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National Advisory Committee on Drugs

Parental Substance Misuse: Addressing its Impact on Children

A Review of the Literature

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Parental Substance Misuse: Addressing its Impact on Children

A Review of the Literature

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National Advisory Committee on Drugs

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Foreword

I welcome the National Advisory Committee on Drug's Literature Review Report *Parental Substance Misuse: Addressing its Impact on Children*. This review draws from the substantial body of literature on the effects of parental substance misuse on children and it serves as a reminder of the need to renew our efforts to deal with the issues that arise in this context.

The information outlined is not surprising but it brings much evidence together in a coherent way that informs policy makers and those involved in dealing with the problems that arise in a very effective way. The report outlines the impact of parental substance misuse on children, from the unborn, through early years and on to adolescents, with differing responses needed across the age brackets.

The report also documents consequences of drug use for parenting and overall family life. Many issues arise in this regard and these can result in children being at high risk of encountering emotional and social problems.

The impact of the report must be that it reinforces the need to renew all our efforts to break the cycle of substance misuse in families and across generations. As Minister of State I am determined to tackle the problems highlighted in this report and in doing so to impact significantly on the overall issue of substance misuse in our country.

I would like to express my appreciation to all those involved in compiling this report. These include in particular Dr. Justine Horgan, Senior Researcher in the NACD who carried out the literature review, the members of the Research Advisory Group for the project and Dr. Des Corrigan and Joan O'Flynn, Chair and Director of the NACD respectively.

Róisín Shortall, T.D.
Minister of State at the Department of Health with special responsibility for Primary Care

Preface

Among the tasks assigned by the Government to the NACD is that of advising it about the consequences of problem drug taking in Ireland. As part of that remit the NACD has published studies on the effects of the drugs phenomenon on communities, Travellers, the homeless and on families.

This new report focuses on the needs of children whose parents are problematic substance misusers. It was prepared at the request of the NACD by our Senior Researcher Dr Justine Horgan who is to be congratulated on the quality of her review and analysis of the Irish and international literature on what is known about the impact of parental use of a range of drugs on their children. The report looks, not only at the biological impact of drug use during pregnancy and breast feeding, but even more importantly highlighting the psychosocial impact on children when their parents misuse drugs including alcohol.

The report draws attention to gaps in our knowledge of the true extent and impact of that drug misuse in Ireland. A number of key messages are identified in this study:

- International evidence underlines that parental drug and alcohol misuse has negative consequences for child development, parenting and family life
- Common principles and standards to support work with parental substance and alcohol misusers should underpin services working to safeguard the development of their children
- The national *Children First* guidelines should be used by organizations working regularly with children who experience parental substance misuse and with their parents
- Health promotion and public information messages that target parents and the impact of their drug and alcohol use on their children need to also promote support services and interventions.

The report also sets out a range of measures which need to be taken on board in order to redress the gaps in our knowledge of what is happening to the children of drug users in Ireland at this time, emphasising five essential research activities.

The NACD endorses the detailed recommendations contained in the report and commends the individual actions to those State agencies with responsibilities in the substance misuse and child welfare arenas.

On behalf of my colleagues on the NACD I would like to thank Dr. Horgan and all those on the Research Advisory Group (RAG) who so ably assisted her in the work leading up to the report.

I would also like to express my personal appreciation to our former Director Susan Scally and to her successor Joan O'Flynn and to the hardworking staff of the NACD for their inputs into the successful production and launch of this landmark report. The NACD also acknowledges the on-going support for its work from the Minister of State Róisín Shortall and her officials in the Drugs Policy Unit of the Department of Health.

Dr Des Corrigan FPSI
Chairperson

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I would also like to thank members of the NACD Prevention Sub-Committee and members of the NACD Committee who provided support and advice for the research and for this report.

Other people have generously participated in reading earlier versions of the report. In this regard I am very grateful to Brigid Pike, Health Research Board and to Aidan McGivern, the Drugs Treatment Centre Board for their time and valuable comments on earlier versions of the report.

I with to express sincere thanks to Dr. Peter Mühlau, Department of Sociology, Trinity College Dublin for his tireless support in accessing research literature. I would also like to acknowledge his helpful input in structuring the report.

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Finally, I would like to thank Dr. Des Corrigan, Chairperson NACD, the former NACD Director Susan Scally, the present NACD Director Joan O'Flynn, Mary Jane Trimble, NACD, Seán McNamara, NACD and Alan Gaffney (fomerly NACD), for their support and assistance in carrying out the work and in the production of this report.

Justine Horgan
October 2011

Executive Summary

Children depend on their family to meet their physical, psychological and social needs and their economic security and well-being. All of these can be jeopardised by parents misusing substances. Recognising the problems that parental substance misuse poses to the functioning of the child's family, *The National Drugs Strategy (Interim)* 2009-2016 underlines the need to target the child's needs in relation to parental substance misuse.

While not all substance use by parents disrupts family relationships, it is clear from the international literature that problem substance use undermines the potential of families. For a substantial minority of the affected children, the effect of their parents' substance misuse continues into their adult lives. For some, the impact can be multifaceted and persist not only into adult life but even into the lives of the next generation. In recognising this problem, the National Advisory Committee on Drugs undertook to develop a review of the main findings reported in recent national and international literature.

Over the last two to three decades, a substantial body of literature on parental substance misuse on children has developed. Several reviews have been published addressing specific aspects such as the consequences for parenting of substance misuse (Hogan, 1998), the implications of parental substance misuse for child outcomes (Tunnard, 2002; Barnard and McKeganey, 2004), and others have addressed responding to parental substance misuse (e.g. Velleman and Orford, 1999; Velleman and Templeton, 2007; Tunnard, 2002). Despite the inter-related nature of these issues, there is currently no up-to-date work published providing an overview of the three areas. Considering the significant improvements in methodology and research design that have been made in recent years, as well as the increased prominence of the child developmental framework in this discussion, an up-date synthesis of the research literature is necessary. In order to give the reader the opportunity to assess the quality of the research evidence, this review also reports the key aspects of study design.

The review of the research literature was guided by two main objectives. First, to identify the needs of children of substance misusers, the review should describe the impact that parental substance misuse has on the lives of children involved. The second objective is to report the main findings on the provision of services that respond to the children's needs. While work to support drug and alcohol-dependent adults is ongoing, little is known about the extent to which the services involved assess the needs of their children. The main sources of this information on these issues hail from the UK and the US.

The issues covered in this report reflect the remit of the NACD. Accordingly the review of the literature focused on studies of parents' use of illegal or illicit substances. Some of these studies included parents in treatment for substance use. Others have selected parents according to criteria for substance use disorder (e.g. DSM-IV[1]) or according to their pattern of use e.g. frequent or high levels of substance use. For ease of reporting, the term 'parental substance misuse' has been applied throughout the report. Where single studies are discussed in this report and it has been feasible to do so, the specific substances involved are mentioned. It was not the purpose of this review to highlight issues that are specific to certain types of substances and consequently this is infrequently done in the report.

Structure of executive summary

The structure of the report is set out in four parts. The first part relates to the consequences that substance misuse has for the care-giving environment. One of the most striking developments in the literature in recent years has been the increased prominence of the child developmental framework in the discussion of parental substance misuse. This is reflected in the first part of the review, which begins by discussing the implications of drug misuse during pregnancy

1 Diagnostic and Statistics Manual, 4th edition. Also known as DSM-IV-TR, a manual published by the American Psychiatric Association (APA) that includes all currently recognized mental health disorder.

for the children born. In this regard, Section (i) below summarises the key findings/messages regarding the impact of prenatal exposure to parental substance misuse.

Given the importance of the quality of parenting to the child's development, the second part of the review, Section (ii), focuses on examining the evidence on the consequences that drug misuse has on the type of parenting; where available, findings on the quality of parenting the child is likely to receive are also discussed. Section (iii) summarises what is known about how parental substance misuse affects the development and life chances of the children involved. Section (iv) summarises the findings in relation to what types of interventions are used in connection with parental substance misuse. Each of these sections is used to draw conclusions about gaps in practice and research in Ireland (Section vi). The key messages from each of the four sections are summarised below.

Key messages

(i) Parental drug misuse: consequences for child development

Substance misuse during pregnancy can have deleterious effects on the health and development of the foetus. After birth the infant can endure neo-natal abstinence syndrome and in the case of alcohol specifically, foetal alcohol spectrum disorder can result in significant physical, cognitive and behavioural problems in the child.

Substance misuse jeopardises the individual's ability to parent consistently and to provide structure in their child's life.

(ii) Parental drug misuse: consequences for parenting and family life

Particularly for women whose partners misuse substances, their experiences of parenting can be dominated by a range of associated stressors including relationship conflict and/or breakdown, domestic abuse, family disruption/breakdown, social isolation and insecurity.

Where drug/alcohol misuse and family conflict/violence are concurrent, the quality of family life and family cohesion are eroded. The relationship the child has not only with his/her parents but also with other family members can be negatively affected.

The stress incurred by parental substance misuse combined with the increased likelihood of the child being in care (either arranged informally by family or by court order) and/or suffering homelessness, result in these children being at a high risk of emotional isolation and/or social marginalisation.

A common route of contact between children who live with parental substance misuse and services can be through the criminal justice or child-protection systems. Support can also come from alternative care arrangements, particularly from extended-family members.

(iii) Parental substance misuse and child outcomes

Compared to children whose parents do not misuse substances, children of drug users are more likely to experience a cascading chain of problems across many domains in their lives, such as mental health, social skills, academic achievement and substance use. The longer the child is exposed to parental substance misuse, the more likely that cognitive development and educational outcomes will be adversely affected.

The effect of parental substance misuse on children is not just a reflection of their parents' current drug-use status. Problems experienced by children of drug users can reflect the impact of their parent's substance misuse during earlier stages of the child's life. Such impact during key phases of the child's development can result in negative effects that endure regardless of their parent's drug-use status.

Adverse behavioural outcomes such as hyperactivity and aggression and problems such as anxiety and depression can begin during the preschool years.

The influence of parents and peers plays an important role in mitigating substance-use outcomes for children whose parents misuse substances.

(iv) Response to parental substance misuse

Many initiatives are available to support families with relatives who misuse substances. Many of the initiatives focus on the children's development through working with their parents. The indications are that these family initiatives are most effective with younger children, compared to late childhood and adolescents.

Many interventions are offered to older children and often where family circumstances have already deteriorated. It is essential to ensure that priority is given on an ongoing basis to an early-intervention and prevention system for children who experience parental substance misuse in Ireland. Such a system should complement the child-protection system based on family support services (Barnardo's, 2008).

The problem of parental substance misuse is cross-cutting and therefore requires inputs from many different types of services. These services operate in different disciplines (e.g. substance use, family/child protection, domestic violence) as well as at different levels or tiers of service provision. Substantial benefits can be gained through developing linkages between these agencies (such as referrals, cross-fertilisation of ideas, upskilling, consultancy/advice), within as well as between the different tiers of provision.

The provision of childcare facilities is an important facilitator for the uptake of treatment and rehabilitation services. These facilities play a very important part in supporting women to take up treatment. It is important that these facilities are available to parents who are in need of treatment for substance misuse/dependence.

There is a significant role for adult treatment services in responding to parental substance misuse. Given the link between parenting and treatment, a failure to respond could put both the service user and their children at risk. An awareness of the childcare responsibilities of service users combined with an assessment of their substance misuse would provide important information about treatment needs and parenting capacity as well as informing decisions around appropriate referrals.

Child-protection and family support agencies play a key role in protecting the child and supporting parents with their parenting role and care responsibilities. Substance-using parents may be in contact with many of these agencies and familiarity with parental substance-misuse issues helps to strengthen the response to these cases. Whether or not adult substance-misuse services are directly involved with a parent, input from drug treatment services in the form of information, advice/guidance would strengthen other professionals' understanding of substance misuse and the implications for parenting.

Given the differences in how adults and children are affected by a relative's substance misuse, it is appropriate to consider how the specific needs of young people and adolescents can be addressed. Mutual-support groups may play an important role in this.

(v) Future research and data needs

The review of the literature has highlighted several gaps in Ireland's research, statistics and information regarding children and parental substance misuse. Outlined below is a set of research areas (RA) that would help to fill these gaps. To help assess the feasibility of each study, where possible, section 5.4 discusses each of these areas and provides pointers as to how such studies might be approached. The five areas are as follows.

RA1: *To determine of the total number of child welfare cases in Ireland, how many involve parental substance misuse*

RA2: *To describe the contact people in substance misuse treatment have with their children and what affect does being in treatment have on this contact*

RA3: *To estimate the number of children experiencing parental substance misuse in Ireland*

RA4: *To develop a comprehensive understanding of fathering in the context of substance misuse.*

RA5: *To examine the potential for improving information regarding parental substance misuse from existing data-collection procedures (e.g. administrative data such as the National Drugs Treatment Reporting System) and relevant ongoing research in the drugs and child/family research fields. In addition, full use should be made of existing research data, to provide analyses for the purpose of informing policy on issues of parental substance misuse.*

Policy and research recommendations

In the light of the analysis in the literature review, the following recommendations are suggested.

1. Research, information and data needs

1.1 In line with the approach of the National Data Strategy on Children's Lives, standardise data collection processes and improve data held by statutory and non-statutory agencies and organisations regarding children who live with parental substance misuse. This information gathering should be done in a way that protects privacy and confidentiality as well as reflects best practice in research methodologies.

1.2 Estimate the number of children in Ireland whose parents have substance misuse problems.

1.3 Estimate the number of children who present with their parents to domestic violence support services (refuges and support services) and who experience parental substance misuse.

1.4 Developing needs-led and targeted measures for children whose parents misuse drug and/or alcohol requires an examination of the services interventions, practices/approaches that are currently applied in the existing system. This would entail a snapshot survey to map agencies, their practices and the gaps they encounter in carrying out their work.

1.5 Little is known about fathering in the context of chronic drug misuse in Ireland. Research should be undertaken to develop an understanding of the circumstances and fathering needs of drug misusing men.

2. Recognising the different needs of young children and adolescents with regard to parental substance misuse.

2.1 Consideration should be given to expanding mutual support groups for young people who would prefer peer support with parental substance misuse issues.

2.2 Assess the extent to which professional education and training curricula in for example, youth work, psychology, addiction support, guidance, counselling and childcare address children affected by parental substance misuse.

3. Reduce the negative impact of parental substance use on children and the family as a whole

3.1 Identify the common principles and ways of working with parental substance misuse which should underpin the practice of all agencies and professionals working to safeguard and promote the development of children. In this respect the revised national *Children First* guidelines should be incorporated in all services and organisations in regular contact with children who experience parental substance misuse. These principles also need to consider:

- the need to involve family members, particularly those who do not exhibit problems with substance dependency. Where substance use treatment providers work with adult family members, an opportunity should be afforded for the family to learn about addiction, to understand the impact of addiction on family relationships and to learn specifically the impact on the child.

This information should specifically address the impact on children and how this can be prevented and/or addressed.

- Where professionals in family support, child welfare/child protection services encounter parental substance misuse, substantial benefits can be gained from these professionals' understanding substance use and the implications for the children/young people and the families involved. Child protection should reflect the key issues and challenges posed by parental problem substance use, with the consequent implications for staff training, assessment and case management procedures and interagency liaison.

Where domestic abuse and substance misuse co-occur the health and well-being of family members is severely impacted and the effect on children's lives compounded (e.g. Cleaver et al 2007). Given the degree of overlap between parental substance misuse and domestic abuse it is important to estimate how many children present with their parents to domestic violence services and are experiencing parental substance misuse.

3.1.1 Assess the extent to which domestic abuse and substance misuse services integrate around co-occurring/co-existing problems.

3.2 Assess the extent to which adult drug treatment services are supporting parenting specifically addressing the following areas:

- Training of staff in drug and alcohol services on learning how to recognise the needs of clients as parents and the needs of their children
- Adult-focused work with clients that encompasses clients' role as parents
- Addiction services liaison with family, child support and other relevant services
- Participation of extended family in their relative's treatment process to contribute to the well being, safety and protection of the child.

4. Health promotion and public information

4.1 Educational efforts are necessary in Ireland to inform women of the adverse effects of consuming alcohol and drugs. It is also important to educate parents and those who work with children about Neo-natal Abstinence Syndrome and Foetal Alcohol Syndrome and an overview of the interventions available to help the development of children with these is needed for both parents and medical professionals. The training of medical professionals, including GPs and public health nurses should inform on drug and alcohol use during pregnancy so that they can raise awareness among their patients of the risks of consuming these substances.

4.2 Specific, culturally sensitive, multimedia resources on the impact of parental substance misuse should be developed to facilitate awareness raising and skills development in response to parental substance misuse.

4.3 Consideration should be given to identifying appropriate interventions/ways of working for primary health care staff who are involved in the early stages of children's lives e.g. Public Health Nurses, GPs, community mothers.

4.4 The needs of families coping with substance misuse should be addressed by recognising and resourcing the role of family support groups in assisting with parental substance.

1. Introduction, objectives and structure of the review

Introduction and objectives

Most studies of substance misuse focus on the individual substance user. However, substance dependence is affected by and affects all family members. Children are particularly vulnerable. Substance-use disorders are transmitted across generations, through many inter-related influences. One important route is heritability[2] (Kendler et al, 2003b) and another is the social environment, including neighbourhood, family and peers. While the UN Convention on the Rights of the Child (CRC) acknowledges the family as the natural environment for the growth and wellbeing of children, parental substance misuse is a problem that can severely curtail the safety and potential of children's lives. It is important to respond to situations where the capacity of the family is negatively affected by adult substance misuse. This is reflected in the CRC, which stresses that the family should be afforded the necessary protection and assistance so that it can fully assume its responsibilities within the community.

The National Children's Strategy (2010) emphasises that all children should be able to develop their own capacities and be in a position to grow through childhood in a way that prepares them for independent and integrated living during adulthood. However through their work nationwide with children and families Barnardos encounters first hand the consequences that parental substance misuse can have. Rather than preparing children for independent living account is given by Barnardos (2008) of children having to assume parenting responsibility prematurely and as a result, feeling confused, rejected, burdened and unable to trust parents[3].

Recognising the entrenched nature of this problem, the National Drugs Strategy 2009-2016 (Interim) highlights the considerable negative impact that problem drug and alcohol use has on families and notes that children in these families are likely to be at high risk due to the prevalence of drug/alcohol misuse within their families, among their peers and in their communities. These children are also at risk of becoming problem drug-users in later life. The National Drugs Strategy calls for the consideration of ways to address the needs of children of problem drug-users. It calls for the development of targeted measures focusing on the children of problem drug and/or alcohol users, aimed at breaking the cycle and safeguarding the next generation (NDS, p. 100).

Over the last two to three decades, a substantial body of literature on parental substance misuse on children has developed. Several reviews have been published addressing specific aspects such as the consequences for parenting of substance misuse (Hogan, 1998), the implications of parental substance misuse for child outcomes (Tunnard, 2002; Barnard and McKeganey, 2004), and others have addressed responding to parental substance misuse (e.g. Velleman and Orford, 1999; Velleman and Templeton, 2007; Tunnard, 2002). Despite the inter-related nature of these issues, there is currently no up-to-date work published providing an overview of the three areas. Considering the significant improvements in methodology and research design that have been made in recent years, as well as the increased prominence of the child developmental framework in this discussion, an up-date synthesis of the research literature is necessary. In order to give the reader the opportunity to assess the quality of the research evidence, this review also reports the key aspects of study design.

With the aim of providing an overview of the research literature on children of drug users, the National Advisory Committee on Drugs (NACD) undertook to develop a review of the main findings reported in recent national and international literature. This review was guided by two objectives. To identify the principal needs of children of substance misusers, it is important to describe the impact of parental substance misuse on the lives of the children involved. This is the first objective of this review.

