protection needs by:

- Ensuring advice/evidence regarding the comprehensive strengths-based assessment of parenting competence of individuals with a mental illness

Mental health services can provide valuable support to child protection services by:

- Working collaboratively and providing mental health expertise to assist in assessment of parenting ability and family capacity where the parent has a mental illness and a child's safety, development and/or wellbeing are at risk

Partnerships and cross-agency processes

Government can facilitate high quality service provision for families and children affected by parental mental illness in partnership with all relevant stakeholders by:

- Developing, supporting and resourcing the implementation of protocols to enhance partnerships between mental health services, community service providers, child protection services, the justice sector, the education sector, families and other key stakeholders regarding enhancement of family and individual mental health and wellbeing in families where a parent has a mental illness and the care and protection of children (where concerns are identified)

Workforce development and service reorientation

Children of parents with a mental illness could benefit from the development of workforce standards in the child protection, education sector (student support staff), child and family health and community services areas.

Undergraduate, post-graduate and in-service education and training for those whose work includes the care and protection of children, and those whose work relates to the mental and physical health and wellbeing of children and families (e.g. GPs, teachers, police officers, midwives, childcare workers, paediatricians, child and maternal health nurses, psychiatric trainees, psychologists, social workers, physiotherapists, occupational therapists and speech pathologists). Such support improves outcomes for children of parents with a mental illness when it includes:

- Information regarding the identification of potential risk factors and burdens associated with having a parent with a mental illness
- Education about enhancing and strengthening family wellbeing and how to access supports for children and their families affected by parental mental illness

Parents, children and families affected by parental mental illness would benefit from:

- Increased education of the adult mental health workforce in the area of family-focused and family-sensitive practice, strengths-based approaches and the changing needs of the parent over time

Research and evaluation

To enhance the efficacy and efficiency of services to children of parents with a mental illness, governments and other funding bodies can:

- Request and fund service providers to ensure process and outcome evaluation of programmes developed specifically for children, parents and other carers where the parent has a mental illness
- Adopt and build upon child and family enhancement and intervention programmes that have been evaluated and found to be both effective and consistent with best practice resource utilisation (including funding and policy development)

Governments can also support research to assist service providers to improve their support, care and protection for children and families where a parent has a mental illness by:

- Identifying factors that enhance positive health outcomes for children and parents
- Identifying children's risk status
- Developing knowledge, tools and mechanisms regarding identification of appropriate levels of intervention for children who appear 'well', those who appear to be resilient but in need of support, those who are vulnerable and in need of resources, and those who are vulnerable and in need of protection
- Identifying effective interventions for children and families using a range of child and family-oriented measures (e.g. schooling attendance and retention, and social connectedness)
- Developing models of effective collaboration between families, child and adolescent and adult mental health services, child protection services and other key stakeholders with the aim of ensuring the safety and wellbeing of children who have a parent with a mental illness
- Developing information and models to provide culturally appropriate services and information to children and families

COPMIA Services in New Zealand

Services for children of parents with mental health and addiction in New Zealand are scarce and have only recently received focus from mental health services.

The Ministry of Health notes that there is no consistency in the delivery of services to COPMIA despite pockets of good practice. It is therefore currently working on: establishing New Zealand statistics; DHB/NGO/workforce consultation; and exploration of best practice interventions leading to the development of a national framework [110].

The Werry Centre for Child and Adolescent Mental Health (Auckland) has been contracted by the Ministry of Health to undertake a stock-take of current COPMIA initiatives in New Zealand; identify expectations regarding COPMIA capability in current competency frameworks; and develop a strategy document for the Ministry of Health and Workforce New Zealand for COPMIA in New Zealand [111]

There are also a number of strategic frameworks that are driving change in New Zealand with regards to COPMIA. These include: Blueprint II: Mental Health Commission [3]; Service Development Plan: Rising to the Challenge (Ministry of Health) [112]; and the White Paper for Vulnerable Children (Ministry of Social Development) [113] all of which lay the groundwork for COPMIA service development.

The following sections outline current New Zealand strategies and plans related to COPMIA; programme examples of current COPMIA services; and based on international evidence and experience, programmes that may have the potential to provide COPMIA services in New Zealand.

New Zealand strategies and plans

Healthy Beginnings: Developing perinatal and infant mental health services in New Zealand was published by the Ministry of Health in early 2012 to provide guidance to DHB and other planners, funders and providers of services on ways to address the mental health and addiction needs of mothers and their infants [114]. This comprehensive



document gives an overview of current services in New Zealand including universal preventative, primary care, secondary and tertiary care for perinatal and infant mental health. Guidelines for the development of services are proposed and workforce development issues are discussed. The document also recognises that:

- Perinatal and infant mental health and AOD services cannot be effective unless they are delivered in collaboration with other maternal, family and child health and social services
- Services for Māori will be based on whānau ora – Māori families supported to achieve their maximum health and wellbeing – as the overall vision for Māori health
- It is not desirable or necessary to create a new health ‘silo’ to improve perinatal and infant mental health and AOD services
- The current constrained fiscal environment demands that joining up service provision and sharing resources effectively rather than new funding are required to develop existing services
- Services for infants are less well developed than maternal services and each region will start from a different point.

The guiding principles of *Healthy Beginnings* are based on those set out by *Te Raukura – Mental health and alcohol and other drugs: Improving outcomes for children and youth* [115]. The report also notes that currently no DHB is providing the full range of mental health services for mothers and infants that is required.

In addition a range of other publications are relevant to COPMIA in New Zealand.

As early as 1998, *New Futures: A strategic framework for specialist mental health services for children and young people in New Zealand* [116] recognised that children of parents with severe mental health problems faced a much higher risk for developing mental health problems themselves. The framework was aligned with the *New Zealand Mental Health Strategy: Looking Forward* (1994) [117] and *Blueprint for Mental Health Services in New Zealand* (1998) [118] and recognised that some groups of children and young people were ‘lost’ in the current specialist mental health service provision and highlighted the need to focus on developing appropriate consultation and liaison services for children of parents with severe mental health problems [116].

The mental health and addiction strategy *Te Tāhuhu: Improving Mental Health (2005–2015)* [119] and its associated action plan, *Te Kōkiri: the Mental Health and Addictions Action Plan 2006–2015* [120] again highlighted the need for services for children of parents with mental illness and/or addiction. The action plan calls for increased services that are funded for children and young people and for a review and update of the framework for child and youth mental health and addiction service provision (*New Futures*) based on good evidence and best practices, addressing gaps, reflecting specific population needs and considering children of parents, whānau with mental illness and maternal and infant mental health [120]. *Te Raukura – Mental health and alcohol and other drugs: Improving outcomes for children and youth* [115] was therefore developed, again highlighting the gaps in service for children of parents with a mental illness of addiction.

Blueprint II: How Things Need To Be [121] notes the significant increase in mental health and addiction initiatives since 2005 and introduces a ‘life course’ approach focusing on early responses at key moments in order to have a positive impact. They advocate a priority area focusing on mothers/infants, and children and young people from vulnerable families/whānau with mental health and addiction issues. The companion document *Blueprint II: Improving Mental Health and Wellbeing for all New Zealanders – Making Change Happen* [3] outlines the priority of ‘Providing a good start’ with a specific action to reduce the impact of parental mental health and addiction issues on infant and child development and to increase access for vulnerable families to effective developmental assessments, parenting support and mental health and addiction responses. They note the need to build workforce capacity for the development of mental health services for children as target access rates have not been achieved, particularly for Māori and Pacific children.

Along with *Blueprint II*, the *White Paper for Vulnerable Children Volume 1* [113] also calls for building on firm foundations including services for primary mental healthcare for mothers suffering from depression, drug and alcohol interventions for parents whose substance abuse puts their child at risk, and parenting and relationship support for struggling parents. The Children's Action Plan [122] also focuses on identifying and supporting vulnerable children by working across sectors, using evidence-based programmes, and providing a safe and competent workforce.

Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017 [112] calls for building resilience and averting future adverse outcomes for infants, children and youth. Among the priority services to be implemented are programmes for children of parents with mental health and addiction issues using reprioritised existing funding or new demographic funding led by DHBs. 'DHBs will implement and evaluate targeted, group-based psycho-education programmes that provide the children of parents with mental health and addiction issues (COPMIA) with information, peer support and tools to promote resilience, self-esteem and coping strategies. These services will work in conjunction with services that support parents with mental health and addiction issues' [112].

Current Programmes in New Zealand that may address COPMIA

Currently in New Zealand there are only scattered ad hoc services provided specifically for children of parents with mental illness and addiction issues. Some examples are listed in the text box below:

Examples of COPMIA Services in New Zealand

Supporting Families in Mental Illness – 19 branches throughout New Zealand

Auckland

- Supporting Children in Families Where There Is Parental Mental Illness Tu Tangata Tonu – a Pilot Project at the Kari Centre (Child & Adolescent Mental Health Service at Auckland District Health Board) to provide support for children in families where there is a parental mental illness
- Kidzone and Youthzone are peer support and education groups for children and adolescents whose parent or caregiver has a diagnosis of mental illness run by Tu Tangata Tonu for families who reside within the Auckland District Health Board area.
- Kids Club for children aged 8–12 years who have a parent, family or whānau member with mental illness in Mount Eden, Auckland

Canterbury

- Familial Trust: a service for families to learn about the effects another's addiction has had on them
- Stepping Stone Trust: one-on-one support and recreational programmes for children and adolescents of parents with a mental illness; Children Understanding Mental Illness group programme
- Purapura Whetu Trust: a kaupapa Māori mental health services to adults, adolescents, children, and their whānau.

Think Parent, Think Family (Matua Raki National Addiction Workforce Development)

Matua Raki is the National Addiction Workforce Development Centre funded by Health Workforce New Zealand (Ministry of Health) whose projects include supporting children of people with mental health and addiction issues in conjunction with the Werry Centre. Matua Raki and Kina Trust have developed a resource for services called 'Think Parent Think Family' for responding to parents and their children in alcohol and other drug services. This includes practical ideas and a family inclusive practice organizational checklist. The resource encourages service providers of parents with mental health and addiction problems to welcome children and whānau, and invite parents to share parenting concerns and worries about their children.

Other New Zealand programmes of relevance to COPMIA

A number of other services in New Zealand may be of benefit to children of parents with mental health and alcohol and other addictions. These are outlined in the sections below:



Parenting Programmes

There is a wide range of parenting programmes currently offered throughout New Zealand, with two examples being included in the text box below. In New Zealand, none of these programmes are specifically targeting families with parents with mental health and/or addiction issues.

The Incredible Years Programme

The Incredible Years programme is endorsed by the Ministries of Health, Social Development and Education as a highly effective evidence-based intervention in New Zealand [123]. Training for group leaders is conducted by the Werry Centre with government and community organizations throughout New Zealand offering the Incredible Years programme. Currently the programme is delivered by Ministry of Education, Special Education staff and by 51 non-government organisations (NGOs) contracted to deliver the programme in partnership with the Ministry. Eleven of the NGOs are Whānau Ora providers. Many are also providing a range of social services to families funded through the Ministries of Health or Social Development or other agencies. In 2009, Fergusson et al. [124] reviewed the Incredible Years Basic Parent Programme in New Zealand and concluded that it was an effective and culturally appropriate programme with significant improvements in behaviour and social competence scores and high parental satisfaction. The effects were similar for Māori and non-Māori children and parents. Although these outcomes are very promising, this was a preliminary retrospective review based on agency records and the authors recommend a wait-list randomized design study to fully evaluate the effectiveness of the programme in New Zealand.

Triple P Positive Parenting Program

In New Zealand Triple P Positive Parenting courses are currently being rolled out in four North Island regions (Bay of Plenty, MidCentral, Counties Manukau, and Waitemata) through a government initiative that aims to improve parenting skills and raise awareness of parenting support. The programmes are being implemented as either one-on-one consultations accessed through primary health care, or in discussion groups [125]. The Werry Centre is coordinating this Ministry of Health funded pilot project in conjunction with more intensive parenting supports such as Incredible Years. Qualitative and quantitative evaluation is inbuilt in the pilot project including the training and support of practitioners, delivery of interventions, and family outcomes [126].

Home Visiting and Other Programmes in New Zealand

A number of home visiting programmes are also available in New Zealand with two examples being provided in the text box below.