2 For example, genetic linkages between parental and childhood personality and behaviours, etc.

3 Barnardos submission on the National Substance Misuse Strategy, available at http://www.barnardos.ie/assets/files/publications/free/ADVO_submission_nationaldrugsstrategy08.pdf

The second objective relates to the provision of services responding to the children's needs. While excellent work has been ongoing to support children with substance-misusing parents, little is known about the extent to which services address this issue. The main sources of information on the types of services needed are the UK and the US, but its relevance to the context in Ireland is not clear. Circumstances in Ireland, drugs policy, implementation and service use all reflect the constellation of needs particular to Ireland. The implementation of Ireland's drugs policy over the last two decades has incorporated many harm-reduction components, including needle-exchange provision, opiate substitution programmes and outreach programmes. The structures involved have facilitated the provision of services that aim to target local needs and priorities. Despite the take-up of treatment and harm-reduction services, there is little to indicate how problem substance use in Ireland affects the children involved and how this is being responded to.

In light of this gap, the second objective entails examining what is known about the types of service provision that are needed to meet the needs of children whose parents misuse drugs.

Structure of the review

The literature is unanimous regarding the capacity for parental drug misuse to impede child outcomes. The associations have been well documented, particularly in the international literature. It has become well accepted that children of substance misusers, compared to their peers whose parents do not misuse substances, are at heightened risk of experiencing a range of health, social and psychological problems. The literature points to several key mechanisms that influence the risk environment in which the child is embedded. This review will examine the issues involved and identify the implications for the needs of children in these circumstances **(Section 2).**

The association between prenatal substance misuse and negative birth outcomes has received considerable attention in the literature over the past two decades. With regard to maternal exposure to drugs of misuse, there is extensive discussion of the associations with foetal and neonatal toxicity. Exposure *in utero* arises as the mother uses drugs during the prenatal stage of pregnancy. Postnatal exposure can also occur if the mother continues to use drugs and is breast-feeding the infant. For the purpose of this report, the literature was reviewed to identify what impact this pre- and postnatal exposure is likely to have on the child. The results arising from this review are presented in **Section 2.1**.

The effects of these drugs on neonatal survival are difficult to disentangle; for example, in most case studies, mothers take other drugs and engage in lifestyles and other circumstances that confound the issue. **Section 2.2** proceeds with a discussion of other ways that substance misuse by the parent can influence children. A longstanding issue in the literature since the 1970s is the effect that drug misuse has on the quality of parenting. Specific effects include inconsistency in parenting, harsh and erratic disciplining, high frustration and low tolerance (Davis, 1990). The section presents the studies that have examined the link between parents' substance misuse and two aspects of parenting that are key for the child's successful development: responsiveness/sensitivity (**Section 2.2.2.1**) and discipline/control (**Section 2.2.2.2**). This is followed by a discussion of findings from studies that point to issues that underlie the relationship between parent's substance misuse and their quality of parenting (**Section 2.2.2.3**). Co-morbidity and socio-economic background are two factors that feature prominently in this discussion.

For some substance users, their children's quality of life and care is a strong motivating factor to enter treatment and remain abstinent. Despite this motivation, substance misuse, and the circumstances associated with it, can have deleterious effects on parenting, resulting in child maltreatment. The studies that discuss these issues are outlined (**Section 2.2.3**). Compared to the link with how parents demonstrate sensitivity

and consistency in supervision, the link between parental substance misuse and the prevalence of neglect/maltreatment is independent of contextual and other potentially confounding factors.

Section 3.0 discusses the literature on outcomes for children whose parents misuse substances. The broader literature on child development and intergenerational transmission/continuity increasingly underlines that there are important pathways through which parental substance misuse affects the lives of children. Heritability and parenting feature prominently in the discussion. There is some evidence to confirm that these factors interact, manifesting in poorer psycho-social outcomes (**Section 3.1**) including psychopathology as well as hampering what would normally be forms of resilience for the wider population, positive adjustment (**Section 3.1.2**), social competence and capacity for socio-emotional and cognitive control/regulation. The third and final issue discussed in this section relates to the onset and development of substance use in the context of parental substance misuse (Section 3.2).

Section 4 addresses the second objective guiding this review. It sets out the findings from the literature on types of interventions that services can use in their response to children of substance misusers. The dominant conceptual framework applied in most of these studies focuses on strengthening the family as the main form of intervention. This occurs in two main ways: on the one hand, the substance-use treatment sector engages with the adults (friends and family members) to encourage the parent substance user to enter/engage with treatment. The other form of family intervention includes friends and family members directly in the treatment process, engaging both the person seeking treatment for substance misuse and their partner in a therapeutic process in order to address the parent's problem substance use. The studies on the efficacy of these forms of interventions are discussed in **Section 4.2**.

The final area covered concerning the response to children whose parents misuse substances relates to the role of inter-agency work. Throughout the discussion of the different types of family interventions and programmes, it should be recalled that the services delivering these are parts of an overall system of care. Moreover, the dimensions of this system of care and the component parts cannot operate in isolation. **Section 4.5** outlines some case studies that discuss the need for coordination and mutually supportive action between the agencies/ organisations that are involved and the barriers that prevail in responding to parental substance misuse and the children involved (**Section 4.5**).

Finally, **Section 5** concludes with a short discussion of the main gaps in practice and research arising from the review and some ways to address these are considered. This material is drawn from a consideration of the learnings from the international and national reviews, as well as insights provided by members of the research advisory group. An extended summary and overview is included in **Section 6**.

General note on selection of research studies and organisation of the review

The review of the literature was conducted with the aim of identifying English-language published literature. Studies were selected on the basis of an assessment of several criteria: the relevance of the study and its findings, the quality of the methodology/evidence, the date of data-collection/publication, and the samples involved. The review included studies based on clinical and epidemiological samples.

Rather than being a systematic review, this report is based on a comprehensive narrative review of material published in peer-reviewed scientific journals. For this purpose, a search was undertaken using PubMed, PsychInfo, PsycArticles, Social Sciences Index and HeinOnline. In some instances, the researcher was unable to access original article sources and

therefore depended on abstracts for information. To develop an overview of research undertaken for other than scientific purposes, relevant material reported in grey literature is also covered. Given the dearth of scientific literature concerning children of drug users in Ireland, the grey literature was a particularly important source. The grey literature for Ireland and other international contexts taken together are extensive, and it is beyond the scope of this project to report this in a systematic way. Where this work has provided important supplementary information and insights, the material involved has been included.

The literature distinguishes between substance-specific and non-substance-specific mechanisms of how substance misuse affects children. While there are important substance-specific effects, in particular with *in utero* effects, most of the discussion relates to more general non-substance-specific issues of severe parental substance misuse and the associated correlates. For this reason, the review is primarily organised to flag these issues at the expense of a substance-specific discussion.

The data, particularly in relation to parental illicit drug use, is mainly based on cross-sectional rather than longitudinal designs, which limits the potential to track the trajectories of outcomes from childhood to adolescence and on to young adulthood and adulthood. To fill this gap, it is useful to include in this review the coverage of a selection of high-quality alcohol studies (large samples, longitudinal designs and long-term follow-ups). In many respects it can be argued that substance misuse by parents, regardless of whether it involves alcohol or illicit substances, leads to similar adjustment difficulties in children under their care. However, simply extrapolating the findings on children of alcoholics to children of illicit substance misusers would be to ignore the socio-cultural differences between alcohol and illicit substance use that are likely to have implications for individuals and families in which members drink or use drugs. For example, opiate users are much more likely to be living in poverty, a certain degree of secrecy and stigma pervades the use of illegal drugs, and there is also the dimension of criminality; thus there is less social acceptance of the problems involved with illicit substance use. Therefore, when considering this material, readers should consider the potential for cross-applicability.

2. Parental drug misuse: consequences for child development

A large number of studies have investigated the impact of exposure to toxic substances in utero. Following the teratological model, the aim is often to examine the impact of specific substances on development. In drawing conclusions, the precise impact of parental substance misuse on children is difficult to substantiate. First, different definitions are used in different studies. How prenatal exposure might cause the effects that are observed is not completely understood. The presence of confounding factors in studies means it is difficult to attribute adverse effects to a specific drug. The use of many substances can involve a polydrug dimension. Particularly in the case of heroin and cocaine use, the effects on the health of the foetus are frequently intensified as a result of polytoxins, including alcohol and nicotine. Many mothers using cocaine also use other substances such as alcohol, marijuana and nicotine. The severity of the use of substances is also likely to be a factor. For example, cocaine is often accompanied by heavy and/or binge drinking; thus the potential effects of cocaine use need to be considered in the context of other substance use during pregnancy.

Research informed by the teratological model continues to yield important insights about the impact of exposure to toxic substances, but there are confounding effects from the child-rearing environment, which are examined in another area of the literature. The misuse of drugs or alcohol is correlated with other factors (such as poverty or depression) and as a result there is considerable disagreement among experts as to whether there is a direct drug effect or whether outcomes reflect other conditions and/or deficits in lifestyle. In socially deprived environments, malnutrition, infections and traumatisation can also have an additional teratogenic effect.

2.1 Consequences of prenatal exposure (PE)

For the foetus, the placenta forms a 'protective barrier' against infectious agents. Some substances consumed by the mother during pregnancy can damage the embryo in its development and, because of these effects, are known as teratogens[4]. Prenatal drug exposure includes acute outcomes observed primarily in the neonatal period.

The number of pregnant women who use illicit drugs is not well known in Ireland. In Australia, drugs of choice that pregnant women use include heroin, cocaine, cannabis and benzodiazepines (Turner et al, 2003). In Ireland research has found that pregnant women who use illicit drugs are frequently polydrug users, with a high percentage using long-term prescription drugs to treat anxiety and/or depression (Scully et al, 2004).

The chaotic lifestyle associated with substance misuse can mean that pregnant women do not attend antenatal appointments as often or as regularly as non-substance-misusing women. In this regard, the Women's Health Council advised that it is important to ensure that, when pregnant substance users come into contact with services, they can access specialised, integrated care that will attend to their needs. Keane and Alison (2001) point out that services provided to pregnant drug-users frequently fail to continue beyond birth, effectively leaving women who may be in a heightened state of vulnerability after birth, and their babies, without specialist support.

The material on illicit drugs in Ireland and presented below is based on a discussion of the issues by McElhatton (2004). Where possible and appropriate, more recent and/more relevant findings to the purpose of this review have been incorporated.

Alcohol: Alcohol use during pregnancy has been linked to increased risk of spontaneous abortion, intrauterine growth retardation, low birth-weight, learning disabilities, hyperactivity and foetal alcohol spectrum disorder (Sokol et al, 2003). Despite public health campaigns and improved knowledge about the harmful effects of alcohol intake during pregnancy, many pregnant women

4 A teratogen is any agent that can disturb the development of an embryo or foetus. Teratogens may cause a birth defect in the child, or halt the pregnancy outright. The classes of teratogens include radiation, maternal infections, chemicals, and drugs.

do not abstain from drinking during pregnancy. The prevalence of drinking during pregnancy has been reported to be 35% in Ireland (Tarrant et al, 2011).

Like other drugs, alcohol is known to be a teratogen and can have a range of deleterious effects on children's cognitive, physical and behavioural development (Stratton et al, 1992). The impact of alcohol on the foetus depends on the pattern and quantity of alcohol consumed by the mother, the stage of development of the foetus, and a number of socio-behavioural risk factors such as socio-economic status and other consumption patterns (polydrug use, tobacco). Extensive research shows that serious harm is associated with higher levels of prenatal alcohol exposure (Stratton et al, 1996). Recent research shows that occasional episodes of binge drinking can increase the risk of child mental-health problems, particularly hyperactivity and inattention problems, and that these persist over time (Sayal, 2009).

The range of adverse effects of prenatal alcohol exposure on the developing embryo, foetus and child are considered as a spectrum of structural abnormalities as well as growth and neurodevelopmental impairments. The term used to encompass all of these effects is Foetal Alcohol Spectrum Disorder (FASD) (Sokol et al, 2003). Diagnosis depends on a triad of signs (specific facial features, growth restriction/retardation, and neurodevelopmental disorder), not all of which need to be present (Gray et al, 2006). The diagnostic criteria enable the physician to assign the child to one of a set of FASD categories. These include Foetal Alcohol Syndrome (FAS) (all three signs), Partial Alcohol Syndrome (pFAS), Alcohol-Related Neurodevelopmental Disorder (ARND) and Alcohol-Related Birth Defects (ARBD) (the latter are less easily diagnosed).

The behavioural effects of prenatal alcohol exposure on children can be seen during infancy, throughout childhood, and into their adult lives. Alcohol is neurotoxic to the brain during the developmental stage (Archibald et al, 2001; Spadoni et al, 2007). In fact, FASD is the leading known cause of intellectual disabilities and birth defects, with brain damage being the most harmful effect (www.fasd.ie). Physical, behavioural and/or learning problems may include attention deficit hyperactivity disorder, disorganisation, impulsivity, distractibility, and hyperactivity. In addition to conduct problems, children with FASD struggle with emotional difficulties including depression and anxiety disorders (Famy et al, 1998). During infancy, babies may have trouble with parent-child attachment and have irritable temperaments (Coles et al, 1991).

Neuromotor defects include impaired balance and coordination, and over/undersensitivity to stimuli. Deficiencies in executive functioning include impaired ability to judge, plan, empathise, estimate, and delay gratification, and speech and language delays. Prenatal alcohol exposure has been associated with a host of disruptive behavioural, emotional, and adaptive factors during childhood. Children with FASD have a difficult time with schooling and with interacting socially with their peers (D'Onofrio et al, 2007; Kelly and Streissguth, 2000), and problematic behaviour may intensify as children get older (D'Onofrio et al, 2007).

Opiates: Opiate misuse has been associated with a number of pregnancy complications such as miscarriage and placental abruption. Despite evidence of adverse foetal effects with maternal codeine use and the paucity of data on the effects of maternal use of other opioids, treatment with opioid analgesics is often assumed to be safe during pregnancy. According to an ongoing, population-based study conducted by the (American) Centers for Disease Control and Prevention (CDC), women receiving opioid analgesic treatment in early pregnancy have a two- to threefold increased risk of delivering infants with conoventricular septal defects, atrioventricular septal defects, hypoplastic left-heart syndrome, spina bifida or gastroschisis (Broussard et al, 2011).

Postnatal outcomes of opiate exposure include a range of central nervous system, autonomic

nervous system and gastrointestinal symptoms known as neonatal withdrawal or abstinence syndrome (NAS). This has been well described in infants born to opiate-dependent mothers. The symptoms include hyperirritability, tremors, convulsions, gastrointestinal distress, respiratory distress, and autonomic disturbances.

Women who are pregnant and use heroin often have lifestyles that involve misusing other drugs, tobacco[5] and alcohol, and have poor nutritional and health status (HIV, hepatitis B and C), and these can influence pregnancy outcomes. Where a pregnancy is complicated by opiate use, prenatal growth may be affected by maternal malnutrition and comorbid infections as well as by opiate exposure.

Methadone can be the treatment of choice for the management of opioid dependence in pregnant women (UK Guidelines on Clinical Management); such treatment has been shown to improve engagement with antenatal services, thus improving perinatal outcomes, compared with continued illicit drug use (Kaltenbach et al, 1998). Methadone is generally not considered to be teratogenic (Fischer, 2000). However, while methadone may be more beneficial for the mother, there can be problems for the newborn, including major congenital anomaly (Clear et al, 2011). The withdrawal symptoms of infants of methadone-dependent mothers are often more severe and persistent than with heroin, and possible effects include a higher risk of Sudden Infant Death Syndrome (Sullivan and Barlow, 2001). Evidence is gradually emerging to indicate a relationship between maternal methadone dose at delivery and NAS (Lim et al, 2009; Scully et al, 2004; Cleary et al, 2011). During the withdrawal period, infants are often resistant to cuddling or soothing and have a decreased ability to respond normally to auditory or visual stimuli.[6] A retrospective cohort study of just over 61,000 births at the Coombe Hospital in Dublin between 2000 and 2007 provides invaluable insights for Ireland. This study found that methadone exposure is associated with an increased risk of adverse perinatal outcomes, even when socio-demographic factors are accounted for. Adverse outcomes included preterm births, being small for gestational age, low Apgar scores[7] and increased incidences of neonatal unit admission, and diagnoses of a major congenital anomaly (Cleary et al, 2010a).

Stimulants

Cocaine and crack cocaine: There is considerable disagreement among experts as to whether or not cocaine and its derivatives actually cause congenital malformations or whether the adverse effects are due to confounding factors. However, numerous developmental disturbances have been attributed to effects on foetal circulation such as bleeding and blood clots in the organs and in the placenta. Reduced blood flow has been implicated as a causal mechanism for effects of prenatal cocaine exposure on poor foetal growth – for example, low birth-weight, being small for gestational age, intrauterine growth retardation, and prematurity (Singer et al, 2001). Maternal cocaine use is also associated with poor maternal nutrition and lack of prenatal care, thus exacerbating the likelihood of poor foetal growth (Amaro et al, 1989). The functional symptoms observed in newborns are less noticeable than in the case of heroin use, but are more apt to be of a toxic nature.

5 The impact of maternal smoking on the foetus can include miscarriage and stillbirth, preterm birth, birth defects and intrauterine growth retardation. Infants born to mothers who smoke have lower lung function and volume and this may continue into later life (Stocks and Dezateux, 2003). There is evidence of an increase risk of Sudden Infant Death Syndrome (Mitchell et al, 1997) and respiratory disease (Anderson and Cook, 1997). Research has also highlighted the effect of nicotine on the developing brain and an etiological link has been suggested with PE and difficulties with maths and language, and behavioural problems (Richmond, 2003).

6 Buprenorphine can be used instead of methadone but buprenorphine itself can result in dependence. The effects on the developing foetus and neonate have been inadequately studied but, thus far, there is no clear evidence of abnormal brain development in most of the children studied.

7 The Apgar score occurs right after the baby's birth in the delivery or birthing room. The test was designed to quickly evaluate a newborn's physical condition after delivery and to determine any immediate need for extra medical or emergency care.

There are concerns that in utero exposure to cocaine may cause adverse behavioural changes in children postnatally (Chasnoff et al, 1985). Studies of the cognitive and behavioural effects of prenatal cocaine exposure report learning disorders and attention deficit at three years of age (Griffith et al, 1994). Singer et al (2004) found specific negative effects of in utero exposure to cocaine on arithmetic skills and general knowledge among preschool children.

Amphetamines, amphetamine derivates and designer drugs: There are conflicting findings as to whether amphetamines and related compounds are associated with an increased risk of congenital malformations in human pregnancy. Chronic use of amphetamines has been associated with an increased risk of placental abruption, miscarriage, intrauterine growth retardation and premature delivery. The effects of these drugs on neonatal survival are difficult to disentangle because, in most case studies, mothers take other drugs. A large number of available drugs are very similar in structure and activity to amphetamine, but the information about their effects in pregnancy is scarce. Overall, the effects of ecstasy on the developing baby are poorly understood. There is little information on the long-term effects on development and behaviour.

Psychedelics

Cannabis: Results from the Drug Prevalence Survey show that cannabis is the most commonly used illicit drug among women of reproductive age in Ireland (NACD, 2008). The reports are conflicting. Some reports of congenital malformations after maternal use have found no pattern (for a review, see McElhatton, 2004). Cannon[8] (2006) reports two studies that found considerable and persisting impairments of executive functioning of the offspring prenatally exposed to cannabis. At follow-up various cognitive abilities – including problem-solving, capacity for attention and memory, and reasoning skills – were apparently affected.

8 *What everyone should know about cannabis* (2006). A report prepared for the Joint Committee on Arts, Sport, Tourism, Community, Rural and Gaeltacht Affairs.

Recent studies reviewed by Park et al (2004) have demonstrated that marijuana, THC (tetrahydrocannabinol) and other exogenous cannabinoids exert effects in both the gonads and during pregnancy. In women, regular cannabis smoking may be associated with suppression of ovulation. Chronic use may cause galactorrhea in women and gynecomastia in men. Endocrine changes resulting from cannabis use may be inconsequential in adults but significant in prepubertal users, in whom cannabis use may suppress sexual maturation, as well as social and personal development and learning of coping skills (Ashton 1999).

2.2 The care-giving environment

Parenting is a central mechanism in how the care-giving environment operates as one of the most important influences in relation to children's needs. Most children exposed in utero to drugs are raised by parents who may not be functioning well in rearing their children (Hans, 1999). For this reason, this section reviews what is known about the parenting of substance misusers. The bulk of this literature focuses on the parenting by mothers. In recognition of the important role also played by fathers to the child's development, this report incorporates studies that have generated information about the parenting by fathers who misuse substances.