Parents as First Teachers (PAFT)

The PAFT home visiting and parenting programme began in New Zealand in 1991. Adapted from the original PAFT curriculum, now called 'Born to Learn', 'Ahuru Mowai' – the Māori dimension, is based on traditional child bearing and rearing beliefs and practices. The programme is managed by the PAFT National Centre, now part of the Ministry of Social Development, and monitors 25 contracts with various organizations who deliver the PAFT programme in 36 locations through New Zealand. The personal visits allow the parent educator to individualise the programme providing parenting and child development information specific to their child. A recent evaluation found a mixed picture of effectiveness with modest impacts noting that poverty and other stressors such as family violence, drug and alcohol abuse and parental mental health would need to be addressed for the parenting programme to have greater effects [127].

Family Start

Family Start is a New Zealand initiative which was first established in 1998 as a family-focused, home-based early intervention programme for the 15% most at-risk families. Its goal is to achieve better wellbeing and development outcomes for the family and children. The programme is designed to deliver an integrated package of services that are relevant to the family over a long duration (up to five years) based on inter-agency collaboration (Ministries of Health, Social Development, and Education, and Child Youth and Family Services). Potential clients are referred to a contracted Family Start provider through an approved referral agency including Lead Maternity Carers, hospital maternity services and Well Child/Tamariki Ora providers from six months before to six months after the baby is born. Family Start takes a strengths-based approach and includes developing needs assessments and case plans; home visiting and coordinating access to services; and information on parenting (Ahuru Mowai/Born to Learn programme). An early evaluation of the Family Start programme had methodological limitations and mixed outcomes [128]. Improvements were subsequently made to strengthen the programme management and outcomes.

Other programmes

Other programmes in New Zealand include: PEPE (Parenting Education Programme) delivered by Plunket; SAGES – older people as mentors; Strategies with Kids, Information for Parents (SKIP); Whānau Toko I Te Ora (WTITO); HIPPY (Home Interaction Programme for Parents and Youngsters); Anau Ako Pasifika; Whanāu Toko/Te Ora; Parents Inc; Barnados; Presbyterian Support Services; Parents Centres; and Early Start.

Some of these programmes, including all the key government funded parenting programmes, were evaluated by the Families Commission in 2005 [129]. They noted that all communities have some access to parent support and development services, however there are gaps in services within specific communities (for example, small rural communities). They concluded that parenting programme effectiveness was very difficult to determine given the range of delivery mechanisms, content of the programmes, engagement of parents and other adversities such as chronic stress and struggle to meet basic needs that may hinder parental involvement in such programmes. They recommended more rigorous evaluations to generate further knowledge about the effectiveness of parenting programmes in New Zealand.

Vulnerable Pregnant Women's Programmes

Some District Health Boards have set up Vulnerable Pregnant Women's programmes to provide wrap-around services to ensure that every pregnancy has the healthiest outcome for both mother and baby. An evaluation of the Hawke's Bay District Health Board Vulnerable Pregnant Women's Multidisciplinary Team [130] noted the need for interagency collaboration to facilitate solutions to complex issues that pregnant women may face including socio-economic, health, community and cultural issues.

Whānau Ora

Whānau Ora is an interagency approach to providing health and social services empowering whānau as a whole rather than focusing separately on individual family members. Whānau Ora providers provide support to whānau to make plans to improve their lives working with hapū, iwi or a non-government organisation. Other whānau can receive wrap-around services specifically tailored to their needs from specialist Whānau Ora providers. These whānau will have a 'navigator' to work with them to identify their needs, develop a plan to address those needs and facilitate their access to health and social services. These services will include mental health and addiction services and include initiatives for youth mental health through the Prime Minister's Youth Mental Health project. A whānau ora approach will also be taken for addressing mental health services for mothers and infants [114].

Universal Programmes: Well Child Tamariki Ora

Well Child/Tamariki Ora is a free national service for all New Zealand children from birth to five years. The programme offers screening through regular wellness checks, health promotion and education, health protection and support. The first 'well baby' check is provided by the lead maternity carer, who then facilitates the choice of a Well Child provider for the remainder of the checks. Well Child providers include: Plunket; Māori health providers; Pacific Island health providers; public health services including public health nurses or community workers; or a general practice team [131]. Plunket is the largest provider of Well Child services providing care for about 92% of babies born in New Zealand. Plunket also delivers Parents as First Teachers and PEPE (Parenting Education Programme) in locations throughout New Zealand [132].

A recent report by the Families Commission on *Early-Intervention Support and Vulnerable Families and Whānau* [133] included families and whānau with mental health problems and multiple other needs as 'vulnerable'. They noted that vulnerable families and whānau are less likely to take up services on offer and more likely to drop out, although trusted relationships with outreach workers, case workers or home visitors could often successfully 'bridge' these families to access services.

Access to universal services such as Well Child/Tamariki Ora would allow for screening and identification of families with needs without stigma. They note that although group-



based parent education programmes are usually recommended, there is evidence that individual-based programmes can be more effective where the family needs are complex [78].

Ways Forward for Children of Parents with Mental Illness and Addiction in New Zealand

New Zealand has recognised the need for services for children of parents with mental illness and addiction for the last 15 years. Various strategies and action plans have further highlighted the gaps and Blueprint II [121] outlines the priority of providing a good start with specific action to reduce the impact of parental mental health and addiction issues on infant and child development, and to increase access for vulnerable families to effective developmental assessments, parenting support, and mental health addiction responses. The Children's Action Plan [122] also calls for identification of vulnerable children and integrated services to meet their needs.

Mental Health and Addiction services in New Zealand recognise the high prevalence of co-morbidity. People with addiction problems also have a high prevalence of mental health problems and vice versa, so an entrance point via any service is needed to ensure they receive comprehensive support for all their problems. Mental health disorders are more common among Māori and Pacific people [134]. Mental health and addiction disorders are also more common among those with the least education, lowest household incomes, high unemployment rates, and low access to services [135]. Te Rau Matatini, the Māori health workforce agency is a key player in ensuring workforce development and strengthening to particularly address the mental health and addiction needs of Māori to improve outcomes for their children [136].

Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017 [112] calls for priority services to be implemented for children of parents with mental health and addiction issues led by DHBs. 'DHBs will implement and evaluate targeted, group-based psycho-education programmes that provide the children of parents with mental health and addiction issues (COPMIA) with information, peer support and tools to promote resilience, self-esteem and coping strategies. These services will work in conjunction with services that support parents with mental health and addiction issues'.

Applying the evidence and international experience of the most effective services, the following best practice system response recommendations for DHBs to consider are outlined in the text box below.

Best Practice System Responses for DHBs to Consider

Early identification: systematically identifying the parental role of many adult mental health service consumers, and other groups that may be at higher risk of mental health issues

- Identification of babies and young children at primary health care level through universal programmes such as *Well Child/Tamariki Ora*, Māori and Pacific health providers, and general practice teams antenatally and in early childhood
- Identification of children at secondary and tertiary health care levels through adult and child mental health services
- Identification of the needs for children who appear 'well'; children who appear resilient but in need of support; children who are vulnerable and in need of services; and children who are vulnerable and in need of protection owing to risk of injury. Recognise that these children may move in any direction along this spectrum of 'risk'
- Clear referral pathways to support services for those children identified

Family preservation and support for family members

- Support, targeted and evidence-based early intervention programmes of sufficient duration and intensity being available to prevent or minimise the longer term consequences of disrupted or dysfunctional child-parent relationships
- Parenting skill programmes that could be tailored for parents with mental illness and addiction issues for example Incredible Years, Triple P Positive Parenting Program

- Family home-visiting programmes that could be tailored for parents with mental illness and addiction issues for example Family Start, Parents as First Teachers
- Identify psychosocial factors which increase the health risks often associated with parents with a mental illness (e.g. poverty and social isolation) which also impact on their children, and advocate for action to address these issues
- Facilitate collaborative multi-agency support for families according to risk and need for example through Whānau Ora
- Ensure policy, practice and procedures recognise and support the importance of secure attachment for infant's health and future wellbeing

Access to information, education and decision-making processes

- Provide information and support universal access for children regarding mental health, mental illness and relevant support services which is non-stigmatising and culturally and linguistically appropriate (via curriculum, help-lines, websites, library resources, child/teen support groups)
- Provide education for relevant support staff regarding parental mental illness, its potential impact on children and age-appropriate responses, resources and supports that may be required by children where a parent has a mental illness

Care and protection of children

- Support family-oriented and family sensitive practice, through workforce development, resource allocation, organisational policy, and services that meet the needs of Māori and Pacific families.
- Ensure parents have access to legal advice regarding child protection
- Work collaboratively and provide mental health expertise to assist in assessment of parenting ability and family capacity where the parent has a mental illness and a child's safety, development and/or wellbeing are at risk

Partnerships and cross-agency processes

- Develop, support and resource the implementation of protocols to enhance partnerships between mental health services, community service providers, child protection services, the justice sector, the education sector, families and other key stakeholders regarding enhancement of family and individual mental health and wellbeing in families where a parent has a mental illness and/or addiction and the care and protection of children (where concerns are identified)
- Establish, build upon and implement local protocols, formal linkages, coordination and provision of education across all sectors involved with children of parents with a mental illness and/or addiction to enable agencies to identify and respond appropriately, flexibly and at the earliest opportunity to children and families who would benefit from support
- Establish communication processes within the mental health sector, across agencies and in partnership with families, to ensure coordinated support, assessment (as required) and care planning for families
- Work with disability and key addiction services (drug, alcohol and gambling) to ensure a coordinated approach to parents with co-morbidities and their families

Recognition of diversity (culturally and linguistically)

- Improve access to culturally appropriate information for families, provided in a range of languages, on the services available to support families in which a parent has a mental illness
- Develop culturally appropriate services to meet needs

Workforce development and service reorientation

- Develop workforce standards in child protection, the education sector, child and family health and community services for working with children of parents with mental illness and addiction
- Develop undergraduate, post-graduate and in-service education and training for those whose work includes the care and protection of children, and those whose work relates to the mental and physical health and wellbeing of children and families (e.g. GPs, teachers, police officers, midwives, childcare workers, paediatricians, child and maternal health nurses, psychiatric trainees, psychologists, social workers, community workers) to support improved outcomes for children of parents with a mental illness and/or addiction



Research and evaluation

- Ensure process and outcome evaluation of programmes developed specifically for children, parents and other carers where the parent has a mental illness and/or addiction
- Adopt and build upon child and family enhancement and intervention programmes that have been evaluated and found to be both effective and consistent with best practice resource utilisation (including funding and policy development)

Conclusions

Although the issues of children of parents with mental health and addiction in New Zealand have been raised over the last 15 years and are embedded in high level strategy and policy documents, current services are scarce. There is a lack of a well-planned national service, including an agreed service model to ensure the needs of these children are met. The systematic identification and assessment of the needs of COPMIA and referral to appropriate service does not currently occur. The actual numbers of children who need support are not known, however estimates from prevalence rates of mental health and addiction problems indicate that 15–20% of children live in households where a parent has mental health and/or addiction issues.

The international literature suggests that services required to best support children of parents with mental health and addiction will include: early identification in systematically identifying the parental role of many adult mental health service consumers, as well as other groups that may be at higher risk of mental health issues; family preservation and support for family members; addressing grief and loss issues; access to information, education and decision-making processes; care and protection of children; partnerships and cross-agency processes; recognition of diversity (culturally and linguistically); workforce development and service reorientation; and research and evaluation.

Family interventions that are the most likely to benefit children of parents with mental health and addiction include evidence-based effective parenting and home visiting programmes, and peer support programmes. The positive impacts resulting from these programmes are considered to be cost effective. Yet, COPMIA services also need family support to address the adverse socio-economic determinants of health and wellbeing commonly associated with parental mental illness and addiction. Current parenting and family support services available for all families in need including COPMIA include a range of parenting programmes funded by Ministries of Health, Social Development and Education, all of which show some positive impacts. However, these must be rigorously evaluated to ensure this most vulnerable group of children are receiving the best support available to enhance their health and wellbeing. The proportion of parents with mental illness and addiction currently accessing parenting support services is not known.

Initiatives to support parents with mental health and addiction issues to achieve broader socio-economic goals are also recognised as a priority. Initiatives to support parents into employment are now being trialled and Whānau Ora is showing some promise.

Realising the gaps, the Ministry of Health is beginning to focus on this important issue by establishing New Zealand data on COPMIA, consulting with DHBs and non-government agencies on workforce capabilities and requirements, and exploring best practice interventions in order to develop a national framework for addressing COPMIA. The Ministry of Health has contracted the Werry Centre for Child and Adolescent Mental Health to provide advice on agreed models of service that will need to be funded at a level appropriate to meet demand.