Studies on parenting provide consistent evidence that constructive parenting includes multiple aspects of parenting that contribute to positive childhood and adolescent adjustment. First, age-appropriate and consistent discipline buffers children and adolescents against the effects of a variety of stressful and negative events (Marshal and Chassin, 2000). Second, parental warmth and involvement may protect children from the development of externalising behaviours by supporting the early development of self-regulation (e.g. Eisenberg et al, 2005). Parental warmth may also limit growth in internalising (e.g. sadness and worrying) and externalising behaviours (e.g. aggression) among adolescents experiencing psycho-social difficulties (Scaramella

et al, 1999). Third, effective parental monitoring has been linked consistently to positive adolescent development (e.g. Pettit et al, 2001). Likewise, poor monitoring is a predictor of problem behaviour outcomes, including antisocial behaviour (e.g. Ary et al, 1999).

Since the early 1970s this constellation of constructive parenting practices has come to be known as authoritative parenting and is one of several prototypic styles of parenting identified by Baumrind (1967; 1971). Studies have applied this framework to examine early and middle childhood as well as to explain variations in patterns of adolescent development (Dornbusch et al, 1987). The findings from these studies of adolescents corroborate findings for earlier age periods: young people benefit most from authoritative parenting and least from *authoritarian* and *permissive* parenting. A study of the families of approximately 4,100 14 to 18-year-olds (Lamborn et al, 1991) examined the adolescents' ratings of their parents on involvement and strictness/supervision. The results indicate that adolescents who characterise their parents as *authoritative* score highest on measures of psycho-social competence and lowest on measures of psychological and behavioural dysfunction; the reverse is true for adolescents who describe their parents as neglectful. Children from *neglectful* homes were relatively disengaged from school and showed a higher frequency of involvement in drug and alcohol use.

2.2.1 Substance misuse and parenting

For a variety of reasons, substance-misusing parents are considered to be less likely to provide high-quality parenting (Kelley, 1998). Substance dependency encompasses all aspects of the user's life and of that of their families (Lussier et al, 2010). The time and resources that are required to obtain and use psychotropic substances can be all-consuming, particularly during intense levels of use and during periods of recovery from episodes of intoxication (Das Eiden et al, 2002; Vaz-Serra et al, 1998). Substance-misusing parents can also present with co-morbidity for either depression or other complicating problems such as anti-social personality disorders. The needs and wellbeing of other family members easily become secondary to an addiction and this causes a variety of problems in family dynamics (Crnkovic and DelCampo, 1998). The quality of care can be directly hampered by poor financial and social resources (Crnkovic and DelCampo, 1998).

Where neonatal abstinence syndrome is involved, newborns can present with neurobehavioral difficulties, including disorganised responses to ordinary stimulation, maladaptive sleeping and feeding behaviours, and a tendency towards easy over-stimulation (Zuckerman, 1994). These infant characteristics can make parenting less rewarding and can compromise the mother's parenting ability in the early phases of the child's development (Juliana and Goodman, 1992).

Considering the extra complications that feature in the life of a substance-misusing parent, the main predictions in studies are that substance-misusing parents are more authoritarian (more punitive and controlling) and less responsive, less emotionally engaged and unable to set limits for their children. The following section reports the findings from a review of the literature of the evidence regarding these predictions.

2.2.2 Evidence of parenting attitudes and styles associated with parental substance misuse

2.2.2.1 Responsiveness and sensitivity

One of the personal resources affecting our ability to cope with stressful experiences is attachment style (Meyers, 1998). Emotional availability and responsiveness of the caregiver to the child is the core of the bond influencing the ways families provide care and protection (Ainsworth, 1989). Secure attachment styles between family members implies an ability to balance intimacy and autonomy, separateness and connectedness (Belsky and Cassidy, 1994), and is associated with family resilience in adversity or crises.

In general, opiate-dependency is found to be associated with a neglectful orientation to children, characterised by emotional withdrawal (Hans, 1992), ambivalence, limited involvement

and engagement, insecure attachment and diminished responsiveness (Davis, 1990; Mayes, 1995). In a study examining maternal use of cocaine, mothers were found to be less engaged and less flexible during feeding interactions with their one-month-old infants (LaGasse et al, 2003). The study also found that mothers had higher conflict with their children (Eiden, 2001) when compared with a control group. Eiden et al (2006) also studied 130 mother-infant dyads (68 cocaine-exposed and 62 non-cocaine-exposed) who were recruited after birth and assessed when the child was aged 4-8 weeks. Postnatal cocaine use and maternal depression/anxiety were unique predictors of lower warmth and higher insensitivity during mother and child interactions.

Finzi-Dottan and colleagues (2006) reported a study of a sample of 56 families comprising drug-using fathers (n=56) in the first stages of recovery from addiction after detoxification, their non-drug-using spouses and their youngest child (n=56). The children were aged between seven and 14 years. The study took place in Israel. Participating drug users were undergoing rehabilitation in outpatient units for the treatment of drug use after completing the detoxification programme. Most used heroin (53%); over a quarter used a combination of drugs (28%); while the remainder used heroin and cocaine. This study found that the drug-using fathers were characterised by an avoidant attachment style. They were significantly less secure and more avoidant than their spouses. The authors also reported that the avoidant drug-using father was likely to deny the impact of addiction on the family and to minimize the impact on their children.

The results from several studies indicate that alcoholic fathers are at high risk for poor quality of parenting, beginning in early childhood (Deide et al, 2004; Jacob et al, 2000). Alcoholic fathers display lower warmth and higher negative affect during interactions with their infants than fathers without substance-misusing problems (Eiden et al, 1999), and with toddlers (Eiden et al, 2004). The explanatory factors in these parenting issues are slowly emerging (Zimmerman et al, 1995). Research on bidirectional influences (e.g. Patterson and Fisher, 2002) indicates that children of alcoholics are more likely to exhibit problematic behaviours and psychiatric disturbances (see Section 3 below). This, coupled with the fact that parents in high-risk groups (e.g. substance-misusing, depressed) react negatively to their children's coercive behaviour compared to well-functioning parents (Patterson, 1982), could result in alcoholic fathers being more likely to withdraw or be less reactive with their children. Depression in alcoholic fathers would intensify this as this combination is associated with less positive expression in interactions with their children (Jacob and Johnson, 2001).

Other research suggests another role played by the father. Mothers with alcoholic partners were less warm and sensitive during play interactions with their toddlers, and lower maternal warmth/sensitivity was predictive of lower social competence in kindergarten (Eiden et al, 2004). The authors raise the possibility that the stresses associated with having an alcoholic partner may have a spill-over effect on maternal interactions with the child and interfere with the mother's ability to be consistently warm and supportive toward their children. Similarly, others have noted lower problem-solving capacity and higher rates of negativity during parent-adolescent interactions among substance-misusing families (Jacob et al, 1991).

2.2.2.2 Discipline, control and supervision

The authoritarian style (Baumrind 1971) has been characterised by over-involvement, harsh verbal criticism, extensive punishment, controlling approaches to discipline, and exclusion of parenting support from other adults (Bauman and Dougherty, 1983; Deren, 1986; Mayes, 1995; Luthar and Suchman, 1999). Substance-dependent parents have been found to rely on more severe disciplinary practices. The relevant studies and findings are discussed below.

In a longitudinal study of a cohort of young adults with a history of substance use, Kandel (1990)

analysed a dyadic sample of 222 parents and their oldest child, aged six years and older. The clearest relationships were found for maternal substance involvement. Mothers more heavily involved in recent drug-using and heavy drinking were associated with poorer parenting: less supervision of the child, more punitive forms of discipline, less closeness, less discussion, and less positive involvement with the child. The mother's substance use was also related to greater disagreement with the spouse about disciplining the child.

In a more recent study, Fals-Stewart and colleagues (2004) compared the outcomes of children living in families with drug-misusing fathers with those of alcohol-misusing fathers and non-substance-misusing fathers. They found that fathers in the drug-misusing homes reported more dysfunctional disciplinary practices and engaged in less monitoring of their children. The longitudinal study described earlier (Chassin et al, 1996) reported that father's alcoholism was associated with less paternal monitoring of adolescent behaviour and this, in turn, predicted associations with drug-using peers. Furthermore, the study showed that these peer associations prospectively predicted growing adolescent substance use over time. These findings show that children whose parents misuse alcohol are at risk for substance use, in part because of impairments that occur in family socialisation and behavioural management. The fact that the father's monitoring had a unique effect (above and beyond the mother's monitoring) is noteworthy, because many studies of adolescent outcomes consider only the mother's role in these parenting behaviours.

Wellisch and Steinberg (1980) reported that substance-dependent parents in detoxification were over-involved and more controlling of their children when compared to non-dependent mothers. The authors concluded that mothers addicted to substances are more likely to exclude outside influences (e.g. support from outside their immediate family and friends) in their mothering roles, in an attempt to control the child and his/her development (ibid, 1980).

Comparing 70 methadone-maintained mothers and their 70 preschool-age children to a matched control group of 70 non-substance-dependent mothers and their 70 preschool-age children, Anselmo (1986) also found that methadone-maintained mothers reflected authoritarian childrearing beliefs. Again, in relation to methadone-maintained parents, Bauman and Dougherty (1983) found that substance-dependent mothers more frequently engaged in disapproving, provocative, threatening and commanding behaviours towards their school-aged children, compared to mothers who were not substance-dependent.

More recent evidence comes from Hien and Honeyman (2000) who used a case-control design and recruited participants from a large public city hospital serving a primarily poor population. The target group was mothers whose drug of choice was crack/cocaine and the control group was recruited from the hospital's general gynaecological clinic population. This site was chosen because of the population's similarity in income status to the drug-using women. The findings from the study indicated that crack and cocaine-dependent mothers were significantly more likely than the control group to be more punitive.

Miller et al (1999) examined the relationship between mothers' alcohol or other drug problems and their punitiveness toward their children. Women (n=170) were recruited from five different sources, including clinical interventions and the community. The results indicated that mothers with current or past substance-misuse problems are more punitive toward their children, even when potentially confounding demographic factors were controlled for. This study also found that anger and hostility served as a predictor of mothers' punitiveness and moderated some of the relationships between their substance-misuse problems and their punitiveness.

2.2.2.3 Co-morbidity and contextual issues underlying parenting among substance-misusers

The literature, however, is not unequivocal. Several studies have noted no association between parenting styles and parental substance misuse (Black et al, 1993; Rohnson & Rosen, 1990; Neuspiel et al, 1991). Most recently, Lussier and colleagues (2010) found that, despite substance-dependent parents experiencing certain limitations in terms of parental control, these difficulties did not in any way affect the quality of the parent-child relationship (see also Catalano et al, 1999; Kumpfer and Bluth, 2004). The disparate findings in the literature are likely in part to be explained by inconsistencies in measurement and definitions of parenting (Hogan 1998). The inconsistency is also explained by other maternal and child risk characteristics, and some of these will be discussed below.

When substance use as a problem occurs alone or without the complication of other risk factors, parents may be in a position to fulfil their parenting role (Smith and Testa, 2002; Nair et al, 2003; Gilchrist and Taylor, 2009). The associations can be moderated by other parental psychopathology such as depression (Eiden et al, 1999). For example, another pathway to maternal insensitivity may be via maternal depression and anxiety. In general, depressed mothers are more likely to display a flatter response during mother-child interactions, provide less stimulation, and be less responsive towards their infants (Cohen & Campbell, 1992; Jameson et al, 1997).

Eiden et al (2006) reported that substance-misusing mothers with higher depression or anxiety tended to be more insensitive during interactions with their children. Substance misuse such as alcoholism may be uniquely predictive of the child's social development and it may also be that substance misuse, depression and antisocial behaviour have a similar impact on the family. This study also found that maternal anger/hostility exacerbates negative maternal behaviour in substance-using populations (Eiden, 1999). These results emphasise the importance of considering other pathways of influence or associations with maternal behaviour among substance-misusing parents (Eiden et al, 2006).

Socio-economic status, parenting practices and protecting against risk: Another direction of investigation in the literature has been to look at the influence of socio-economic status (SES) as a factor in the link between a mother's parenting style and her substance misuse. Literature comparing low and high SES parents has linked low SES with higher rates of authoritarian, controlling parenting styles (Sedlak and Broadhurst, 1996). Some suggest that the authoritarian and controlling parental stance attributed to maternal substance dependence may also be attributable to the mother's concomitant membership in low socio-economic strata. Comparing mother-infant interactions of methadone-maintained versus comparison mothers, Bernstein and colleagues (1984) found that low socio-economic status and psychological characteristics of parents were better predictors of poor parenting interactions than opiate misuse alone.

Schuman and Luthar (2000) examined maternal dependency and low SES as potential determinants of several dimensions of parenting. This was a study undertaken in the US of 120 mothers (69 opiate-dependent and 51 SES-matched comparisons) with children under 16 years of age. The dimensions focused on were parental over-involvement, ability to promote the child's autonomy, and ability for limit-setting. The findings confirm that maternal substance dependence is related to restricting child autonomy (i.e. to be highly protective of their children) and to being over-controlling (harsh criticism) but not to a limit-setting style of parenting. With regard to restricting autonomy, however, the relationship with maternal substance misuse is largely spurious once controlled for SES. In explaining this, the authors suggest that the link between low SES and the tendency for substance-dependent mothers to restrict the autonomy of their children may be an adaptive response to living in environments where

children's exposure to violence, crime, problem substance use and health hazards is high (Luthar, 1999).

In a causal scheme, socio-economic status of the mother is a factor preceding her substance-use status. In this sense it is considered to be a static factor. The mitigating role of dynamic factors (i.e. factors that emerge and change over the parenting period (Nair et al, 2003), are also relevant. These include stressful events such as the behaviour of the child (e.g. antisocial behaviours), relationship breakdown, interpersonal, partner and/or domestic violence, imprisonment, depressive symptoms (Kelley, 1998; Miller et al, 1999; Schuler and Nair, 2001; Young, 1997) and, as mentioned earlier, mental-health and psychiatric problems (Amaro et al, 1990; Hanset al, 1990; Anglin and Perrochet, 1998).

Studies show that the cumulative effects of these various forms of risks mediate the impact of parenting. Nair et al (2003) examined 10 risk factors among substance-using mothers during the first 18 months of their child's life. The study reported more stressful parenting and a stronger inclination towards neglectful and abusive behaviour among mothers with at least five risks, compared to substance-using mothers with fewer than five risks. The authors concluded that, when substance misuse occurs in the context of multiple risks, these will interfere with the mother's ability to care for her children. However, little is known about constellations of risk and resilience factors and how these combinations translate into parenting. It is considered unlikely that the cumulative effects would result in an additive or linear effect on parenting.

Schuman and Luthar (2000) (study described earlier) found that being single and having a large family is associated with an increased vulnerability for substance-dependent mothers when compared to comparison mothers. Specifically, being single conferred greater vulnerability for substance-dependent mothers' involvement with their children, whereas cohabitation and smaller family size resulted in greater risk for restricting child autonomy. The authors conclude that, for substance-dependent mothers, cohabitation with partners and having fewer children may lead to more protective and enmeshed parenting styles.

2.2.3 High-risk circumstances

2.2.3.1 Family disruption, separation and substitute care

Infants may be particularly vulnerable to disruptions in care between six and 24 months of age when they are in the process of establishing stable attachment relationships (Rutter, 1987). Children of substance-misusing women are at increased risk of experiencing family disruption and frequent changes in caregivers (Zuravin, 1992). In Ireland there is a paucity of systematic information about the living arrangements of children of drug-misusing parents. In the international context, studies based on treatment data indicate that almost half of those who access treatment report having dependent children (Meier et al, 2004; Stewart et al, 2007). Women are more likely to have responsibility for children than men and the majority of parents in treatment do not live with their children (Meier et al, 2004). Substance-misusing parents are more likely to be involved with the criminal justice system. Imprisonment often results in family disruption due to separation and possible breakdown of relationships (Beckerman, 1998;).

A study of a small sample of poly-substance-using imprisoned mothers found that just over one-third had minor children still living with them prior to their imprisonment. Over one-third of the children were living in foster care, with the remainder in informal alternative care arrangements with their father or extended family members (Goldberg et al, 1996). Another more recent study of women in treatment programmes (Conners et al, 2004) reported that two-thirds of clients in such programmes had lost legal custody of their children. Taken together, these findings show that children of drug-misusing parents are very likely to have a non-resident parent at some point in their lives.

What evidence there is suggests that the situation in Ireland is similar. Cox and Comiskey (2007) report that of 216 opiate using parents in treatment, more than half (56; n=121) did not have their children in their care. Moreover, there are indications that children of drug using parents are early separated from their parents in Ireland and that the rate of family reunification is low. McDonnell and McGivern (without date) investigated the cases of children of people who attended for treatment in Ireland. Between 2001 and 2009, a total of 127 children were admitted to care. Of this total, only 19 were returned to their families within one year of admission. The separation of the children from their family typically occurred very early and in many cases before the child is one year old.

In the main, children whose parents misuse substances and are placed in care away from home differ from other separated children. They tend to enter care earlier, stay longer and return more often to their relatives or friends rather than to their parents (Nair et al, 1997). In fact, studies based on samples of parents who have been referred to welfare agencies or the courts also indicate that substance-misusing mothers are more likely than non-substance-misusing mothers to voluntarily relinquish care of their child to family members or neighbours (Lawson and Wilson, 1980; Hussong et al, 2010). As a result, these children's families are frequently re-constituted – for example, as grandparent-headed households (Barnhill, 1996).

Children who have been in care are more likely to be involved in crime, to suffer homelessness and to take drugs themselves. They are also more likely to have their own children taken into care. This problem has already been highlighted in Ireland by Hogan (1997) and Corrigan and O'Gorman (2007) and McDonnell and McGivern (without date).

Very little is known about how contact between parent and child develops as drug users move from being in treatment to rehabilitation and avail of services that support this recovery phase. Local area data on the needs of service users who attend Ballyfermot STAR[9] have been reported by McKeown (2006). One group of services users in this study comprised 18 participants of the Community Employment programmes (programmes funded by FÁS for former drug users) who were at different stages of the recovery process. These participants were on average 29 years and included men (n=10) and women (n=8). A high proportion of these participants were parents (n=14) and one was a grandparent. Of this group, eight were living with all of their children, one with some and five with none of their children. The group comprised a high proportion of single fathers not living with their children. Noteworthy also are the details regarding the participants' current drug status: most were stable (62%) and equal shares were active and drug-free (19%).

Risk factors

A study reported by Lam and Colleagues (2004) of a community sample of parents who are intravenous and crack-cocaine drug-users, sought to identify the characteristics of mothers who use crack cocaine. The study compared women who have their children living with them with mothers who have been separated from their children. The study found that 69 per cent of mothers had their children living with them. Almost 20 per cent of the mothers in the study had been victimised as children and almost 40 per cent had multiple sex partners or had traded sex for money or drugs in the past 30 days. These mothers used crack frequently (15 of the past 30 days) and had smoked the drug for periods lasting over a day, suggesting compromised parenting practices and high-risk environments for their children.

Lam and Colleagues (2004) also found that the mother being homeless and reporting physical abuse as a child were found to be important risk factors. However, days of crack use in the past month, depressive symptoms and physical abuse in the past 90 days did not demonstrate significant independent effects on caregiver status when

9 Ballyfermot STAR (Supporting Aftercare Recovery). The basic aim of STAR is to support drug users and their families and to provide information and education on drug issues to the wider community.

controlled for a range of factors (socio-demographic, environmental, psychological, behavioural, and historical risks). On average, mothers who retained their children were as aggressive as those separated from their children. Despite the high-risk environments of mothers living with their children, they reported strong motivation to retain the care of their children.