References

1. Tobias M, Turley M, Liu M. 2013. Health Loss in New Zealand: A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study, 2006–2016. Wellington: Ministry of Health
2. Devlin JM, O'Brien LM. 1999. Children of parents with mental illness. 1: An overview from a nursing perspective. *Australian New Zealand Journal of Mental Health Nursing* 8(1) 19-29.
3. Mental Health Commission. 2012. Blueprint II: Improving mental health and well being for all New Zealanders – Making change happen. Wellington: Mental Health Commission
4. Statistics New Zealand. 2012. Vulnerable children and families: Some findings from the New Zealand General Social Survey. Wellington: Statistics New Zealand
5. Mason K, Bhattacharya A, Stefanogiannis N, et al. 2009. Alcohol Use in New Zealand: Key results of the 2007/08 New Zealand Alcohol and Drug Use Survey. Wellington: Ministry of Health
6. Jones K, Smith D, Ulleland C, et al. 1973. Pattern of malformation in offspring of chronic alcoholic mothers. *The Lancet* 301(7815) 1267-71.
7. Sampson PD, Streissguth AP, Bookstein FL, et al. 1997. Incidence of fetal alcohol syndrome and prevalence of alcohol-related neurodevelopmental disorder. *Teratology* 56(5) 317-26.
8. Rutter M, Quinton D. 1984. Parental psychiatric disorder: effects on children. *Psychological Medicine* 14(4) 853-80.
9. Reupert A, Maybery D. 2007. Families affected by parental mental illness: a multiperspective account of issues and interventions. *American Journal of Orthopsychiatry* 77(3) 362-9.
10. Beardslee WR, Versage EM, Gladstone TR. 1998. Children of affectively ill parents: a review of the past 10 years. *Journal of the American Academy of Child & Adolescent Psychiatry* 37(11) 1134-41.
11. Royal Australian & New Zealand College of Psychiatrists. 2009. Children of parents with a mental illness. Position Statement 56. Royal Australian & New Zealand College of Psychiatrists
12. Wells J, Oakley Browne M, Scott K, et al. 2006. Te Rau Hinengaro: The New Zealand Mental Health Survey: Overview of methods and findings. *Australian and New Zealand Journal of Psychiatry* 40(10) 835-44.
13. Baxter J, Kokaua J, Wells J, et al. 2006. Ethnic comparisons of the 12 month prevalence of mental disorders and treatment contact in Te Rau Hinengaro: The New Zealand Mental Health Survey. *Australian and New Zealand Journal of Psychiatry* 40(10) 905-13.
14. Kessler R, Angermeyer M, Anthony J, et al. 2007. Lifetime prevalence and age-of-onset distributions of mental disorders in the world health organization's world mental health survey initiative. *World Psychiatry* 6(3) 168-76.
15. Australian Bureau of Statistics. 2008. National Survey of Mental Health and Wellbeing: Summary of results, 2007. Canberra: Australian Bureau of Statistics <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4326.0>
16. Howe D, Batchelor S, Bochynska K. 2009. Estimating consumer parenthood within mental health services: a census approach. *Australian e-Journal for the Advancement of Mental Health* 8(3).
17. Maybery DJ, Reupert AE, Patrick K, et al. 2009. Prevalence of parental mental illness in Australian families. *Psychiatric Bulletin*.33(1) pp.
18. Kessler RC, Demier O, Frank RG, et al. 2005. Prevalence and Treatment of Mental Disorders, 1990 to 2003. *N Engl J Med*.352(24) pp.
19. Bijl RV, Ravelli A. 2000. Psychiatric morbidity, service use, and need for care in the general population: Results of the Netherlands Mental Health Survey and Incidence Study. *American Journal of Public Health*.90(4) pp.



20. Austin MP, Priest SR, Sullivan EA. 2008. Antenatal psychosocial assessment for reducing perinatal mental health morbidity. *Cochrane Database of Systematic Reviews* 4.
21. Gavin NI, Gaynes BN, Lohr KN, et al. 2005. Perinatal depression: a systematic review of prevalence and incidence. *Obstet Gynecol* 106(5 Pt 1) 1071-83.
22. Fryer K, Jones O, Kalafatellis E. 2011. ALAC Alcohol Monitor - Adults & Youth. 2009-10 Drinking Behaviours Report. Wellington, New Zealand: Research New Zealand
23. Mallard SR, Connor JL, Houghton LA. 2013. Maternal factors associated with heavy periconceptional alcohol intake and drinking following pregnancy recognition: A post-partum survey of New Zealand women. *Drug and Alcohol Review* 32(4) 389-97.
24. Flak AL, Su S, Bertrand J, et al. 2013. The Association of Mild, Moderate, and Binge Prenatal Alcohol Exposure and Child Neuropsychological Outcomes: A Meta-Analysis. *Alcohol Clin Exp Res*.
25. Sood B, Delaney-Black V, Covington C, et al. 2001. Prenatal alcohol exposure and childhood behavior at age 6 to 7 years: I. dose-response effect. *Pediatrics* 108(2) e34-e34.
26. Alcohol Healthwatch. 2010. Towards Multidisciplinary Diagnostic Services for Fetal Alcohol Spectrum Disorder. Auckland, New Zealand: Alcohol Healthwatch
27. Taylor B, Dickson N, Carter M. 2001. New Zealand Paediatric Surveillance Unit Report. Dunedin: New Zealand Paediatric Surveillance Unit Report
28. Streissguth A, Aase JM, Clarren SK, et al. 1991. Fetal alcohol syndrome in adolescents and adults. *JAMA* 265(15) 1961-67.
29. Reupert AM, D., Kowalenko, N. 2012. Children whose parents have mental illness: Prevalence, need and treatment. *Medical Journal of Australia* 1(Suppl 1) 7-9.
30. Handley C, Farrell GA, Josephs A, et al. 2001. The Tasmanian children's project: the needs of children with a parent/carer with a mental illness. *Aust N Z J Ment Health Nurs* 10(4) 221-8.
31. Maybery D, Reupert A, Patrick K, et al. 2005. VicHealth Research Report on Children at Risk in Families affected by Parental Mental Illness. Melbourne: Victorian Health Promotion Foundation, Melbourne
32. Nicholson J, Biebel K, Hinden B, et al. 2001. Critical issues for parents with mental illness and their families. Rockville, Maryland, USA: Center for Mental Health Services; Substance Abuse and Mental Health Services Administration
<http://www.mentalhealth.Org/publications/allpubs/>
33. Hinshaw SP. 2005. The stigmatization of mental illness in children and parents: developmental issues, family concerns, and research needs. *J Child Psychol Psychiatry* 46(7) 714-34.
34. Mowbray CT, Oyserman D, Zemencuk JK, et al. 1995. Motherhood for women with serious mental illness: pregnancy, childbirth, and the postpartum period. *Am J Orthopsychiatry* 65(1) 21-38.
35. Nicholson J, Sweeney EM, Geller JL. 1998. Mothers with mental illness: I. The competing demands of parenting and living with mental illness. *Psychiatric services (Washington, D C)* 49(5) 635-42.
36. Gaffney M. 2007. A research study of Young Carers: The development of a recording tool for agencies to identify young carers. Dunedin, New Zealand: Children's Issues Centre, University of Otago
37. Cooklin A. 2009. Children as carers of parents with mental illness. *Psychiatry* 8(1) 17-20.
38. Waylen A, Stewart-Brown S. 2010. Factors influencing parenting in early childhood: a prospective longitudinal study focusing on change. *Child: Care, Health & Development* 36(2) 198-207.
39. Beck CT. 1998. The effects of postpartum depression on child development: a meta-analysis. *Archives of Psychiatric Nursing* 12(1) 12-20.

40. Gladstone BM, Boydell KM, Seeman MV, et al. 2011. Children's experiences of parental mental illness: a literature review. *Early intervention in psychiatry* 5(4) 271-89.
41. Gottesman I, Shields J. 1976. A critical review of recent adoption, twin, and family studies of schizophrenia: behavioral genetics perspectives. *Schizophrenia Bulletin* 2(3) 360-401.
42. Rice F, Harold G, Thapar A. 2002. The genetic aetiology of childhood depression: a review. *Journal of Child Psychology & Psychiatry & Allied Disciplines* 43(1) 65-79.
43. Seifer R, Sameroff AJ, Dickstein S, et al. 1996. Parental psychopathology, multiple contextual risks, and one-year outcomes in children. Dec 1996. *Journal of Clinical Child Psychology*.25(4) pp.
44. Shaw DS, Winslow EB, Owens EB, et al. 1998. Young children's adjustment to chronic family adversity: A longitudinal study of low-income families. May 1998. *Journal of the American Academy of Child & Adolescent Psychiatry*.37(5) pp.
45. Goodman SH, Gotlib IH. 1999. Risk for psychopathology in the children of depressed mothers: a developmental model for understanding mechanisms of transmission. *Psychological Review* 106(3) 458-90.
46. Lovejoy MC, Graczyk PA, O'Hare E, et al. 2000. Maternal depression and parenting behavior: a meta-analytic review. *Clinical Psychology Review* 20(5) 561-92.
47. Manning C, Gregoire A. 2009. Effects of parental mental illness on children. *Psychiatry* 8(1) 7-9.
48. Forbes EE, Shaw DS, Silk JS, et al. 2008. Children's affect expression and frontal EEG asymmetry: transactional associations with mothers' depressive symptoms. *Journal of Abnormal Child Psychology* 36(2) 207-21.
49. Gross HE, Shaw DS, Moilanen KL. 2008. Reciprocal associations between boys' externalizing problems and mothers' depressive symptoms. *Journal of Abnormal Child Psychology* 36(5) 693-709.
50. Avenevoli S, Merikangas KR. 2006. Implications of high-risk family studies for prevention of depression. *American Journal of Preventive Medicine* 31(6 Suppl 1) S126-35.
51. Abela JR, Hankin BL, Haigh EA, et al. 2005. Interpersonal vulnerability to depression in high-risk children: the role of insecure attachment and reassurance seeking. *Journal of Clinical Child & Adolescent Psychology* 34(1) 182-92.
52. Walker EF, Cudeck R, Mednick SA, et al. 1981. Effects of parental absence and institutionalization on the development of clinical symptoms in high-risk children. *Acta Psychiatrica Scandinavica* 63(2) 95-109.
53. Patel V, Rahman A, Jacob K, et al. 2004. Effect of maternal mental health on infant growth in low income countries: new evidence from South Asia. *BMJ: British Medical Journal* 328(7443) 820.
54. O'Connor TG, Heron J, Golding J, et al. 2002. Maternal antenatal anxiety and children's behavioural/emotional problems at 4 years Report from the Avon Longitudinal Study of Parents and Children. *The British Journal of Psychiatry* 180(6) 502-08.
55. Van den Bergh BRH, Mulder EJH, Mennes M, et al. 2005. Antenatal maternal anxiety and stress and the neurobehavioural development of the fetus and child: links and possible mechanisms. A review. *Neuroscience & Biobehavioral Reviews* 29(2) 237-58.
56. Goodman SH, Rouse MH, Connell AM, et al. 2011. Maternal depression and child psychopathology: A meta-analytic review. *Clinical child and family psychology review* 14(1) 1-27.
57. Kowalenko N, Mares S, Newman L, et al. 2012. Family matters: infants, toddlers and preschoolers of parents affected by mental illness.
58. Zahn-Waxler C, Iannotti RJ, Cummings EM, et al. 1990. Antecedents of problem behaviors in children of depressed mothers. *Development and Psychopathology* 2(03) 271-91.