Other studies also show that static and dynamic factors significantly distinguish between mothers who retain custody of their children and those who do not. A mother's report of being physically abused in childhood has been shown by many studies to be associated with decreased odds of her retaining care of her own children (Grella et al, 2006). This finding suggests that women involved with child welfare may have greater service needs related to their own exposure to traumatic events and victimisation, and that these events may adversely affect their parenting capability. Experiences of personal victimisation and community violence may lead to isolation among substance-misusing mothers (Hill et al, 1995) and may further facilitate substance use as a coping strategy and thereby interfere with parenting.

Studies based on hospitals, child-protection services and the courts introduce important points for consideration. The literature reports that engaging and retaining clients who are drug-users in treatment is a critical problem (Choi and Ryan, 2006). Besinger et al (1999) report that, of 639 children removed from their homes, evidence of parent/caregiver substance use was found in 79% of the cases. However, only 16 per cent of the cases involved caregiver substance misuse that was clinically diagnosed, while in just 33 per cent of the cases did caregiver substance misuse contribute directly to the child's removal from the home. Young and colleagues (1998) reported that less than half of all parents with substance-misuse issues in the child welfare system enter and complete necessary alcohol and drug services. Gregoire and Schultz (2001) found that few parents complete assessment or treatment. Mothers misusing drugs and who are not engaged in treatment may be especially vulnerable to being separated from their children.

2.2.4 Child maltreatment, neglect and abuse

Definitions

Child maltreatment, sometimes referred to as child neglect/child abuse, includes all forms of physical and emotional ill-treatment, sexual abuse, neglect and exploitation that results in actual or potential harm to the child's health, development or dignity (WHO, 2006; Krug et al, 2006).

Child neglect is the most frequently reported form of child abuse and the most lethal. It includes both isolated incidents as well as a pattern of failure over time on the part of a parent or other family member to provide for the development and wellbeing of the child. Child neglect is the failure to provide for the child's basic needs such as shelter, safety, supervision and nutritional needs. It may include abandonment. Child neglect may be physical, educational or emotional neglect. Major types of abuse are: physical abuse, emotional abuse and sexual abuse.

Parental substance misuse and child maltreatment

Compared to people without substance-use disorders, substance-misusing mothers are more likely to have been referred previously to child-protective service agencies, to be rated by court investigators as presenting a high risk to their children, to reject court-ordered services, and to lose custody of their children (Johnson & Leff, 1999; Kumpfer, 1987; Wilens et al, 1995; Marcenko et al, 2000) or have them permanently removed (Kelleher et al, 1994). Little is known of the mechanisms by which neglect and maltreatment may take place, especially in substance-misusing mothers.

A recent review article concluded that neglect is more of a serious problem than abuse (Magura and Laudet, 1998). Data from the (US) National Institute of Mental Health (NIMH) Epidemiologic Catchment Area study (Egami et al, 1996)

concluded that, after controlling for socio-demographic and psychiatric variables, illicit substance disorders were related to neglect but not to abuse in parenting.

However, while there is no clearly determined causal relationship, drug and/or alcohol problems are frequently present where there is domestic abuse. In Ireland the quality of evidence is strongest for alcohol consumption and shows that alcohol is frequently a trigger for abuse in the family: Watson and Parsons (2005) show that in approximately one third of the cases of domestic abuse recorded in Ireland, abuse was associated with the consumption of alcohol. In one quarter of cases alcohol consumption was always involved. This research also found that abuse that occurs in the context of alcohol use can be more likely to lead to injury, so that its role in triggering domestic abuse in Ireland needs to be taken seriously.

In studies of men in treatment for their substance misuse, around 50 per cent admitted perpetrating domestic abuse within the previous six to 12 months (Schumacher et al, 2003). US studies investigating domestic violence among women in treatment for substance use report prevalence rates of domestic violence ranging from 41 to 80 percent. A study of nearly 300 social-service cases in four London boroughs, involving 120 children, found that a third of the cases involved parental substance misuse, with alcohol misuse present in two-thirds of these cases (Forester and Harwin, 2006). Violence was present in 55 families; in two-thirds of those families, substance misuse was also present. Another study of just over 350 cases from six local authorities in England (Cleaver et al, 2007) found that the initial reason for referral was parental violence in 60 per cent of cases, parental substance misuse in half of cases and both problems together in a fifth of cases.

Recent inspections of child-protection services in Northern Ireland demonstrate the intimate connection between these problems. Devaney (2008) analysed social-work case files of children named in child-protection register reports between 1997 and 2003. The aim of the study was to identify the characteristics and careers of a group of children whose situations were defined as chronic. Devaney found that substance use was the primary reason for child-protection registration, and domestic violence the second. When the cases of domestic violence were studied more closely, Devaney (2008) found that substance misuse by at least one adult member of the family was the main factor for registration.

When the problems of substance misuse and domestic abuse co-exist, the effect on all aspects of children's lives is considered to be far more serious (e.g. Cleaver et al, 2007). Research suggests that, where both of these problems exist, it is often the disruptive behaviour and associated worry for the child that causes most upset (Nicholas and Rasmussen, 2006; Ritter et al, 2002; Velleman and Orford, 1999). There are additional risks for children if they live with both of these problems simultaneously (Mullender et al, 2002; Templeton et al, 2006; Velleman and Orford, 1999). They are at a higher risk of a range of negative outcomes in all areas of health, safety, and emotional and social development (Cleaver et al, 2007; Ritter et al, 2002).

Substance-misusing mothers are considered to be at a special risk for child abuse and neglect (Gomberg, 1993). Figures are not available for Ireland, but in the US it is suggested that of the families in the child welfare system involving substance misuse (Young et al, 1998; Famularo et al, 1992), the majority of these relate to mothers' neglect and abuse (Curtis & McCullough, 1993; Semidei et al, 2001). This finding is complicated: on the one hand it may reflect the fact that mothers are much more likely than fathers to have the care of their children. On the other, women are more likely than men to use alcohol and other drugs to self-medicate to cope with trauma (Bennett 1997; Stuart et al 2002; Lipsky et al, 2005).

Parental substance misuse was considered to be a cause for concern in 52 per cent of an inner-city sample of families on the British Child Protection Register (Forester, 2000). Child maltreatment cases involving parental substance abuse often

result in recurring maltreatment allegations, longer stays in foster care and reduced likelihood of family reunification (Ryan et al, 2006). Grella and colleagues (2009) examined US data from 1,150 mothers who participated in a treatment outcome study in conjunction with data obtained on these mothers and their children from child welfare administrative data. Over 40 per cent of the children had been removed for reasons of emotional abuse or neglect, about one-third (33%) for caretaker absence or incapacity, 14 per cent for severe neglect and 11 per cent for exploitation, sexual and/or physical abuse. Most of the children (58%) were placed into the care of other family members. One-quarter went into a group home, and 17 per cent went into a (non-kin) foster home. Several aspects of mothers' treatment participation were related to reunification outcomes. Like other studies, this also found that treatment retention increased the likelihood of reunification.[10] An important finding from the study is that reunification was enhanced among mothers who were treated in programmes that provided a broader range of employment and educational services, as well as family/child services. Child-welfare-involved mothers in drug treatment are typically younger and have more children than other mothers in treatment but are less likely to have employable skills or prior work history (Grella et al, 2006).

The broader literature on child maltreatment, in which cases of abuse or neglect have been examined retrospectively for potential risk factors, strongly links parental substance misuse to child maltreatment. The (US) National Institute of Mental Health (NIMH) Epidemiologic Catchment Area (ECA) surveys explored the relationship between parental substance misuse, harsh parental discipline (Holmes and Robins, 1987) and physical abuse using cross-sectional (Egami et al, 1996; Kelleher et al, 1994) and prospective research designs (Chaffin et al, 1996). Among a total sample of 9,841 adults, 1.5 per cent reported abusing children, 33 per cent had a lifetime history of alcohol abuse or dependency, and 10 per cent had a lifetime history of illicit drug use (Egami et al, 1996). Alcohol dependence significantly increased the risk of physical abuse perpetration. Using a case-control design for these surveys, 376 adults who reported physically abusing or neglecting a child were matched with control subjects drawn from the same community-based survey (Kelleher et al, 1994). A higher lifetime prevalence of substance-use disorders was found among respondents who reported physically abusive behaviour, compared to their non-abusive counterparts, after controlling for confounding factors (depressive disorder, antisocial personality disorder, household size and social support). Kelleher and colleagues (1994) also found that adults with a history of substance disorders were almost three times more likely to report committing child physical abuse and more than four times more likely to report committing neglect, compared to the control subjects.

In the second wave of the study, parents who did not indicate physical abuse or neglect of their children were followed for one year prospectively to determine risk factors associated with onset of physical abuse or neglect (Chaffin et al, 1996). Social and demographic variables such as socio-economic status, age, education, and availability of social support were limited predictors of maltreatment, while substance-abuse disorders were strongly associated with physical abuse. The authors concluded that, of the psychiatric disorders studied, "... substance abuse disorders appear to be the most common and among the most powerfully associated with maltreatment ... approximately tripling the risk of maltreatment when other factors were controlled" (p. 200).

A longitudinal nested case-control study of 14,138 children followed for eight years identified maternal and paternal risk factors distinguishing those children who had been identified for possible child maltreatment compared to

10 The authors caution that this finding may reflect a self-selection effect, in that mothers who comply more with their treatment plan, as seen in their longer retention in treatment, are more likely to reunify with their children because of other attributions that predict retention, rather than reunification resulting from a treatment affect that can be attributable to longer retention or treatment completion.

non-identified children. Paternal and maternal substance abuse was significantly related to different forms of child maltreatment – physical abuse, sexual abuse, emotional abuse and neglect (Sidebotham and Golding, 2001) but these effects disappeared when background factors were controlled for.

High rates of child maltreatment have been reported in families in which either or both parents misuse substances. For example, Ammerman et al (1999) found that 41 per cent of mothers and 25 per cent of fathers with a substance-use disorder scored in the clinical range on the Child Abuse Potential Inventory (Milner, 1986), an instrument sensitive to actual or potential physical abuse of children. Even when there is no current maltreatment, the presence of substance-use disorder in a parent is a very strong predictor of subsequent new cases of child abuse and neglect 12 months later (Chafffin et al, 1996).

A study by Walsh et al (2003) in Canada examined the relationships between reported exposure to child abuse and a history of parental substance misuse. Based on a community sample of over 8,000 respondents, it was found that rates of physical and sexual abuse were significantly higher, with a more than twofold increased risk among those reporting parental substance-misuse histories. The authors note that this rate is likely to be an underestimate since the survey was limited to those living in private homes only and excluded homeless persons, and people living in institutions. There is some evidence that these groups are more vulnerable to child abuse (Goodman et al, 2001; Ryan et al, 2000; Wong and Piliavin, 2001). This study also showed that successively increasing rates of abuse were found for those respondents who reported that their fathers, mothers or both parents had substance-abuse problems. This risk was significantly elevated where both parents, rather than the father only, had substance-abuse problems.

Summary and conclusions

Prenatal and postnatal drug misuse by the mother are associated with special health and care needs of drug-exposed newborns, with complications for the mother, the child's development and with communication deficits in the mother-infant dyad (Beckwith et al, 1999; Howard, 1994; Kelley, 1992). Because the biological impact associated with prenatal substance exposure can be confounded with environmental influences for example associated with maternal drinking during childhood, it can be difficult to distinguish a particular role for foetal exposure. O'Connor and Paley (2006) however found that whereas prenatal alcohol exposure was associated with increased symptoms of depression in the child, these symptoms were not related to current maternal drinking pattern (or depression), supporting the hypothesis that foetal exposure plays a critical role in increasing vulnerability to child depression.

The evidence supports the idea that, in high-risk circumstances, coercive transactions between parents and children can begin in early childhood, exacerbating both child problem behaviour and poor parenting (Scaramella and Leve, 2004; Kim and Brody, 2005). The relationship between psycho-social risk and parenting attitudes illustrates the variability that occurs among drug-misusing women and the importance of helping women to reduce their risk. The presence of a stable adult figure is found to be valuable in terms of increasing children's resilience (Eiden et al, 2004).

In this regard, Tarrant and colleagues (2011), reporting on a study of nearly 500 pregnant women in Dublin, found that over 35 per cent said they consumed alcohol. The authors assert that educational efforts are necessary to convince women of Irish nationality, in particular, of the adverse effects of alcohol consumption on foetal outcome. It is also important to educate parents and those who work with children about FASD and the interventions available to help the development of children with FASD.

The quality of the care-giving environment can be seriously undermined by the complications of parental substance misuse[11]. Substance misuse can interfere with parenting by affecting the parent's judgment and ability to provide care and supervision. It appears that parenting skills, child-rearing practice and family life are likely to deteriorate when parents misuse drugs. Drug-misusing parents, particularly mothers, are more likely to be socially isolated, spend less time with their children and discipline their children inconsistently.

Parental substance misuse brings disruption to family life. In general the families function poorly, perceive their environment to be less cohesive, and have lower levels of expression of warmth and caring, and higher levels of unresolved conflict and arguing (Burke et al, 2006). Parental substance misuse, in particular parental alcohol misuse[12] increases aggression in families. Increased marital conflict can contribute to physical abuse of partner and children.

Child neglect involving parental substance misuse often results in recurring maltreatment allegations and longer stays in foster care, while the rate of family reunification is substantially lower (McDonnell and McGivern, n.d.; Ryan et al, 2006). Specific effects of neglect include abandonment, inconsistency, harsh and erratic discipline and low frustration tolerance. Erratic life histories can mean that parents lack the foundation for effective parenting (McMahon and Luthar, 1998). Disruption and upset is also much more likely to occur due to homelessness. This has detrimental consequences for stability and continuity in the child's life, particularly with regard to their schooling and relationships with peers. Given the increased risk of drug and alcohol misuse being concurrent with family conflict/ violence, family life and family cohesion become strained. These problems affect relationships between the child and all other members in their family, both adults and children.

11 For evidence in Ireland see Hogan (1997)

12 This may be a reflection of the fact that there are more studies, and better data quality regarding the impact of parental alcohol misuse.

The self-regulation problems of drug-exposed children can interact with the substance-dependent mother's own difficulties with self-regulation and deficits in being able to correctly read infant cues and signals (Kaplan-Sanoff and Rice, 1992). In some cases the parent never had a firm foundation for parenting; in other cases there was a foundation or period of adequate parenting that was interrupted by drug misuse. These parenting deficits have been said to lead to *"... decreased emotional responsiveness, availability, acceptance and sensitivity"* (Harden, 1998, p. 33) which can be especially devastating for infants and young children whose need for close supervision and continuing care is very great.

The risk of maltreatment and neglect appears to be higher among women although this may reflect the fact that mothers are much more likely than fathers to have the care of their children. Some of the risk factors associated with the heightened risk of abuse appear to precede the mother's substance use (e.g. history of family abuse). Others factors are events that have unfolded in the mother's adult life, such as interpersonal violence, imprisonment, poor health. But many if not most women who misuse drugs or alcohol want to be good parents (McMahon and Luthar, 1998). Where father substance use is the problem, the mother carries the burden of protecting the child and the worry of losing custody. Child wellbeing figures prominently in their motivation to stop using drugs or in maintaining recovery (Magura and Laudet, 1996). High-control parenting may also reflect in part the parent's desire to protect their child in a high-risk neighbourhood (see Hogan, 2003 for a discussion of this in Ireland) and in part reflects the norms of parenting of the social context in which the family belongs. Little is known about the responses of fathers where the mother's substance use is problematic.

Finally, as mentioned earlier, there has been little work documenting the impact of father's parenting on child outcomes (for a review, see Amato and Gilbreth, 1999). The limited evidence suggests that unmarried non-resident biological

fathers are at higher risk than almost any other group of men for low paternal involvement with children (Marsiglio et al, 2000), but it appears that the quality of the relationship they have with the child's mother is a key mediating factor. There are indications that, when substance-dependent fathers live with their children, their own health and wellbeing benefit. They are more likely to be in treatment (Pilowsky et al, 2001) and live in better conditions when they live with their children (Meier, 2004), but little is known about the protective processes that might be involved, and, in Ireland, whether or how well these are transmitted to the child.

The following section outlines the findings of a review of the national and international literature regarding what is known about the outcomes for children who have parents who misuse alcohol and drugs.

3. Child outcomes

It is important to note that the majority of children of substance misusers are not considered to be maladaptive (Jacob and Leonard, 1986). Additionally, the link between parental substance misuse and child outcomes involves different aetiological components – for example, whether the risk is specific to the parent substance misuse (e.g. their drug and alcohol problem) or whether it can be attributed to such co-occurring factors as parent psychopathology or environmental stress (Chassin et al, 1991). The organisation of the literature mirrors two distinct types of approaches or paradigms: the first relates to the negative effects or deficits model, which focuses on the implications of parental substance misuse for the child's mental health and psychopathological development. The second paradigm focuses on positive development/adjustment and to understand the development of resilience in the face of adverse circumstances such as parental substance misuse. As will be seen in the review, in many respects the differences between these branches are not always clear-cut. In an attempt to discuss the various outcomes separately, the material has been set out in separate sub-sections as far as possible. However, in practice, the empirical studies reported in these sub-sections rarely deal with one type of outcome. As the author has sought to avoid excluding valuable information, there is inevitably a degree of overlap between the sections.

3.1 Psycho-social outcomes

One consistent pattern across studies is that children of substance misusers are at risk in terms of psychopathology. Child developmental studies indicate that experiences in early childhood have unique influences on later developmental psycho-social adjustment and outcomes (O'Connor and Rutter, 2000; Collins et al, 2000; Kovan et al, 2009). These may be realised over time through a variety of implicated mechanisms such as a heightened genetic liability to early conduct problems, as well as cognitive deficits and high-risk environments.

Among the most negative consequences of alcohol and drug dependency are the psycho-social effects of parent substance misuse on their children. In comparison with children raised by parents who do not misuse substances, children who live with an alcoholic or drug-misusing parent exhibit elevated psychopathology symptoms (Wilens et al, 1993; Johnson and Leff, 1999). Children who live with an alcoholic parent exhibit elevated symptoms for internalising (e.g. sadness and worrying) and externalizing (e.g. aggression) syndromes. Research on children who live with parents who primarily misuse drugs rather than alcohol is far less developed.

Reporting on a longitudinal cohort study of adults with a history of substance use and their children (dyads), Kandel (1990) found that, by age 12, behavioural problems (control and obedience) among children of substance-misusing parents were common. Children were also more likely to be aggressive, withdrawn and not well adjusted when the level of mothers' substance use was high. Similar comparisons show that children of drug misusers are more likely to experience socio-economic disadvantage, to report higher stress levels and to experience more social isolation than non-misusing comparison groups (Kumpfer and DeMarsh, 1986; Sowder and Burt, 1980).

Wilens and colleagues (1995) assessed the emotional and behavioural development of children of opioid-dependent parents. Results indicated that children of opioid-dependent parents had significantly higher scores on both internalising and externalising behaviours when compared with non-dependent controls, but not when compared to co-morbid ADHD children.

In a subsequent study, Wilens and colleagues (2002) examined outcomes with respect to three groups: (i) high-risk parents with opioid dependence, (ii) parents with alcohol dependence and (iii) parents with no alcohol or drug-use disorder (controls). A total of 96 families and their respective offspring (167 parents and 183 children aged six to 18) participated in the study. There were significant differences among the groups of

children in terms of family intactness and socio-economic status. Although 88 per cent of the control children came from intact families, only 32 per cent of the alcohol children and 18 per cent of the opioid children did so. Significantly lower socio-economic status ratings were found in the opioid and alcohol groups compared to the control group. The results show that 59 per cent of children of opioid-dependent parents had at least one major psychopathological condition compared to 41 per cent of the alcohol group and 28 per cent of the control. In comparison to control children, the opioid and alcohol children had significantly higher rates for any psychopathology. For the opioid, alcohol and comparison groups, the rates for any psychopathology were respectively (59%, 41%, 28%), behavioural/ attentional disorders (32%, 23%, 11%), mood disorders (e.g. major depression) (27%, 23% 9%), and anxiety disorders (45%, 32%, 15%). Controlling for SES, family intactness and correlations among related siblings, substance-user disorders were found to be significantly greater among alcohol children when compared to controls (5%, 18%, and 1%). Additionally, opioid children exhibited higher rates of Oppositional Defiant Disorder and Attention Deficit Hyperactivity Disorder compared to controls. Disruptive, depressive and anxiety disorders were overrepresented in the opioid group, and depressive disorders and substance-use disorders were overrepresented in the alcohol group.