59. Gunlicks ML, Weissman MM. 2008. Change in child psychopathology with improvement in parental depression: a systematic review. *Journal of the American Academy of Child & Adolescent Psychiatry* 47(4) 379-89.
60. Mendes AV, Loureiro SR, Crippa JA, et al. 2012. Mothers with depression, school-age children with depression? A systematic review. *Perspect Psychiatr Care* 48(3) 138-48.
61. Poobalan AS, Aucott LS, Ross L, et al. 2007. Effects of treating postnatal depression on mother–infant interaction and child development Systematic review. *The British Journal of Psychiatry* 191(5) 378-86.
62. Velleman R, Templeton L. 2007. Understanding and modifying the impact of parents' substance misuse on children. *Advances in Psychiatric treatment* 13(2) 79-89.
63. Niccols A, Milligan K, Smith A, et al. 2012. Integrated programs for mothers with substance abuse issues and their children: a systematic review of studies reporting on child outcomes. *Child Abuse Negl* 36(4) 308-22.
64. Dunn MG, Tarter RE, Mezzich AC, et al. 2002. Origins and consequences of child neglect in substance abuse families. *Clinical Psychology Review* 22(7) 1063-90.
65. Broning S, Kumpfer K, Kruse K, et al. 2012. Selective prevention programs for children from substance-affected families: a comprehensive systematic review. *Subst Abuse Treat Prev Policy* 7 23.
66. Fergusson DM, Horwood LJ, Lynskey M. 1994. The Childhoods of Multiple Problem Adolescents: A 15-Year Longitudinal Study. *Journal of Child Psychology and Psychiatry* 35(6) 1123-40.
67. Reupert AE, Cuff R, Drost L, et al. 2012. Intervention programs for children whose parents have a mental illness: a review. *Medical Journal of Australia* 196(7) 18.
68. Siegenthaler E, Munder T, Egger M. 2012. Effect of preventive interventions in mentally ill parents on the mental health of the offspring: systematic review and meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry* 51(1) 8-17. e8.
69. Beardslee WR, Solantaus TS, Morgan BS, et al. 2012. Preventive interventions for children of parents with depression: international perspectives. *Medical Journal of Australia* 196(7) 23.
70. Solantaus T, Puras D. 2010. Caring for Children of Parents with Mental Health Problems—A Venture into Historical and Cultural Processes in Europe. *International Journal of Mental Health Promotion* 12(4) 27-36.
71. Solantaus T, Paavonen EJ, Toikka S, et al. 2010. Preventive interventions in families with parental depression: children's psychosocial symptoms and prosocial behaviour. *European child & adolescent psychiatry* 19(12) 883-92.
72. Solantaus T, Toikka S, Alasuutari M, et al. 2009. Safety, feasibility and family experiences of preventive interventions for children and families with parental depression. *International Journal of Mental Health Promotion* 11(4) 15-24.
73. Beardslee WR, Wright EJ, Gladstone TR, et al. 2007. Long-term effects from a randomized trial of two public health preventive interventions for parental depression. *Journal of Family Psychology* 21(4) 703.
74. Compas BE, Forehand R, Keller G, et al. 2009. Randomized controlled trial of a family cognitive-behavioral preventive intervention for children of depressed parents. *Journal of Consulting and Clinical Psychology* 77(6) 1007.
75. Compas BE, Forehand R, Thigpen JC, et al. 2011. Family group cognitive–behavioral preventive intervention for families of depressed parents: 18-and 24-month outcomes. *Journal of Consulting and Clinical Psychology* 79(4) 488.
76. Garber J, Clarke GN, Weersing VR, et al. 2009. Prevention of depression in at-risk adolescents. *JAMA: the journal of the American Medical Association* 301(21) 2215-24.
77. Sanders MR. 2002. Parenting interventions and the prevention of serious mental health problems in children. *Medical Journal of Australia* 177(7) S87.
78. Lundahl B, Risser HJ, Lovejoy MC. 2006. A meta-analysis of parent training: Moderators and follow-up effects. *Clinical Psychology Review* 26(1) 86-104.

79. Harding K, Galano J, Martin J, et al. 2007. Healthy Families America® Effectiveness: A comprehensive review of outcomes. *Journal of Prevention & Intervention in the Community* 34(1-2) 149-79.
80. Doggett C, Burrett S, Osborn D. 2009. Home visits during pregnancy and after birth for women with an alcohol or drug problem (Review).
81. Catalano RF, Gainey RR, Fleming CB, et al. 1999. An experimental intervention with families of substance abusers: one-year follow-up of the focus on families project. *Addiction* 94(2) 241-54.
82. Catalano RF, Haggerty KP, Gainey RR. 2006. Prevention approaches in methadone treatment settings: Children of drug abuse treatment clients. *Handbook of Drug Abuse Prevention* 173-96: Springer.
83. Haggerty KP, Skinner M, Fleming CB, et al. 2008. Long-term effects of the Focus on Families project on substance use disorders among children of parents in methadone treatment. *Addiction* 103(12).
84. Barlow J, Smailagic N, Ferriter M, et al. 2010. Group-based parent-training programmes for improving emotional and behavioural adjustment in children from birth to three years old. *Cochrane Database of Systematic Reviews* 3.
85. Dretzke J, Frew E, Davenport C, et al. 2005. The effectiveness and cost-effectiveness of parent training/education programmes for the treatment of conduct disorder, including oppositional defiant disorder, in children. *Health Technology Assessment* 9(50) 1-250.
86. Barlow J, Smailagic N, Huband N, et al. 2012. Group-based parent training programmes for improving parental psychosocial health. *Cochrane Database of Systematic Reviews*
<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002020.pub3/abstract>
87. Webster-Stratton C. 2001. The incredible years: Parents, teachers, and children training series. *Residential treatment for children & youth* 18(3) 31-45.
88. Nowak C, Heinrichs N. 2008. A comprehensive meta-analysis of Triple P-Positive Parenting Program using hierarchical linear modeling: Effectiveness and moderating variables. *Clinical child and family psychology review* 11(3) 114-44.
89. De Graaf I, Speetjens P, Smit F, et al. 2008. Effectiveness of the Triple P Positive Parenting Program on Parenting: A Meta-Analysis. *Family Relations* 57(5) 553-66.
90. de Graaf I, Speetjens P, Smit F, et al. 2008. Effectiveness of The Triple P Positive Parenting Program on Behavioral Problems in Children A Meta-Analysis. *Behavior Modification* 32(5) 714-35.
91. Wilson P, Rush R, Hussey S, et al. 2012. How evidence-based is an 'evidence-based parenting program'? A PRISMA systematic review and meta-analysis of Triple P. *BMC medicine* 10(1) 130.
92. Sanders MR, Pickering JA, Kirby JN, et al. 2012. A commentary on evidenced-based parenting programs: redressing misconceptions of the empirical support for Triple P. *BMC medicine* 10(1) 145.
93. Coyne JC, Kwakkenbos L. 2013. Triple P-Positive Parenting programs: the folly of basing social policy on underpowered flawed studies. *BMC medicine* 11(1) 11.
94. Phelan RF, Howe DJ, Cashman EL, et al. 2012. Enhancing parenting skills for parents with mental illness: the Mental Health Positive Parenting Program. *Medical Journal of Australia* 196(7) 30.
95. Wagner M, Spiker D, Linn MI. 2002. The effectiveness of the Parents as Teachers program with low-income parents and children. *Topics in Early Childhood Special Education* 22(2) 67-81.
96. Charles J, Bywater T, Edwards R. 2011. Parenting interventions: a systematic review of the economic evidence. *Child: care, health and development* 37(4) 462-74.
97. Cunningham CE, Bremner R, Boyle M. 1995. Large Group Community-Based Parenting Programs for Families of Preschoolers at Risk for Disruptive Behaviour Disorders: Utilization, Cost Effectiveness, and Outcome. *Journal of Child Psychology and Psychiatry* 36(7) 1141-59.