Fals-Stewart et al (2004) examined lifetime psychiatric disorders and current emotional and behavioural problems of children aged eight to 12 living with substance-misusing fathers, compared to children living in demographically matched homes with alcohol-misusing or non-substance-misusing fathers. The results show that children from homes where fathers had misused drugs (cocaine and opiates) exhibited significantly higher levels of both depression and anxiety than children from alcohol-misusing and non-substance-misusing families. Children who lived with substance-misusing fathers were more likely to have a lifetime psychiatric diagnosis (53% versus 25% in alcohol-misusing homes and 10% in non-substance-misusing homes) when compared to children with no parental substance misuse. In comparison with alcohol-misusing and non-substance-misusing families, children living with fathers who misused illicit drugs reported a higher frequency of physical violence and had witnessed more marital conflict.

Clark and colleagues (2007) also found that behaviour and anxiety disorders were more prevalent among pre-adolescent children of parents with substance-use disorders than among controls. The authors report on the relationship between the psychiatric problems of boys who have fathers with and without substance-use disorders. They report that parental childhood psychiatric disorders were more strongly predictive of children's psychiatric disorders than parental adult psychiatric disorders, including parental substance misuse.

3.1.1 Interaction between parental substance misuse and socio-economic environment

Two studies not covered in earlier reviews undertaken by Ornoy and colleagues (1996) examined the role of in utero exposure to heroin and the role of the home environment in the long-term development of children born to heroin-dependent parents (83 children born to heroin-dependent mothers and 76 born to heroin-dependent fathers) and to matched controls (50 children with environmental deprivation, 50 normal children from families of moderate or high socio-economic background, without environmental deprivation, and 80 healthy children from kindergartens). The children were examined at 5-6 years of age. The study sought to isolate the prenatal effects of heroin on neurobehavioral development from the postnatal impact on environmental deprivation, which is so common in families of those who are drug-dependent. Lower birth-weight, gestation period and height were recorded in the group of children born to mothers and fathers who were heroin-dependent when compared to all other groups. With regard to cognitive development, children

born to heroin-dependent parents performed more poorly than normal controls.

In terms of psychological scores, the group of children born to heroin-dependent mothers had lower test scores when compared to normal controls. The children born to heroin-dependent fathers performed less well than either of the two control groups. Exposed children raised at home had lower psychological test scores than adopted children. The lowest psychological score of all was among the children who suffered from severe environmental deprivation.

Behavioural disorders were significantly higher among children born to heroin-dependent mothers (53%) and heroin-dependent fathers (42%) when compared to the control groups (even those with severe environmental deprivation – 37%). The adopted children born to heroin-dependent mothers had a much lower incidence of behavioural disorders when compared to those of the same group raised at home (20% vs 74%). Ornoy and colleagues concluded from this study that heroin-dependent children, if born without significant neurological damage, seem to have a normal developmental potential in spite of the fact that they have been exposed in-utero to heroin. They also conclude that the developmental outcome of children born to heroin-dependent mothers seems to be influenced by the environment, as those raised in adopting families exhibited normal development.

However, in later work Ornoy and colleagues (2010) again examined the effect of in utero exposure to heroin, in particular to investigate whether early adoption would alleviate the effects on the cognitive, social and emotional functioning of adolescents. This study was similar in design, and included 191 adolescents (12-16 years), who had or had not been exposed *in utero* to drugs and who differed in socio-economic status and in adoptive status, and their mothers. This study showed no differences between the groups in terms of growth and neurological outcomes. Exposed children from low SES background and who remained with their families performed similarly to non-exposed, low SES adolescents. However, exposed adolescents who were adopted did not perform better than those who remained in their low-SES environments. In contrast to previous studies using similar measures that found no effect, this study found that adolescents who had been exposed prenatally to heroin appeared not to be able to take full advantage of the high-SES environment into which they were adopted in order to improve their cognitive functioning.

3.1.2 Positive adjustment

Thus far, the review shows that there is a heightened risk for maladjustment among children of drug and alcohol-dependent parents. However, not all children of this group develop these tendencies. The heterogeneous outcomes observed among children of substance-misusing parents stem from the children's personal attributes and their degree of exposure to the kinds of positive experiences that constitute protective or resilience factors. As an alternative to the long-held deficit models, one perspective emphasises a strength-based conception of development in youth and sees attributes such as social competence, self-regulation and cognitive/ academic as key competences that contribute to the young person thriving during adolescence (Lewin-Bizan et al, 2010). From this perspective, thriving in adolescence is not seen as the absence of problems; instead it is seen as the development in various domains that promotes thriving.

The literature identifies two domains – social competence and self-regulation[13] – as key antecedents to positive adjustment (e.g. youth achievement, including academic skills, self-esteem and positive peer relations). This is mitigated by the child's capacity on the one side

13 A related concept is the propensity for behavioural under-control (Sher, 1991) which is evident in the form of a disinhibited temperament and externalising symptoms in children of alcoholics as young as 3-5 years of age (Puttler et al, 2006). In turn, early engagement in externalising behaviours that are continued into adolescence is a significant predictor of later alcohol disorders (Zucker, 2006). Such greater externalising symptoms increase the risk of affiliating with substance-using peers and thus accumulating additional models of use, access to alcohol and encouragement of drinking.

for self-discipline, planning and goal-setting and, on the other, by a capacity to minimise impulsivity and aggression.

The developmental processes associated with the child's social competence and self-regulation occur in schools and among peers as well as in the family. Early influences may be particularly important because they predict later factors which in turn affect late adolescent or adult outcomes (Haller et al, 2010). Recent conceptual and empirical work suggests that these domains of competences cascade across multiple domains of functioning, amplifying the effect of one another over time (Schulenberg and Maslowsky, 2009). Hence change in any one of these domains of functioning may trigger a progression of consequences that is thought to have extensive effects in adolescence and adulthood (Bonds McClain et al, 2010). In fact, multiple streams of evidence suggest that various domains of the child's development influence each other both concurrently and longitudinally (Haller, 2010).

3.1.2.1 Social competence and self-regulation

Social competence encompasses many related interpersonal skills. In children it manifests in emotional self-regulation, social cognition, positive communication, and pro-social relations with family members, peers and teachers (Bornstein et al, 2010). It refers also to the child's ability to make friends and display socially competent behaviours – for example, in the school setting – and is predictive of success in school at later ages (Eiden et al, 2009). Social competence may affect the emergence and development of a variety of psycho-social and emotional disorders insofar as it regulates both self-control and achievement across various domains. Children who lack skills associated with social competence may have self-expression difficulties and problems understanding others. Cross-sectional and longitudinal connections between social competence and internalising behaviours from childhood to adolescence abound in the literature (for a short review of this work, see Bornstein et al, 2010). These all point to short-term effects as well as effects over longer periods. Prior successes or failures in social competence appear to have spillover effects with respect to current and subsequent internalizing symptoms.

Research aiming to identify the contextual factors that promote positive development among young people finds that earlier resources in the child's life, such as positive parenting, is a major contextual asset predicting various aspects of subsequent positive youth development and self-regulation (Lewin-Bizan, 2010). In relation to parental substance misuse, the findings point to deficits in social competence associated with parent alcoholism and a risk that is specific to boys (Fitzgerald et al, 2000; Puttler et al, 1998). A more recent study involving a longitudinal study (Hussong et al, 2005a) examined the developmental trajectories of children (6-15 yrs) of alcoholic and non-alcoholic parents (controls). This study reports that the highest risk of lower social skills is among girls with paternal rather than maternal alcoholism; with two alcoholic parents rather than one, and with 'active' as opposed to 'recovered' alcoholic parents. However, Hussong and colleagues (2010), with a similar design, reported a dominance of distal over proximal and time-varying effects of parent alcoholism on children's externalising symptoms. These effects reflect, among others, the long-term deleterious impact of high genetic vulnerability coupled with a stressful, chaotic environment. Hussong and colleagues (2005) suggest that social competence may be undermined by an active alcoholic parent due to higher levels of stress and chaos created in the home. There is support for this in other studies which report that children of alcoholic parents are generally more vulnerable to encountering more life stress and to suffering more under life stress than children of non-alcoholic parents[14] (Hussong and colleagues, 2005b).

Empirical evidence shows that the association between parenting and social competence is in

14 Previous studies have shown that greater life stress partly accounts for the increased risk of psychopathology (Chassin et al, 1996, 1997; Sher et al, 1997).

fact mediated by the child's ability in self-control or self-regulation (Lengua et al, 2007). Self-regulation permits the child to plan, set goals and adjust which in turn have relevance for a spectrum of activities that can elevate or dampen risk. With high self-regulation the child is more likely to process parental directives, benefit from parental guidance, internalise parental rules and inhibit inappropriate behaviour (i.e. develop effortful control and internalisation). The attainment of these self-regulatory and social skills sets the stage for successful adaptation – for example, during the transition to and progress made in school (Zimmerman, 1980) and in peer settings (Calkins and Fox, 2002).

Eiden and colleagues (2009) examined whether parental alcohol-use disorder negatively affects the child's self-regulation and/or social competence. The study also hypothesised that these relationships would be mediated by parental warmth/sensitivity. Based on a sample of 227 families with 12-month-old infants (111 girls and 116 boys), the families had either one parent with alcohol problems (n=130) or no alcohol problems (n=97). First, the study confirmed in these samples that self-regulation is predictive of social competence. Thus, children who learn to regulate or manage their own behaviour in response to environmental demands by preschool age are also more adept at peer interactions and social behaviour. Secondly, maternal warmth/sensitivity plays a critical role in predicting children's self-regulation. Further, the results confirm that the link between parental alcoholism and social competence is mediated by parenting and self-regulation. This association is supportive of previous literature indicating that aspects of self-regulation such as effortful control are predictive of social competence (Spinrad et ,al 2007) and other aspects of social functioning such as empathy (Eisenberg et al, 2007).

It is noteworthy that social competence and self-regulation are not independent but rather inter-dependent influences on behaviour. Self-regulation influences one's ability to participate in groups and to choose (non-deviant) friendships (e.g. resisting situations such as peer pressure to drink when negative drinking consequences are likely) (Parker and Asher, 1987). The achievement of these salient social developmental tasks constitutes key criteria by which children are judged in society. In short, the child's ability to set goals, and to learn as well as maintain friendships and foster popularity are skills that presage successful adaptation in a variety of family and peer settings, with consequences also for academic/educational outcomes (Waters and Sroufe, 1983).

3.1.2.2 Cognitive/academic competences

Children's social skills relate to their cognitive skills (Bornstein et al, 1996) and children with behavioural problems have been consistently shown to suffer deficits in cognitive skills. An outcome closely associated with poor self-regulation among children with parental substance misuse is a lag in academic achievement. Bauman and Levine (1986) studied methadone-maintained mothers and their children who experienced withdrawal from drugs; children were more likely to exhibit development delays such as lower IQ scores, height and birth-weight compared to children of methadone-maintained mothers who were not born drug-dependent.

Herjanic et al (1979) found slow cognitive development in 44 per cent of 32 children aged six to seven born to heroin-dependent fathers. Drug-exposed children living in homes with ongoing maternal cocaine and/or heroin use had lower mental development scores than drug-exposed children living in homes with no ongoing maternal cocaine and/or heroin use (Griffith et al, 1994; Schuler et al, 2003).

Studies suggest that pre-school age children of parents who misuse alcohol do not necessarily display cognitive deficits (Puttler et al 1998). However school-age children experience academic difficulties, often repeating grades, failing to thrive in high school (Sher et al, 1991). A four-year longitudinal study (Sher et al, 1991) of children of alcoholics and non-alcoholic families showed that

the former had lower verbal and problem-solving abilities as well as poorer academic achievement. No risk effects were found for cognitive functioning (e.g. abstract reasoning, perceptual motor ability, learning and memory, and attention and concentration).

Research examining children born to heroin-dependent fathers has shown that this group is at high risk for early school behavioural and learning problems (Sowder and Burt, 1980). Similar results have been reported by Stranger et al (1999) who compared children of cocaine- and opiate-dependent parents with a demographically matched sample of people who were referred for mental-health services and children who were not referred. This study found that referred children scored lower on all competence scales including social and academic competences.

Wilens et al (2002) also found significant differences in cognitive functioning among the groups. The mean scores among opioid and alcohol children were lower than those of controls in relation to vocabulary scores (10.3, 9.7, 13.0, respectively), oral arithmetic (9.7, 11.1 and 12.7), arithmetic (91, 98.6, 112.7) and reading (100.3, 98.4, 110.7). Higher levels of dysfunction in relation to school were observed among the opioid and alcohol children compared to controls. Most notably, the opioid and alcohol children were more likely to have repeated a grade, been in special classes and received extra help. Finally, there was some evidence of more impaired social functioning among the children of opioid-dependent parents, and that the alcohol and opioid children functioned significantly worse than controls. The number of affected parents with substance-use disorders did not influence the magnitude of social or family functioning in the substance-use groups.

Studies in this area have demonstrated that children of parents with dual diagnosis, particularly alcohol misuse and anti-social personality disorder, display the poorest intellectual functioning and have the highest risk for academic difficulties when compared to control groups (Poon et al, 2000).

King and Chassin (2004) tested the idea that adolescent behavioural under-control increases the odds of drug misuse and developing a drug-dependence diagnosis in emerging adulthood. Poor parenting and behavioural under-control interact to increase children's school failure, interpersonal difficulty, and emotional distress, leading to affiliation with deviant peers, which in turn leads to substance use and substance-use disorders (Sher, 1991; King and Chasin, 2004). It is noteworthy that, at low levels, the effect of behavioural under-control can be buffered by support from parents. However, as under-control increased, the protective effects of parental support decreased; these protective effects were absent at the highest levels of behavioural under-control. This is what Luthar et al (2000) termed protective but reactive, in that a buffer provides advantages that decrease in the presence of high levels of the risk factor.

Parental substance misuse is thought to increase the risk for substance-use disorders in emerging adulthood through an interaction between parenting and certain aspects of the child's personality, in particular their ability for self-regulation (Sher et al, 1991). Additionally, children who are doing poorly at school may increase their affiliation with substance-using peers (Oetting and Donnermeyer, 1998) and these peer affiliations, in turn, may lead to higher levels of substance use and lower educational attainment (Fergusson and Horwood, 1997).

The following sections discuss the evidence regarding substance use among children whose parents misuse substances.

3.2 Substance use among children

The risk for substance-use disorders is transmissible between generations via both genetic and environmental mechanisms. Current epidemiological patterns of alcohol and drug use among children whose parents misuse substances shows that parental substance misuse raises the risk of drug and alcohol use during adolescence and is a risk factor for adult drug and alcohol

misuse (Chassin et al, 1991; Hawkins et al, 1992). Moreover, the evidence is that children of parents who misuse drugs and alcohol and have mental health problems are more likely themselves to develop substance use problems in adolescence. Ohannessian and colleagues argue that their evidence suggests that substance use outcomes for children with parents with alcohol dependence alone may not differ that much from adolescents who have parents with no psychopathology in relation to substance use. But adolescents with parents diagnosed with alcohol dependence and psychiatric disorder are at a significantly higher risk of developing substance misuse problems (Ohannessian et al 2004).

At a certain point during adolescence, alcohol and drug use are typically initiated (Johnston et al, 1999) and show systematic age-related trends, with increases in consumption and abuse or dependence peaking in the age period that Arnett (2000) has called "emerging adulthood" (ages 18-25). Bachman et al (1997) found that increasing drinking after leaving school was associated with leaving the parental home and acquiring freedom from adult supervision, whereas declining drinking between ages 22 and 32 was associated with entry into marriage and parenthood.

Because of these age-related trends, substance abuse has been referred to as a developmental disorder (Sher et al, 1999; Tarter and Vanyukov, 1994). Research studies show that children of drug misusers (Kumpfer, 1987; Kumpfer, 1989; Kumpfer et al, 1997; Tarter and Mezzich, 1992) and of alcoholics (Schuckit, 1992; Zucker and Fitzgerald, 1996; Chassin et al, 1991) are more likely to exhibit early-onset alcohol misuse (Chassin et al, 2000) and illicit drug misuse (Clark et al, 1999; 2005; Chassin et al, 1991; Puttler et al, 1998; Sher, 1991) than their peers. Girls who experience early onset of drinking show a greater risk for development of an alcohol disorder (Grant and Dawson, 1997; Hussong et al, 2008).

Age of exposure to parental substance use appears to be an important factor in determining the impact on offspring: It is well known that adolescence is a critical developmental period for the emergence of substance use disorders (Kandel et al 1984). Biederman and colleagues (2000) examined the specificity risk for alcohol or drug abuse or dependence in offspring exposed to particular subtypes of parental substance use disorders and showed that although exposure in childhood conferred almost a twofold risk[15], exposure during adolescence conferred a threefold risk that was highly significant clinically and statistically.

Chassin and colleagues (2004) examined the trajectories of substance use and dependence from adolescence to adulthood among 454 adolescents ranging in age from 11 to 16, 264 of whom had at least one alcoholic biological parent, and 208 demographically matched adolescents with no alcoholic parent (control). This study identified three dependence groups involving alcohol only (the most common), illegal drugs only, or co-morbid disorders. Most participants (61%) did not develop dependence over the course of the study. In terms of consumption, the group of most clinical significance was the heavy drinking/heavy drug-use group, who showed escalating trajectories of heavy use of alcohol and drugs from adolescence to emerging adulthood. Members of this group were most likely to be children of alcoholics and had the densest family histories of alcoholism, supporting previous research that links family history to trajectories of heavy use and clinical disorders (Chassin, 2002). The levels of use in this group went beyond those that are developmentally normative, either by standards determined by the sample or by national epidemiological data. This group was most likely to develop a substance-use disorder; almost 80 per cent of them were diagnosed as dependent on alcohol or illegal drugs or both. Moreover, this group also had the highest risk for disorders other than alcohol dependence (i.e. they had higher rates of drug-use, co-morbidity or persistent dependence). They also had the highest level of impulsivity, lowest agreeableness and most openness.

15 Not statistically significant. It is unclear whether this result could be limited by insufficient statistical power.

The term *telescoping* has generally been applied to an accelerated trajectory from substance-use onset to treatment-seeking (Hussong et al, 2008). Women have a shorter history of dependence than alcoholic men; nonetheless, alcoholic women and men showed equivalent brain atrophy in comparison with non-alcoholic women and men (Mann et al, 2005). Epidemiological patterns of alcohol use among children of alcoholics show higher rates and faster acceleration of alcohol use, starting in adolescence and continuing into adulthood (Chassin et al, 1996).

Analyses based on a community sample also show children of alcoholics, compared with their peers, have a telescoped pattern of substance use, escalating more quickly from initiation (in adolescence) to disorder than their peers who are not children of alcoholics (Hussong et al, 2008). Hussong et al (2008) found that externalising symptoms and early drinking patterns failed to explain the children's risk for telescoped drinking onset-to-disorder trajectories. This appears to be independent of when or how drinking is initiated. The relationship did not differ by gender or as a function of whether alcoholic parents were actively symptomatic. Because alcohol can so frequently be a gateway event to other drug use, this study examined whether children of alcoholics accelerated more quickly from drinking onset to drug disorder as compared with children of non-alcoholics. The risk was similar in magnitude to that for alcohol disorders. Similar to the results for alcohol disorders, this result was maintained once controlled for age, gender, ethnicity and parental education.

Children, whose alcoholic parents showed co-morbidity for either depression or anti-social personality disorder, evidenced a stronger telescoping effect than those whose alcoholic parents did not show co-morbidity. These telescoping effects may result from a greater propensity to experience consequences[16] and dependency symptoms at the same level of drinking as children of non-alcoholics. That the children of alcoholics show a telescoping for drug disorders as well may indicate that telescoping by children of alcoholics may also extend beyond the specific outcome of alcohol disorders to the broader class of disinhibitory disorders (Hussong et al, 2008).

Parental substance misuse is thought to heighten the risk for substance-use disorders in emerging adulthood through certain aspects of parenting. Examining the transition from adolescence into adulthood, Bronte-Tinkew and colleagues (2006) analysed parent-child dyad data from a nationally representative survey of young people (The National Longitudinal Survey of Youth) and found that the risk of substance use is significantly lower for adolescents with more positive father-child relationships, net of the effects of other variables including the mother-child relationship. The risk of first substance use is only marginally significant for adolescents whose fathers have an authoritarian parenting style compared to fathers with an authoritative parenting style, and the risk is significantly lower for adolescents with higher levels of father monitoring or awareness (Mayes and Truman, 2002).

Although there is wide support for the relation between adolescent substance use and peer substance use, less is known about their potential knock-on effects into other domains of functioning. While the long-term effects of low-level adolescent alcohol or drug experimentation may be relatively small for most adolescents (Sedler and Block, 1990), there are indications that a cascading chain of problems in many domains may occur. For example, if academic functioning becomes compromised by substance use, it may produce longer-term negative effects. A study by Haller and colleagues

16 For example, a greater responsivity to the psychopharmacological response and/or greater expectancies of enhanced cognitive and motor functioning, of tension reduction, personal motives and power motives are associated with high-risk drinking (McLaughlin et al, 1987)

(2010) examined the prospective and bidirectional relations between a range of developmental domains and tested for cascading effects over time (e.g. the extent to which these different factors influence each other both concurrently and longitudinally). Using a high-risk community sample (n=405), the researchers drew the participants from a larger longitudinal study of familial substance misuse across three generations (Chassin et al, 1991). Haller and colleagues (2010) tested for possible developmental cascades among three domains: substance use, affiliation with substance-use-promoting peers, and academic achievement. The findings indicate that these adolescent risk factors influence adult substance-use disorders both by causing stable within-domain impairment over time and by spilling over into other domains and thus creating broader impairment over time. For drug disorders, adolescent drug use had bidirectional relations with both academic achievement and affiliation with substance-use-promoting peers. The developmental cascades across these domains mediated the influence of parental substance use on adult drug disorders. It is important to note that these findings proved to be robust when controlled for pre-existing and ongoing current relations among the three domains, as well as the effects of several potentially confounding variables, including parental alcoholism, parental education, gender and age.

Haller and colleagues also reported that affiliations with peers who use substances, who provide opportunities for substance use, and encourage attitudes that are positive towards substance use, influence both adolescent and adult substance-use outcomes. Affiliating with substance-using/promoting peers can maintain and/or increase adolescent substance use over time and thus increase the likelihood that some adolescents will experience significant long-term negative consequences of their substance use (i.e. an adult substance-use disorder) rather than simply experiencing an adolescent-limited period of substance-use experimentation.

3.3 Next generation parenting

Problem substance misuse contributes directly to compromise parenting. Increasingly we are gathering evidence for the long-held assumption that developmental experiences with our mothers and fathers influence how we go about producing and parenting our children (Furstenberg et al, 2000; Kost, 2001). Recent prospective, longitudinal investigations show strong support for continuities in parenting behaviours across generations; the correlations are the same regardless of population type and the type of measures used (Conger et al, 2009). Neppl and colleagues (2009) find a direct relationship between first and second-generation harsh parenting (hostile, angry, and coercive) and between first and second-generation positive parenting (communicative, responsive and assertive). These findings show that parents learn specific as well as related childrearing behaviours from their parents and emulate these practices in interactions with their own children. It is noteworthy that the inclusion of controls for socio-economic status does not alter these findings; hence continuity in parenting practices cannot be simply a function of consistency in social context (Bailey et al, 2009; Shaffer et al, 2009; Neppl et al, 2009; Belsky et al, 2009; Kerr et al, 2009).

Neppl and colleagues (2009) show that hostile parenting predicts aggressive behaviour in children which, in turn, is linked to higher levels of hostility later in their interactions with their own children. The study also finds that constructive parenting continues across generations, in large part through its impact on the development of a generally competent child. They find that the first-generation constructive parenting predicts success in interpersonal relations and success in instrumental activities, such as educational attainment and civic participation. In turn, both of these dimensions of competence functioning predict second-generation constructive parenting. Neppl and colleagues confirm that academic achievement and psycho-social competence are key attainment elements in the process of intergenerational continuity.

Final comments

This picture of the intergenerational transmission of parenting practices indicates that children who experience parental substance misuse are at risk on two fronts: as the previous section shows, substance misuse by the parent leads to significant stress to the children's health and wellbeing, and affects their overall ability to parent. This section shows that it also has consequences for their mental health, social skills, academic achievement and substance use. The evidence is not only that these problems cascade in the child's life as he/she develops, but that these consequences may have a direct reach into the quality of parenting they bring to their own children.

In relation to parental substance misuse current research emphasises that it is the accumulation of risk in the child's life that is most influential in determining outcomes. It is essential to identify the factors that have the most direct influence on child outcomes in Ireland. The international literature points to disrupted family functioning and inconsistent and insensitive parenting, as factors that have the most direct influence. Furthermore, the more children are surrounded by substance misuse for example, with several family members, the more they are more likely to have severe outcomes. Adolescence appears to be a critical developmental period for exposure to parental substance misuse. Given this, substance abusing parents need to know they are placing their children at high risk for substance abuse (Biederman et al 2000).

Breaking this cycle will require interventions that reflect the specifics of this problem. Early intervention is vital – in particular, the targeting of key phases of the child's development.

While the impact of parental substance misuse on cognitive development may not be clear in the important first three years of life, the longer the child is exposed to parental substance misuse, the more likely cognitive development and educational outcomes will be adversely affected (Burke, 2006). Furthermore, parental substance misuse is not just bilateral in effect. It is important to recognise that it extends multilaterally, establishing itself as a firm family-level problem. For this reason any efforts to intervene must involve the wider family.

4. Responding to children who live with parental substance misuse

4.1 Introduction

The programmes and interventions delivered by services can be classified in a number of ways, based on who the targets are (e.g. the families/ parents of children, youth at risk, general population of youth), where the intervention is implemented (at home, school, community) and what the content of the intervention is (therapy, parenting education, parenting skills, mutual support).

With regard to working with parents and families, the assumption is that children will benefit directly from improvements in family life and/or parenting skills. One of the key points of possible contact with parents is when they access treatment or rehabilitation services. Treatment success depends on many factors, including an individual's readiness to change (Prochaska et al, 1992) and the source of motivation. Children are also reported to be a principal source of motivation for mothers to change drug-misusing lifestyles (Tracy, 1994; Wilke, 1994, 2005). Consequently, the development of services that give mothers the support they need to address their substance misuse and improve their ability to parent their children is one part of the core measures needed to tackle this problem. Another important point of contact is with family support services. These are generally available to all families, parents and children in their communities and therefore these projects are a resource for all families. However, where there is a need/capacity, projects can also work more intensively with those who are more vulnerable. Where the child is deemed at risk, the child welfare system aims to protect children and assure their safety.

Two key points are important when discussing a system of response for parental substance misuse. First, in relation to addressing the needs of children, support should include support for parents, siblings, the extended family and important friends of family. Second, the problem of parental substance misuse requires inputs from many different services. For many of the agencies involved, parental substance misuse has traditionally not been an area within their remit. Nevertheless, linkages between these agencies can be important to develop complementary (rather than contradictory) approaches to addressing the issues of parental substance misuse. These two ideas are central to the discussion of the review of the literature that is presented below.

4.2 Parental substance misuse and strengthening families

There are two ways in which the role of the family is envisaged in the literature about responding to children of drug users. The first of these underlines the importance of encouraging substance-misusing parents to enter and engage with treatment. The second involves working directly with the family to bring about changes to parenting skills, family/relationship dynamics, communication skills, substance use, etc. Following this distinction of the different role of family members, Copello and colleagues (2005) discuss three areas that are important for interventions:

(i) Working with family members to promote the entry of substance misusers to treatment

(ii) The joint involvement of family members in the treatment of the misusers

(iii) Responding to the needs of family members in their own right

In this section, these three headings are applied (and at times adapted) for the purpose of presenting the main relevant issues raised in the literature.

4.2.1 Working with family members to promote substance misuser entry to and engagement in treatment

A critical change event for a child whose parent misuses a substance can be when their parents enter treatment. There can be many obstacles to this entry, but there are some indications that working with family members to help challenge the user's reluctance to seek treatment can help.

This approach works with concerned significant others to influence those with alcohol and drug problems by helping them to decide to seek or accept help for the problem. There is some evidence to support the view that family involvement helps to engage the substance user in treatment. Some studies also show better treatment outcomes (Meyers, 1999) while others find that retention is low and relapse rates can be high (Loneck et al, 1996). However, much of the research is based on weak design and hence generalisability is uncertain.

It is not only the substance user who stands to gain from these efforts; family members can also benefit through more effective treatment of the substance misuser and reduced tensions and stress on the family system. Community Reinforcement and Family Training (CRAFT) is an example of a method aimed at working with concerned significant others (including family and friends) in order to improve the engagement in treatment of people with substance-misuse problems. The aim is to restructure social, family and vocational aspects of the everyday life of the substance misuser so that abstinence is selectively encouraged (Copello et al, 2009). This approach has used concerned significant others, including family members, in a variety of ways. These include people to monitor medication/detect relapse, as partners in marital counselling, and as active agents in resocialisation and reinforcement programmes.

The evaluations have examined both alcohol and drug-misusing populations. In a trial (Miller et al, 1999) that randomly assigned 130 concerned significant others to receive (1) Al-Anon Facilitation Therapy, (2) a Johnson Institute intervention[17] or (3) CRAFT, all equated for intensity of treatment (12 hours). It should be noted that the groups involved in the comparisons are far from ideal to demonstrate the effectiveness of CRAFT. All three interventions resulted in substantial and similar improvements in the concerned significant others' functioning throughout a year of follow-up, regardless of whether or not the substance misuser was engaged in treatment. The rates of treatment engagement, however, were significantly different across conditions. When the concerned significant other was given Al-Anon Facilitation Therapy, only 13 per cent of substance misusers entered treatment. The comparable figures were 30 per cent with the Johnson intervention, and 64 per cent with CRAFT. Treatment engagement occurred, on average, after 4-6 sessions of CRAFT counselling. As concerned significant others, parents had a higher rate of engaging the substance misuser in treatment, as compared with spouses.

The trial also compared CRAFT with Twelve-Step (Al-Anon/Nar-Anon) Facilitation Therapy. Half of the CRAFT concerned significant others were further randomized to receive or not receive weekly CRAFT aftercare group sessions for up to six months. In all conditions, concerned significant others showed similar and substantial improvement throughout a year of follow-up in mood states, social functioning, and physical symptoms.

While it is not clear from these studies to what extent these methods contribute to long-term changes in substance use (see Cor et al on this issue), they appear to provide relatives with better insights into the problem of substance misuse. For example, family members report valuing the guidance and support provided by these programmes (Yates et al, 1988). The methods help family members to cope – for example, by encouraging them to change/broaden their social network to include more supportive members, which in turn can affect the substance user's behaviour (Copello et al, 2000).

4.2.2 Joint involvement of family members in treatment of misuser

Based on the idea that a substance misuser's social and family relationships affect that person's misuse, approaches also involve concerned

17 One of the pioneer models of working with members of the drug-user's family to encourage them to be pro-active in helping the substance-dependent individual. This model has come under scrutiny due to its reputation as an 'ambushing' method.

significant others in drug and alcohol treatment (Copello et al, 2000b). While substance-using parents may be in contact with services, a substantial difficulty is securing engagement/progress with that service. Working with other family members can help with this. A variety of methods – including behavioural marital/couples treatment of alcohol and drug problems (O'Farrell and Murphy, 1995; Epstein and McCrady, 1998), and family/couples treatment for drug problems (Stanton and Shadish, 1999) – confirm the association of improved outcomes with family involvement. These methods have in common that they aim to improve family members' coping (constructive responding to problems) and family interactions and to encourage treatment entry. They focus on improving relationships, decreasing behaviours that facilitate substance misuse and increasing marital or family stability and happiness. Another prominent intervention is marital (or couples) therapy which aims to facilitate recovery through stabilising the substance misuser's interpersonal context. Social behavioural and network therapy is based on a similar premise – that to give the best chance of a good outcome, people with drinking problems need to develop positive social-network support for change (Copello et al, 2000b). Evaluations have been undertaken for many of these approaches (see Copello et al, 2009 for an overview of specific interventions and the evaluation outcomes).

In terms of substance-use services responding to the needs of family members, Orford and colleagues (2009) report the various success and challenges that were encountered by two specialist substance-misuse treatment teams in the UK in a two-year project to engage families in their work.[18] The aim was to set up the specialist services that would integrate family members into their work, regularly engaging concerned and affected family members, and including family information-gathering at intake and outcome assessments. The results of these interventions are mixed but it appears that most result in either equal or (usually) better outcomes than approaches which have not involved family members (Copello et al, 2009). Despite difficulties and challenges, the teams reported that the changes made brought improvements to the services they were able to offer to client groups. The teams developed considerable appreciation of the value and need of working with family members.

4.3 Responding to the needs of family members in their own right

In the discussion thus far, the focus has been on providing for the needs of the parent; the children of substance misusers have rarely been the focus in this work. Supporting the health and wellbeing of the family is essential given its role as the main context of care for the child. Family members can be affected by their relatives' drug use in a variety of ways, but the stress of coping with the demands and needs of their substance-using relative can be enormous. Added to this, feelings of shame and confusion are commonplace for family members. For the child, the impact on their other family members can exacerbate the situation. For example, family members often fail to recognise or acknowledge the extent of their relative's substance use and consequently may not be in a position to assess adequately the child's needs. Family members may not perceive themselves as carers or at least as legitimate/formal carers, yet frequently experience pressure to take on the role of carer, particularly where the child has experienced problems. The stress that families suffer can be sufficient to undermine the health and wellbeing of family members as well as place enormous strain on relationships.

In general the evidence for the effectiveness of family-based treatment or therapy for the child is growing. Diamond and colleagues (2005) report on randomized clinical trials conducted over a number of years that included parents as a primary participant in treatment of child and adolescent psychiatric problems. The results indicate that family treatments have proven effective with

18 This entailed applying the '5-step family intervention' (for a description of this intervention, see Orford et al, 2007).

Table 1: Family intervention programmes by type of families and child ages*

	Universal (general population)	High-risk population	In-crisis population	0-5 years	6-11 years	12/14 years
In-home family support		X	X	X		
Behavioural parent training		X	X	X	X	
Family skills training	X	X	X		X	
Family education	X					X
Family therapy			X			X
5-Step Model	X	Authors point out this approach is designed to be used with a low-risk/high-need group. At time of writing it has been evaluated for use with adults only.				

**Based on Kumpfer et al (2003)*

externalizing disorders, particularly conduct and substance-abuse disorders, and in reducing the co-morbid family and school behavioural problems associated with attention-deficit/hyperactivity disorder. In addition, several new studies suggest that family treatments or treatment augmented by family treatments are effective for depression and anxiety. The authors conclude that, for many disorders, family treatments can be an effective stand-alone intervention or an augmentation of other treatments. They state that engaging parents in the treatment process and reducing the toxicity of a negative family environment can contribute to better treatment engagement, retention, compliance, effectiveness, and maintenance of gains.

Because women differ from men in their substance-misuse patterns, with different antecedents and consequences (Grella, 1996), it is important to provide women with services to meet their specific needs as well as the needs of their children. The (American) Families in Transition (FIT) programme is an example of a model wherein parents and children are treated in an integrated programme so that, as a parent recovers from illness, the multiple risks the child faces (school failure, emotional disturbance, future substance abuse/dependence) are also addressed. This is a family-focused residential programme, where families progress from treatment and family re-unification to a period of increased independence in which parents undertake vocational training or employment, accept increased parenting responsibility and prepare for supported reintegration into the community. (See Jackson, 2004 for a comprehensive description of this programme.) It was not possible to identify any evaluation work reported for this programme.

Kumpfer and colleagues (2003) describe five forms of intervention that directly involve the child. The various intervention strategies address problem types by age of child and severity of family or child situations. The types of families to which these interventions are applied and the age group for whom the intervention is considered best suited are set out below. Table 1 gives summary information for each programme, the types of families to which the programmes are typically applied and, the ages of children for whom the approach is best suited.[19]

Details of these programmes are as follows:

1. **In-home family support** (high-risk/in crisis; 0-5 yrs): This is a prevention approach involving either in-crisis or high-risk families and is applied to help children younger than five years. The programme works first on the family's crises or basic needs, then teaches improved child management or home management skills.

19 Table 1 is based on the framework presented by Kumpfer and colleagues (2003).

Two evaluations are cited by Kumpfer and colleagues (2003); it is indicated that these found medium and very high levels of evidence for in-home family support programmes reducing aggression and conduct disorders in children.

2. **Behavioural parent training** (high-risk/in crisis; 0-5 yrs and 6-11 yrs) – for parents of young children, either individually or in small groups. There are 1-2 hour sessions for a general population group and 45 hours for families at risk. Parents are taught to increase attention to positive child behaviours, improve monitoring and use effective discipline methods for inappropriate behaviour.

3. **Family therapy** (in crisis; 12/14 yrs): A prevention approach involving families with adolescents who have indicated problems (e.g. conduct disorder, depression, aggression, school or other social problems). These interventions have also been found to have preventive value for younger siblings because of positive changes in communication patterns, resulting in reduced family conflict and maladaptive family processes (Alexander et al, 2000).

4. **Family in-home education** (general population; 12/14 yrs): Take-home booklets to engage parents and children together in homework assignments concerning drug use or other potentially problematic teenage behaviours. The aim of this work is to reduce substance use and improve communication.

5. **Family skills training** (general population; 12/14 yrs): This approach combines a behavioural parent training group and children's social skills training group, run parallel but separately. Families come together to practise positive play, family meetings, effective communication styles and effective discipline methods. Different versions of family skills training programmes have been implemented successfully with universal selective and crisis families with children from 12 to 14 years (e.g. the Strengthening Families Programme is discussed below).

These prevention approaches have in common interactive methods for behaviour change, methods for engaging hard-to-reach families, and programme material and content that focuses on family processes that are key to the child – attachment, family supervision and discipline, communication and values (Kumpfer et al, 2003). However, the review of the literature resulted in the identification of reports/evaluations regarding programmes and/or interventions for just two of the above forms of intervention: family in-home education, and family skills training. The quality of the review of these studies varies. This is due mainly to a lack of access to some of the original article sources. As a result the research was entirely dependent on abstracts for information. The articles also varied greatly in terms of the depth and quality of information reported.

4.3.1 Studies on in-home family support

Programmes based on home visiting either by health workers (e.g. nurses) or other trained workers are considered to be a successful approach or model for families with young infants. Home-visitation services have been promoted as a means of preventing a range of health and development problems in children from vulnerable families. The beneficial effects are thought to arise where interventions are instituted early in the life cycle. The studies reported suggest a cautious optimism regarding the efficacy of early home intervention among drug-misusing mothers. However, some of the studies are based on small sample sizes.

Nurse/volunteer home visits

A randomized trial reported by Olds and colleagues (1997) involved 400 women at baseline and 324 at 15 years' follow-up. Women were stratified by marital status, race and geographic region. The research design includes four conditions:

- Condition one: families randomized to treatment 1 were provided with sensory and developmental screening for the children at 12 and 24 months of age)

- Condition two: participants were provided with screening plus free transportation for prenatal care and childcare, through to the child's second birthday
- Condition three: families randomized to condition three were provided with the screening and transportation services and also with a nurse who visited them at home during pregnancy
- Condition four: families were provided with the same services as condition three families, except that the nurse continued to visit up to the child's second birthday.

The results of the study showed that nurse-visited, low-socio-economic groups and unmarried women reported being impaired in fewer domains by alcohol or other drug use, having been arrested and convicted less often, and having spent fewer days in jail than other groups. In contrast to women in the comparison group, those visited during pregnancy and the first two years of the child's life were identified in fewer reports as perpetrators of child abuse and neglect during the 15-year interval (Olds et al, 1997).