98. Mihalopoulos C, Sanders MR, Turner KM, et al. 2007. Does the Triple P-Positive Parenting Program provide value for money? *Australasian Psychiatry* 41(3) 239-46.
99. Mihalopoulos C, Vos T, Pirkis J, et al. 2011. The economic analysis of prevention in mental health programs. *Annual review of clinical psychology* 7 169-201.
100. Kaminski JW, Valle LA, Filene JH, et al. 2008. A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology* 36(4) 567-89.
101. Thomas R, Zimmer-Gembeck MJ. 2007. Behavioral outcomes of parent-child interaction therapy and Triple P – Positive Parenting Program: A review and meta-analysis. *Journal of Abnormal Child Psychology* 35(3) 475-95.
102. Cohen J. 1992. Statistical power analysis. *Current directions in psychological science* 1(3) 98-101.
103. Fergusson DM, Boden JM, Horwood LJ. 2013. Nine-year follow-up of a home-visitation program: a randomized trial. *Pediatrics* 131(2) 297-303.
104. Kearney MH, York R, Deatrck JA. 2000. Effects of home visits to vulnerable young families. *Journal of Nursing Scholarship* 32(4) 369-75.
105. McNaughton DB. 2004. Nurse home visits to maternal–child clients: A review of intervention research. *Public health nursing* 21(3) 207-19.
106. Kendrick D, Elkan R, Hewitt M, et al. 2000. Does home visiting improve parenting and the quality of the home environment? A systematic review and meta analysis. *Archives of Disease in Childhood* 82(6) 443-51.
107. Australian Infant Child Adolescent and Family Mental Health Association. 2004. Principles and Actions for Services and People Working With Children of Parents With a Mental Illness. Canberra: Stepney: Australian Infant Child Adolescent and Family Mental Health Association
108. Mrazek PB, Haggerty RJ. 1994. Reducing risks for mental disorders: Frontiers for preventive intervention research: Summary: National Academies Press.
109. Commonwealth Department of Health and Aged Care. 2000. Promotion, Prevention and Early Intervention for Mental Health—A Monograph. Canberra: Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged Care
110. Crawshaw J. 2012. Key Ministry & Government Initiatives. In Health DoM (Ed.).
111. Werry Centre for Child and Adolescent Mental Health. 2013. ICAHMS & AOD Leaders Sector Day Presentation.
112. Ministry of Health. 2012. Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017. Wellington: Ministry of Health
113. Ministry for Social Development. 2012. The White Paper for Vulnerable Children Volume I. Wellington: Ministry for Social Development
114. Ministry of Health. 2011. Healthy Beginnings: Developing perinatal and infant mental health services in New Zealand. Wellington: Ministry of Health
115. Ministry of Health. 2007. Te Raukura – Mental health and alcohol and other drugs: Improving outcomes for children and youth. Wellington: Ministry of Health
116. Ministry of Health. 1998. New Futures: A strategic framework for specialist mental health services for children and young people in New Zealand. Wellington: Ministry of Health
117. Ministry of Health. 1994. Looking Forward: Strategic Directions for the Mental Health Services. Wellington: Ministry of Health
118. Mental Health Commission. 1998. Blueprint for Mental Health Services in New Zealand. How Things Need to Be. Wellington: Mental Health Commission
119. Minister of Health. 2005. Te Tāhuhu – Improving Mental Health 2005–2015: The Second New Zealand Mental Health and Addiction Plan. Wellington: Ministry of Health
120. Minister of Health. 2006. Te Kōkiri: The Mental Health and Addiction Action Plan 2006–2015. Wellington: Ministry of Health
121. Mental Health Commission. 2012. Blueprint II: Improving mental health and well being for all New Zealanders – How things need to be. Wellington: Mental Health Commission

122. Ministry of Social Development. 2012. Children's Action Plan: Identifying, Supporting and Protecting Vulnerable Children. Ministry of Social Development
123. Sturrock F, Gray D. 2013. Incredible Years Pilot Study Evaluation Report. Wellington: Centre for Research and Evaluation, Ministry of Social Development
124. Fergusson D, Stanley L, Horwood LJ. 2009. Preliminary data on the efficacy of the Incredible Years basic parent programme in New Zealand. *Australian and New Zealand Journal of Psychiatry* 43(1) 76-79.
125. Clark TC, Fleming T, Bullen P, et al. 2013. Youth'12 Overview: The health and wellbeing of New Zealand secondary school students in 2012. Auckland, New Zealand: The University of Auckland
<http://www.fmhs.auckland.ac.nz/faculty/ahrg/publications.aspx>
126. Werry Centre. 2013. <http://www.werrycentre.org.nz/?t=601>. accessed November 2013
127. Praat A. 2011. Parents as First Teachers Evaluation: Phase II Report. Wellington: Centre for Social Research and Evaluation
128. Centre for Child and Family Policy Research, Auckland UniServices Limited. 2005. Outcome / impact evaluation of Family Start. Auckland: Centre for Social Research and Evaluation Te Pokapū Rangahau Arotaki Hapori, Ministry of Social Development
129. Kerslake Hendricks A, Balakrishnan R. 2005. Review of Parenting Programmes. Wellington: Families Commission
130. Cram F, Ormond A. 2011. Vulnerable Pregnant Women's Multidisciplinary Team, Hawke's Bay District Health Board: Evaluation Report. Auckland: Katoa Ltd
131. Well Child Tamariki Ora Programme. 2013. <http://www.wellchild.org.nz/?t=34>.
<http://www.wellchild.org.nz/?t=34> accessed November 2013
132. Annual Report 2012 The Royal New Zealand Plunket Society Inc. Wellington
133. Gray A. 2011. Early-Intervention Support and Vulnerable Families and Whanau. Wellington: Families Commission
134. Scott K, McGee M, Oakley Browne M, et al. 2006. Mental disorder comorbidity in Te Rau Hinengaro: The New Zealand Mental Health Survey. *Australian and New Zealand Journal of Psychiatry* 40(10) 875-81.
135. Scott K, Oakley Browne M, McGee M, et al. 2006. Mental-physical comorbidity in Te Rau Hinengaro: The New Zealand Mental Health Survey. *Australian and New Zealand Journal of Psychiatry* 40(10) 882-88.
136. Te Rau Matatini. 2013. www.matatini.co.nz accessed November 2013