Black et al (1994) evaluated the efficacy of home intervention with cocaine and/or heroin-using women on parenting behaviour and on children's development. A randomized clinical trial involved 60 drug-misusing women recruited prenatally and allocated to intervention (n=31) or comparison (n=29) groups. The sample was relatively homogenous: most mothers were single, African-American, had experienced more than one birth prior to the trial, and were non-high-school graduates from low-income families. Approximately 40 per cent of the women were HIV-positive and 62 per cent had been imprisoned.

Women in the intervention group were marginally more likely to report being drug-free and were compliant with primary-care appointments for their children. Women in the intervention group were also more emotionally responsive and provided their children with marginally more opportunities for stimulation. At 18 months, parents reported more normative attitudes regarding parenting. At six months, children in the intervention group obtained marginally higher cognitive scores but at 12 and 18 months there were no differences reported.

Home and centre-based interventions

Regardless of prenatal drug exposure, children living in poverty are at risk for cognitive delays (Brooks-Gunn et al, 1996) and poor academic achievement (Patterson et al, 1990). Home and centre-based interventions are often used to help improve developmental outcomes among children of substance misusers. Schuler et al (2003) evaluated the effects of a home intervention on ongoing maternal drug-use and on the development outcome of infants. This was a longitudinal randomized cohort study of a home intervention with substance-misusing mothers and their infants. Mother-infant dyads were randomly assigned to a control or intervention group at two weeks' post-partum. Control families received brief monthly tracking visits. The home intervention had both a parent and infant component. The goal of the parent component was to enhance the mother's ability to manage self-identified problems by using existing services and family and social supports. The topics covered included housing, public assistance programmes, partner abuse, the effects of drug use, and drug treatment. The goal of the infant component was to promote infant development using a programme of games and activities. The home visitors' curriculum contained 650 age-specific developmental skills for infants from birth to 36 months of age. Based on the age of the infant, the home visitors would model an age-appropriate developmental skill for the mother. An activity sheet on this was given to the mother to help her learn about child development. The results from the study showed that, among drug-exposed infants living with their mothers, a home intervention led to higher mental and psychomotor development scores 18 months post-partum. The intervention had the greatest effect on infants whose mothers reported no ongoing use of cocaine/and or heroin use after the child was born.

The *Parents Under Pressure Programme (PUP),* reported by Harnett and Dawe (2006), is a structured programme, primarily home-based, and includes both parents. The sessions last between one and two hours. Additional case management can occur outside of these sessions, determined by individual family needs. The programme begins with a comprehensive assessment; specific targets for change are identified during the assessment and become the focus of 'treatment'. The programme combines methods for improving parental mood and parenting skills. As poor parental affect-regulation and parental stress are associated with poor child outcome and child maltreatment in substance-misusing families (Suchman and Luthar, 2000), cognitive mindfulness techniques are incorporated to help parents to learn emotional regulation. The programme contains 10 modules; each of these covers a theme that may continue throughout the sessions (see Harnett and Dawe 2006 for a more comprehensive outline of each module and theme).

Effectiveness: In an initial study of the PUP programme (Dawe et al, 2003), 12 families were recruited from methadone clinics. Nine of the families completed the programme delivered in their homes; eight were re-contacted at three months. There were significant improvements on measures of parental functioning, parent-child relationship, and parental substance use and risk behaviour. In addition to the changes in family functioning, the majority of families reported a decrease in recent alcohol use, HIV risk-taking behaviour and maintenance dose of methadone.

Dawe and colleagues (2007) reported on a later study, a randomized trial conducted with parents who were on methadone maintenance and had children aged between two and eight years. This age group was selected because parenting interventions appear to be more effective with younger children, compared to late childhood and adolescents (Dishion and Patterson, 1992). Participants were recruited through two inner-city community methadone clinics. They were allocated to one of three treatment conditions: (i) a parenting programme, (ii) a brief clinic-based parenting programme (brief intervention); and (iii) standard care. The parenting programme was focused on reducing the potential for child abuse and neglect among methadone-maintained parents. The results show that, compared to the comparisons, the methadone-maintained parents who participated in the PUP intervention showed significant improvements across multiple domains of family functioning, including a reduction in child-abuse, in rigid or harsh parenting attitudes (Child Abuse Potential Inventory Rigidity), and in child behaviour problems. The Child Abuse Potential Rigidity Scale measures a parent's unreasonably high and rigid expectations of children's behaviour and appearance and is associated with the forceful treatment of children in order to make them behave in accordance with these rigid beliefs (Dawe et al, 2007). The largest difference was observed in this measurement when compared with the standard care group.

Retention in the PUP programme was particularly high. This may have been due to the follow-up efforts of the therapists and/or to the strong emphasis on the therapeutic alliance in the PUP (Dawe et al, 2007). However, programme attendance in itself is not sufficient to show improvement in parenting capacity. Despite the clinical significance of the intervention, 36 per cent of the PUP group showed continued high-risk status over the course of the study. This is an important point and draws attention to the need to examine individual families' responses to parenting interventions (Budd, 2005). It may be speculated that, for these high-risk samples, directly addressing the parents' cognitive-affective functioning may increase the effectiveness of the parenting skills of the programme.

4.3.2 Studies on family skills training

Different family interventions are needed because different parenting and family skills are needed for children of different ages and for different types of families. A number of parent or family programmes have been developed to reduce children's risk of developing problems such as substance-use disorders when parents have a

substance-use problem (Dawe and Harnett, 2007; Camp and Finkelstein, 1997; Dawe et al, 2003; LeMarsh and Kumpfer, 1985). However, it is unclear whether the range of needs is met by these types of interventions. It is certainly assumed that children will benefit indirectly from the support offered to their parents, but It is difficult to ascertain the capacity of these interventions to provide a child-centred perspective.

Iowa Strengthening Families Programme (ISFP) and Preparing for the Drug Free Years Programme (PDFY)

Two brief interventions were designed for general population families of young adolescents: *The Iowa Strengthening Families Programme (ISFP)*[20] and the *Preparing for the Drug Free Years Programme (PDFY)* (Kumpfer and De Marsh team. The models informing these programmes articulate categories of empirically based risk and protective factors that influence substance use and other problem behaviours. Targeted risk factors include, for example, poor discipline skills and poor quality of parent-child relationships (Brook et al, 1990); protective factors targeted by the ISFP focus on resiliency characteristics in youth, including empathy, as well as parent-child bonding (Kumpfer, 1996; Richardson et al, 1990).

The PDFY intervention is delivered in five training sessions, with an average session length of two hours. Sessions are scheduled once per week for five consecutive weeks, held on weekday evenings, typically at schools. Four of the sessions are attended by parents only; children attend one session with their parents, focusing on peer resistance skills. Essential programme content is included on videotapes to ensure standardized delivery of program content and to enhance the learning process by visually demonstrating competent parent-child and family interactions.

The ISFP requires seven sets of sessions conducted once per week for seven consecutive weeks; like PDFY, sessions were held on weekday evenings, typically at schools. It includes separate parent and child skills-building curricula and a family curriculum. Weekly sessions consist of separate, concurrent training sessions for parents and children, followed by a family session in which parents and children jointly participate. During the family session, parents and children practise skills learned in their separate sessions. The concurrent parent and child sessions last one hour and are followed by the family session, which also lasts one hour. The seventh meeting consists of a one-hour family interaction session, without the concurrent training sessions for parents and children; thus, the total number of intervention hours is 13. (The primary content of both the PDFY and ISFP sessions is summarized in Spoth et al, 2001.)

Effectiveness: A randomized control trial was undertaken to evaluate the PDFY and ISFP. The study examined intervention versus control differences in initiation level of alcohol, tobacco and marijuana use. Participants in the study were families of sixth-graders enrolled in 33 rural schools. A randomized matched design guided the assignment of the 33 schools. Schools were matched on the proportion of students who resided in lower-income households and on school size. From the 33 schools, 221 PDFY group families, 238 ISFP group families and 208 control group families participated.

The findings showed evidence of intervention control differences in delayed initiation, current use, and composite use, at a point when students are in high-risk years for substance-related problem behaviours. Significant effects detectable four years past baseline were observed for both interventions; a greater number of significant effects were found for the relatively more intensive ISFP. Where significant, intervention effect sizes were in the small to medium range. More specifically, mean substance-use rates among intervention-group adolescents were in the range of one-quarter to one-third of a standard deviation lower than those of the normal population control group.

20 An earlier version targeting children aged 6-10 years has been developed at the University of Utah; the later version developed at Iowa State University targets children from 6-14 years.

The interventions were implemented at the developmental point at which the participating students were likely to be experimenting with alcohol and tobacco, but before they progressed to more frequent or varied use of substances. This developmental timing, when coupled with other considerations, can help to explain the long-term effects observed. Earlier findings cited in the introduction (e.g., Redmond et al, 1999; Spoth et al, 1998) support hypothesized intervention mediating mechanisms. That is, they show significant effects on proximal parent and youth skills-training outcomes at earlier waves of data collection (e.g. peer resistance, parent-child affective quality). Further, these proximal outcomes were associated with reduced propensity to use substances (Redmond et al, 1998).

Strengthening Families Programme (SFP)

More recently and closer to home, a study by Coombes and colleagues (2009) evaluated the *Strengthening Families Programme (SFP)* in the UK. The study was based on the experience of facilitators and families who had participated in the programme, which involved young people aged 10 to 14 and their parents (SFP 10-14 yrs) in Barnsley. A mixed-methods design blending quantitative and qualitative data was used in the study, carried out in two phases over a nine-month period in 2005. Pre and post quantitative data were collected using the SFP 10-14 Parent/ Caregiver Survey Questionnaire, the SFP 10-14 Young Persons Survey Questionnaire, and the Strengths and Difficulties Questionnaire. Questionnaire data was compared at the beginning of the SFP 10-14 programmes (weeks 1-2) and at the end of the programmes (week 7). In addition, two focus-group meetings were held with families who had undertaken the SFP 10-14 programme; and three focus-group meetings were conducted with facilitators of SFP 10-14 programmes.

Effectiveness: Parents reported significant changes in communication limit-setting, emotional management, prosocial behaviour and drugs/alcohol use. Total difficulties scores were also significantly different pre- and post-SFP 10-14 programmes. For the young people, communication and emotional management were improved and their drugs/alcohol use decreased. Their total difficulties scores were also significantly different.

Qualitative evidence indicated that families who had participated in the study found the SFP 10-14 useful in preventing young people's alcohol and drug use in terms of: learning more about alcohol and drugs, using knowledge and skills to reduce behaviours that might lead to alcohol and drug use and, for young people, dealing with peer pressure that might lead to drug and alcohol use. Parents/caregivers and young people reported that the SFP 10-14 had played a part in improving family functioning through strengthening the family unit.

The findings from this exploratory study suggest that the SFP 10-14 may be a useful primary prevention intervention in helping to prevent drug and alcohol misuse in young people.

Michigan State University Multiple Risk Outreach Program

There are two other targeted programs for children and families in which there is an alcohol-dependent parent. The first of these, the *Michigan State University Multiple Risk Outreach Program* (Zucker team) (Maguin, Zucker and Fitzgerald, 1994; Nye, Zucker and Fitzgerald, 1995), targets families with children aged 3-6 whose fathers have been convicted of impaired driving. Recognizing the elevated risk for children with alcohol-dependent fathers of developing behavioural problems which are, in turn, precursors of adolescent dependency, the goal of this program is to reduce behavioural problems in children by helping parents to develop the disciplinary skills needed to deal with problem behaviour and alternatively to generate an increase in appropriate behaviours. Part of the programme deals with marital conflict and various other family problems. The programme is solely intended for families in which both parents (including the alcohol-dependent father) live with the child.

Effectiveness: An evaluation of this programme focused on studying a group in which approximately half of the alcohol-dependent fathers also display anti-social personality traits. The short-term results indicate that the children in the experimental group show an increase in appropriate behaviours and a decrease in inappropriate behaviours, compared to children in a randomly selected control group.

What remains to be seen is whether these effects will favourably influence later adolescent tendencies (i.e. the distal outcome). The research plan seems reasonably rigorous, and long-term follow-up of children and families is anticipated.

Focus on Families/Families Facing the Future

There are only a few reports of rigorous experimental evaluations; many evaluations are limited by small sample sizes and short follow-up periods (Copello et al, 2009). A study undertaken to assess effectiveness in preventing substance-use disorders as children mature into late adolescence and early adulthood was undertaken by Haggerty and colleagues (2008) when examining the efficacy of the *Focus on Families* project (currently called *Families Facing the Future*). This is a preventive intervention to reduce substance-use disorders among children in families with a parent in methadone treatment. A total of 130 families were assigned randomly to a methadone clinic treatment-as-usual control condition or treatment-as-usual plus the Focus on Families intervention between 1991 and 1993. Participants were recruited from two methadone clinics.

This study examines the development of substance-use disorders among the 177 children (56.84% male) involved in the programme, using data from a long-term follow-up in 2005, when these participants ranged in age from 15 to 29. The intervention was delivered through group parent-training workshops at the methadone clinics and through individualized home-based services. The intervention taught parenting skills and skills for avoiding relapse to drug abuse.

At long-term follow-up, substance-use disorders were measured by the Composite International Diagnostic Interview (CIDI). Survival analyses were used to assess intervention versus control differences in the risk of developing substance-use disorders.

Overall, intervention and control participants did not differ significantly in risk of developing substance-use disorders. However, there was evidence of a significant difference in intervention effect by gender. There was a significant reduction in the risk of developing a substance-use disorder for intervention-group males compared to control-group males (hazard ratio = 0.53, P = 0.03), while intervention versus control differences among females were non-significant and favoured the control condition.

The contrasting results for boys and girls are puzzling but perhaps suggest that parenting strategies taught in the intervention were better suited to handling boys who typically exhibit more externalizing problem behaviours in childhood and adolescence. Long-term positive intervention effects among girls in this population may require interventions that focus more on working with parents and children to handle internalizing behaviours (Haggerty et al, 2008). Results from this study suggest that helping parents in recovery to focus on both reducing their drug-use and improving their parenting skills may have long-term effects on reducing substance-use disorders among their male children. However, the overall long-term benefits of this programme are not supported by the results for female children.

Other family members

Other interventions designed to help family members to target the women partners of men with alcohol problems can have many aims, including to reduce the stressful impact on the woman, improve communication, provide problem-solving training for the couple and to help influence the partner's drinking. Many different approaches or programmes fall into this category (see Copello et al, 2009 for an overview

of some of these). Barnard (2003) argues that extended family members, particularly grandparents, should be supported in their efforts to protect and support the children.

Competing needs within the family

The various forms of intervention described thus far are most likely to provide the support and assistance needed by a large number of families. The indications are that such interventions are most effective with younger children, compared to late childhood and adolescents. The different responses, including the involvement of the family in substance-use treatment, emphasise the mutual interdependence and reciprocal influence in the relationship between the young child and their main carers. There is a strong emphasis on the family as the key social context in which the child learns and of the family providing a firm foundation for policies drawing together services that will benefit the child. This mirrors the principles of the National Children's Strategy (2000-2010), which aims to improve the lives of children by supporting their parents/families.

However, many of the initiatives focus on the children's learning and development through the involvement of parents. Many are based on men's and women's needs as people in their own right, and the goals of the work may obscure the child's needs. Where contact is with parents who are accessing drug-use treatment, the adults will be the focal client and the main goal will be how best to support the drug-user to enter and engage with the treatment process. Devaney (2008) demonstrates that there can be problems in relying on parents' assessments of situations; there can be a mismatch between parents' assessment of their children's needs and actual needs. He explains that, for a variety of reasons, some parents can be very unaware of their children's needs. Some can find it difficult to accept that there may be problems, particularly where they feel that the standard of care they offer their children is better than that they received as children themselves (Devaney 2008). Ingrained belief systems can result in family members minimising concerns about children. This can reduce the potential for professionals to consider including family members to provide support, such as monitoring and care arrangements.

The extent to which challenging these levels of awareness and beliefs are a routine part of the work with parents who for example are in treatment for substance misuse treatment or involved with family support, has not been established in Ireland.

Addressing the child's needs in service response

There is a small but growing literature on individual and group work with children with substance misusing parents (Kumpfer 1998; Ackerman R.J 1983; Reich et al 1993; Moe et al 2008; Templeton 2010) and these are discussed below. For children in foster care and other care arrangements, their significant others may not be familiar with or perhaps able to address their needs. For these children, their understanding about who their family comprises may have been reconceptualised on an ongoing basis.

The 5-Step Method

The 5-Step Method is a brief intervention that aims to benefit families who live with relatives who misuse drugs and/or alcohol. The method is considered to be appropriate where problems are serious but not critical, or when families are not experiencing such serious problems but where an earlier intervention could prevent problems becoming more damaging (Copello et al, 2010). In this regard, the 5-Step Method might be appropriate as part of an early intervention and prevention system for children assessed to be at low risk but who, because of their parent's substance misuse, are of 'high need', or what are would in policy terms be described as a vulnerable group.

The 5-Step Method focuses on interactions between members of the family unit and on the fact that family interactions affect family members differently. The main point of departure is the stress-strain-coping-support model. The five steps of the model can be delivered over one meeting or

combined, if circumstances require, into a smaller number of sessions, including in some instances, a single interaction. The five steps are given as the following: (1) listen, reassure and explore concerns; (2) provide relevant, specific and targeted information; (3) explore coping responses; (4) discuss social support; (5) discuss and explore further needs.

This method has been evaluated in a number of settings in the UK and Italy (for an overview, see Copello et al, 2010). More than 300 family members took part in the various projects evaluated. In each, the most frequent relationship that participants had to their substance-using relative was partner and/or parent. Baseline and follow-up scores (12 weeks after baseline) showed positive changes are maintained when family members are re-tested at 12 months (Velleman et al, in preparation, cited in Copello et al, 2010).

Concerning whether the 5-Step Method would reduce the symptoms of strain experienced by the family, the results appear to consistently show a decrease in physical and psychological symptoms. The authors noted that qualitative evidence revealed that some of those delivering the method said they would prefer the delivery over a longer period, with more opportunities for face-to-face contact. In relation to coping, the results were not as clear-cut. Some knock-on effects were also reported for the substance-using relative, in the form of reductions in their consumption of alcohol or drugs, or improved relationships between the 'user' and others in the family.

The 5-Step Method focuses primarily on the adult family member who received support; there has been little analysis of how the method affects children in the family. However, Templeton (2010) discusses how the 5-Step Method should be of benefit to children. She mainly focuses on the indirect benefits whereby improvements are made in the adult family members' support of the child (e.g. grandparents). Since the method aims to tackle their capacity to deal with stress (which is, for many, an integral part of living with a substance-misusing relative), Templeton argues that this will automatically improve their ability to protect and support the children involved (*ibid*). In light of the lack of evidence to support this or any other mechanisms that might be relevant in the working of the 5-Step Method, research is needed to examine whether and how this intervention, adapted for the needs of the child, benefits their situation.

The Betty Ford Children's Programme

Few substance-dependence programmes offer services that are specifically designed for children of substance-misusing parents. If such a service is on offer, it may consist of family day(s), a family week, evening groups or a family intervention. The Betty Ford Center has developed a programme designed specifically for the children of substance misusers, and Moe and colleagues (2008) undertook an evaluation to monitor its efficacy. The Children's Programme is viewed as primary prevention and aims "... to proactively interrupt the multigenerational legacy of addiction" (Moe et al, 2008).

The programme operates as a four-day educational programme for children aged seven to 13 who are not using substances but are living in families affected by alcoholism or other drug dependence. The programme uses art, games, storytelling, films, written exercises, role-playing and recreation to help youngsters build strengths and deepen their resilience. The staff provides continuing care recommendations for all children who participate in the process. Ideally, the alcoholic or drug-dependent parent or caregiver attends the programme and is required to abstain from alcohol or other substances during their participation. Parents and caregivers attend a brief orientation on the first day of the programme and participate with their children on the third and fourth days. The adult component on days three and four includes parent education and support.

Approximately 160 participating children (aged 7-12) were evaluated pre-test and post-test, using a comprehensive psychological battery; a subsample of 50 children participated in a follow-up telephone interview six months later.

Results showed that children of substance misusers benefit from brief, intensive programme efforts that serve their special circumstances. Increased social skills, a decreased sense of loneliness and a new recognition that they cannot control their parents' substance-use behaviour were found. All of these are important concomitants of resilience (Werner and Smith, 1992; 2001).

4.4 Joined-up services for young people whose parents misuse substances

Providing help, support and care for the children of parents who misuse substances involves cross-cutting issues. Childhood is a developmental process and entails a range of services such as health, education, and welfare. The application of the 'whole child' principle, as set out in the National Children's Strategy (2000–2010), requires support from a wide range of services (NCS, p. 10). Responding to the needs of children requires addressing a range of cross-cutting issues which in turn requires co-ordination, collaboration and co-operation among those involved in this service provision. The National Children's Strategy emphasises that, without an integrated approach among services, the capacity to support the child's development is reduced. Accordingly, most documents relating to the development of services for children and families[21] published in recent years highlight the importance of multi-agency collaboration (e.g. Children Acts Advisory Board, 2009).

In the wider drugs research literature, the rationale for inter-agency working in relation to children of substance misusers stems primarily from a recognition of the multitude of problems and needs faced by the young people and families involved. Many children present with unstable family/home arrangements, psycho-emotional problems, socio-economic disadvantage and poor educational experiences. Child protection will also be an issue where abuse, neglect or maltreatment has been observed.

21 Including child and adolescent services.

The decision to adopt inter-agency approaches should be based on a solid understanding of when and in what ways inter-agency approaches can contribute to responding to children's needs and achieve strategy objectives, and of when other approaches might be more effective (Duggan and Corrigan, 2009; YoungBallymun, 2010). Generally, parties agree that services are likely to be improved by collaboration and joint effort. In spite of these drivers, research demonstrates that, at individual, disciplinary and organisational levels, a series of barriers can militate against better inter-professional collaboration. Often there can be disagreement about the purpose and role of the different professionals' involvement with families.

Case Study 1: Substance Use and Child Welfare Professionals

Lee and colleagues (2009) reported a process evaluation of a pilot programme involving substance-misuse families involved in child welfare. The programme sought to address problems that clients had in accessing services due to poor integration of the substance-misuse and child-welfare systems. The aim was to overcome this problem through the co-location of substance-use counsellors and child-welfare officers and thereby to increase collaboration between these two sets of professionals. The co-location work took place in seven different sites: four in a rural and three in urban locations. The background discussion in the publication refers to a US context; however details on the context of the co-location work are not provided.

All but one of the seven sites implemented the co-location model. At the programmatic level, the study found an improved relationship between the child-welfare and substance-use fields. Both child-welfare workers and substance-use counsellors grew to understand the goals, objectives and challenges of each other's fields.

They saw benefits to clients such as improved early identification, timely referral to treatment, and being able to track treatment outcomes of substance-misusing parents in the child-welfare system. The co-location sites encountered many difficulties and challenges. Apparently these were finally resolved through careful planning, engaging child-welfare workers and substance-use counsellors (advanced information consultation, training/education), standardising procedures (clearly stated procedures, protocols and memoranda of understanding) and providing strong leadership. It was reported that the child-welfare workers believed that the programme led to less recurrence of child maltreatment. It was noted by the authors that substance-use counsellors were "... able to persuade child welfare clients to admit substance abuse problems" (ibid 2009: 64), were able to help them access treatment services, and worked with them to remain in treatment.

This case study is not typical. The impressions reported are frequently not verified by a review of the services' administrative data. As a result, apart from reports of the impressions of professionals, there are no other indications of the extent to which integration of the child-welfare and substance-use perspectives are achieved. For example, to what extent do professionals see the new clients as part of their role? Have changes been made to work core practices, such as adapting and recording practices (e.g. contact sheets) to reflect the extent and nature of contact with new client groups, and so on? Perhaps in part because of this, no descriptions are provided of key details such as how many people were seen, the types of cases involved and, importantly for the purpose here, how co-location specifically contributed to addressing the needs of the children involved.

Case Study 2: Parents of Children at Risk (POCAR) – An Inter-agency Intervention

Welsh and colleagues (2008) describe a multi-agency-based intervention involving community, voluntary and statutory organisations. The Parents of Children at Risk (POCAR) programme was established in the UK (Brighton) to address the needs of substance-misusing parents whose children had been assessed as at risk or in need. However, in practice this programme appears to target female substance misusers exclusively. The rationale is explained as the need to reflect the fact that females are more likely to have substance-misusing partners than males.

The POCAR programme runs for 16 weeks and is overseen by a multi-agency steering group. This group has developed operational policies and procedures and agreed aims and objectives for the programme. Care pathways, referral routes, inclusion and exclusion criteria and information-sharing were developed. The agencies involved include one that provides services to substance misusing-women, many of whom have children. This agency was selected to deliver a psycho-social component of the range of services offered by the POCAR programme. Crèche facilities are also made available by this agency for preschool-age children. The other agencies in the partnership that deliver services are the Children and Young Persons Trust, the local statutory substance-misuse service, and the local Crime Reduction Initiative.

Participation in POCAR is available for women with both drug and alcohol problems; typically, the women attending will be poly-drug-users. POCAR involves a comprehensive assessment and the drawing-up of an agreed care plan. The statutory substance-misuse service undertakes necessary prescribing and clinical needs. The programme involves key work, groups and other activities and includes a combination of motivational interviewing and cognitive-behaviour therapy approaches.

Welsh and colleagues note that early signs are that the programme is successful in providing families with opportunities to remain together, reducing problem drug-use and improving parenting capacity. A further success reported is the improved working relationships between children's services and adult drug-treatment services; close communication between these services enhances the understanding of one another's roles and the impact of drug-use in the family. However, the levels of communication required are reported as "... intensive and this has a significant impact on the resources of providers ..." (Welsh et al, 461).

The approach used to evaluate the effectiveness of adopting inter-agency working in this study appears to adhere to the idea that the outcomes should be observed for both service-delivery workers and the services users alike. However, while there is an explicit focus on assessing how the approach affects service-delivery workers, and this is well elaborated in the findings, there is only an indirect and fleeting reference to the service user. Again, there is no clear indication that this study has been informed by a consideration of how this form of inter-agency working would or could benefit the children involved.

Finally, reports from the UK (see Warin, 2007) warn that increasingly children's centres and sure-start centres are confronted by the needs of fathers and male carers but that these services are unable to facilitate these or to address the dilemma of how to balance fathers' and mothers' services.

4.5 Towards a child-centred perspective

While research has clearly shown that children living in adverse circumstances exhibit remarkable strengths and adaptive capacity (see Masten 2011 for a review) account needs to be taken of the fact that children and young people can also find it difficult to cope both with parental substance misuse and the range of associated problems such as family/domestic abuse, family disruption and relationship breakdown, and social isolation. The secrecy and stigma associated with these types of familial and background problems mean that most children are reluctant to share their family and personal problems with others. Not only self-protection, but also a sense of loyalty to and protection of their family members, fear of being taken away from their families and fear of being punished by family are among the many concerns that can motivate a child to protect others in their family by hiding what is going on from others (Buckley et al, 2007; Velleman et al, 2008). As discussed earlier, a proportion of children living with parental substance misuse will come into contact with services – for example, as a result of their anti-social behaviour, youth crime/offending behaviour and/or as a result of suffering neglect or maltreatment (i.e. the criminal justice or child-protection systems).

Velleman et al (2008) presents findings from a 10-EU-state study on domestic abuse experienced by young people living with substance-misusing parents. This work shows that there is not necessarily a good fit between the coping strategies used by children living with these problems and what in objective terms might be considered to be the most effective strategies of coping with these circumstances. For example, despite being one of the least effective, one of the most frequently used strategies by these children was 'wishful thinking', while more effective strategies - cognitive restructuring and distraction – are relatively infrequently used by this group of children. While young people interviewed had spoken to someone about their parents' substance misuse, this was most likely to be a friend, followed by a young person's mother, a sibling and, finally, their father. When asked about formal or professional help, most children were unable to identify an appropriate person or agency to which they could go for help and advice about problems in their family or where they could talk to someone (Velleman et al, 2009). Finally, many children said they would have liked to have

spoken to someone outside of their family circle. A few children suggested that a school counsellor, a doctor or a telephone helpline might be an appropriate approach, but no child in the sample said they had ever availed of this.

Velleman's research above shows that one of the first ports of call for children are those who are closest to them i.e. their family and friends. Tunnard (2002) finds that children want information about parental substance misuse that can assist them in differentiating behaviours that are particularly problematic from those that are not. Children report taking on a level of responsibility beyond their years and engaging in considerable physical and emotional caregiving of parents (Kroll and Taylor, 2003). In this regard Velleman and Templeton (2003) note that children need recognition by and support from professionals and other for this role. In the absence of empathy or support from relatives and friends, young people need to be confident that professionals have a good understanding of and focus on their experience and perspective. Bell (2002) found that children and young people most appreciate having a 'trusting relationship with someone available, reliable and concerned who listened, treated them with respect and was not judgemental' and that a combination of emotional support with practical help was valued (cited in Burke, 2006).

Clearly, care is needed where professionals are working with the concept of the family as a unit of coherent needs as many of the interventions and methods used may be based on the experiences of adult family members and on an understanding of how the intervention could best meet their needs, rather than the child's specific needs. It is not always appropriate to assume that the ways in which children are affected by, and respond to, their parents' substance misuse is equivalent to those for the adult family members. In fact, given the differences in how adults and young family members are affected by a relative's substance misuse, it is appropriate to consider whether approaches can be applied to meet the needs of young people and children. In recognition of this gap, some work is progressing to identify the issues that are relevant for children (see Templeton, 2010; Moe et al, 2008).

Child-focused outcomes

The empirical evidence indicates that supporting the family through teaching parenting skills and training is beneficial for the family. However, specific evidence-based programmes for children of substance misusers are few (aside from the strengthening families approach, which is for the entire family and not the individual child). In most cases, to achieve evidence-based programme status, a randomized control study is deemed necessary. For that reason, the lack of a control or comparison group is a significant criticism of the programme evaluations that have been reported (e.g. Moe et al, 2008). It is, however, virtually impossible to conduct a randomized controlled study for children who are receiving special services and ethical issues would arise regarding the non-delivery of services to youth at risk.

Relevant information should be collected on (i) the activities delivered and (ii) the outcomes for the target groups. This calls for a systematic approach to the development of data and information on the extent to which interventions contribute to developing the child, and incorporating this in the routine data-gathering activities of the organisation (including inter-agency work). In this regard, Templeton (2010) raises a concern that needs to be addressed – that current standard measures used to assess the impact of interventions and that services are encouraged to use might not be appropriate for use with children of family units.

5. Addressing gaps in the response to parental substance misuse

Introduction

Parental substance misuse undermines the individual's ability to parent well and consistently. The importance of parenting for both the current adjustment and later development outcomes of children has been well established (see Section 2). More recently, improvements in research design have permitted a more thorough examination of the pathways from child-rearing history to later parenting (Belsky et al, 2005; Capaldi et al, 2003; Confer et al, 2003). These studies provide good evidence for what many scientists, practitioners and the lay public have suspected: that patterns of parenting and discipline that parents use with their children can be at least partially predicted from those their own parents used (e.g. Belsky et al, 2005; Conger et al, 2003). The evidence is that productive aspects of parenting such as parental monitoring, involvement, consistent discipline and warm parent-child relations lead to similar constructive parenting behaviours in the subsequent generation by supporting youth achievement, self-esteem and positive peer relations (Kerr et al, 2009).

These studies suggest that what is being transmitted to children through supportive and consistent environments may not be parenting behaviours per se, but a host of cognitive and interpersonal skills that are applied to functioning parenthood. These skills are also applied to other roles in our adult lives, such as of employee, colleague, neighbour, etc.

The international literature identifies a number of important programmes, projects and interventions that help to buffer the risk and/or address the impact of parental substance misuse. Many of these activities have an adult- rather than a child or family-focus and many that are child-focused carry punitive connotations. Based on the main findings from the literature set out in this report, this section discusses the implications for responding. The message from the general literature is very clear in one respect: the earlier the intervention the better and the more disadvantaged the child, the more powerful the effects of the intervention. The following section reviews what steps are taken when responding to parental substance misuse and cover working with the child's adult/parents, the child's family and finally the wider community.

5.1 Supporting the parent and family

5.1.1 Prenatal and perinatal stages and substance-use dependency

Section 2 of this report highlighted that pre-natal consumption of drugs and alcohol can have serious consequences for the health and development of the foetus. This risk varies with the pattern and quantity consumed by the mother. Consequences include neo-natal abstinence syndrome (NAS) and/or foetal alcohol spectrum disorder (FASD). Despite public health campaigns and improved knowledge about the harmful effects of alcohol intake during pregnancy, many pregnant women in Ireland do not abstain from drinking during pregnancy (Donnelly et al, 2008).

Alcohol use can also be detrimental for pregnancy women in drug treatment. Alcohol use is high among women on methadone maintenance treatment, (Teplin et al, 2007) and this has also been found for Ireland (Ryder et al, 2009). Alcohol use is not only associated with poorer treatment outcomes, but is also a leading cause of death for patients in substance-use treatment (Joseph et al, 1985). Research shows that one of the reasons women drink is to help cope with stress. Pregnancy and the perinatal stages are particularly vulnerable times, with increased risk for triggering stress and derailing treatment, which has consequences for the mother-child relationship.

Primary Care Teams: In this regard many studies comment on the desirability of collaborative care between primary care and addiction services. Given that many women in Ireland do not abstain from alcohol when pregnant (Williams et al, 2010), priority needs to be given to interventions that address problem alcohol use among those

who avail of support and treatment from primary care (Ryder et al, 2009). Primary healthcare practitioners are in a unique position to recognize patients with potential alcohol and drug problems and to provide interventions and/or referrals where appropriate.

Those with substance-use problems most frequently engage with primary healthcare providers (Narrow et al, 1993) and, hence, the primary care team (PCT) is well placed to provide initial assessments, brief interventions and referrals for pregnant women. Primary care is especially important for these women's children as it is where early intervention happens. The underlying rationale of the PCT is providing a person-centred primary-care service through multidisciplinary teams and networks, serving defined populations (Primary Care Strategy, 2001). Through the PCTs, children and/or parents have access to a range of services. These include the GP and public health nurse, while integral to the service is the provision of a range of therapeutic services in one centre. These services include speech and language therapy, occupational therapy, counselling and social work, which are critical for children, often providing the early intervention necessary to prevent the escalation of problems. If well-resourced, a responsive and effective primary-care service could prevent the development of problems that may later require more intensive interventions.

For parents and pregnant women who misuse substances, screening, assessment and a continuum of care is very important for their own health and that of their children. This quality of care depends on professional awareness, skills and the knowledge to identify the impact of parental substance misuse on children (e.g. foetal alcohol spectrum disorder). A recent report (Encare, 2010) recommends that medical professionals in Ireland, including GPs and public health nurses, should be informed and updated on the advice of the Chief Medical Officer regarding alcohol use during pregnancy to enable them to raise their patients' awareness of the risks.

Problem substance use is associated with health problems, serious mental illness and higher stress, and for women, a greater likelihood of being a victim of interpersonal violence. Addressing substance use and mental-health problems in primary-care settings helps to reduce the stigma associated with these problems. This should increase people's access to services as it represents a first point of contact to the health system and social services for women with substance-misuse problems, but also for relatives affected by substance-abuse issues, who are not linked into existing services. In this way the PCT could provide timely and effective support for children and families.

However, in Ireland primary (and secondary care) services are configured to give advantage to those with the lowest health needs (Sinclair cited in Chan et al, 2011). People who misuse substances are disadvantaged in many respects, being unemployed, being of poorer health and mental health, and having relatively low levels of education. A recent study focusing on the problem of access to primary care in deprived areas found that the use of lengthened consultations did not result in better health, mental health or quality of life among mothers living in the areas in question (Chan et al, 2011). The authors suggest there is a need in these areas to develop stronger collaboration with mental-health services. This study did not measure team-building, but poor collaboration among PCT members would undermine team consultation and consequently the capacity to recognise and assess problems. Widely recognised inhibitors to collaboration of this type include issues related to change and the process of care. Resistance to change, new staff and new roles, and balancing competing demands can be difficult to overcome without strong leadership that is committed to integrated care and that champions the programme.

5.1.2 Treatment service providers supporting the parent and family

Treatment for substance dependency can lead to withdrawal symptoms, with substantial physical and emotional distress. The process also entails

vast behavioural and emotional changes. While achieving and maintaining abstinence is possible, it is a difficult process and one that is rarely straightforward. Psychological stress from work or family problems, social cues or the environment can interact with biological factors to hinder sustained abstinence and make relapse more likely. Despite the positive nature of substance-use changes, both children and parents frequently find change difficult. For example, a parent newly in recovery can finding coping with a child's needs very difficult. Problems in family functioning may have developed over time and can be overwhelming as the parent tries to engage with family. For children, their parents going through the treatment process and recovery can be traumatic, particularly as the family dynamic associated with substance dependence begins to change. Children experiencing a parent's recovery may have trouble accepting the parent's attempt to function in a role that he/she previously did not perform. Clearly, children can experience distress and at worst be at risk of harm in these circumstances. Where family relationships have been affected by substance misuse, there is a need to (re-) develop quality relational ties between family members, strengthening connections and the basis for building trust.

Treatment service providers supporting clients' parenting responsibilities: The focus for adult addiction services has mainly been on building a helping relationship and a solid rapport with their clients. This has not included working either with the children or with the adult to enhance their parental responsibility. Yet treatment service providers can play an important role in supporting families under stress, including families where a child is at risk of significant harm. Of course safeguarding trust and respect is vital to the success of the therapeutic relationship between treatment provider and client. There are important benefits to be gained, as McConnell and McGivern[22] suggest, when adult treatment service providers routinely screen for childcare responsibilities as part of the ongoing process of provision of treatment. By establishing the parenting status and the nature of childcare responsibilities of those availing of treatment services, they are better informed to ensure that treatment supports rather than undermines, or is undermined by, the demands of family care. Routinely screening clients' childcare roles generates important information to assess family support need and for making referral decisions and strengthening the referral process involved.

Treatment services involving the family: There are gains to be made from involving families and carers in relation to parental substance-misuse issues. Given the link between parenting and drug-treatment outcomes, a failure to do so could put both the service user and/or their children at risk. Treatment services have recognised for some time the difference that a supportive family can make to their clients' wellbeing. As reviewed earlier in this report, where it is possible, involving family members in the recovery/ treatment process can be effective for many families affected by substance misuse.

While it can be beneficial, it is nevertheless a challenge to engage family members in a process to (re-)establish relationships and family connections. Children's services and the interventions that aim to strengthen families focus on building reciprocal positive connections between family members. Treatment services, working with the relevant child/family agencies to integrate, for example, parenting and family communication skills will be an important step here. There is evidence that combining family-based interventions with substance-misuse treatment has positive effects on children who have substance-misusing parents when it builds family routines and promotes strong bonds to non-drug using family members (Dawe and Harnett, 2007). Where treatment providers work with family members, the latter are afforded the opportunity to learn about addiction, understand the impact of addiction on their relationships, and begin the process of change that is involved in their relative's substance treatment. Many of the programmes of working with family members provide concrete skills and information that will

22 Citing Harbin and Murphy (2000).

help family members to build on their existing strengths.

It is important to incorporate not only members of the immediate family but also of the extended family who can provide support for the child, and where appropriate, for the non-dependent parent. However, consideration must be given to considering personal circumstances and limitations for support. For example while parenting grandchildren may be an emotionally rewarding experience, it also incurs psychological, physical and economic costs in performing these roles (Burton 1992; Minkler et al 1997). Important insights regarding these and other related issues should be gained from studying the work by community based services (examples in Dublin are Ballyfermot Star and Ballymun Youth Action Programme). The extent to which this is a part of the work and approach used with parents who for example are in treatment for substance misuse treatment has not been established in Ireland.

5.1.3 Other service providers collaborating to support the parent and family

Working together on common/shared problems: The concept of caring for the child within their family in the National Children's Strategy (2001-2010) depends critically on finding effective mechanisms to support the families involved to provide for their children. No single agency or profession has the capacity to address all circumstances but collaboration between agencies can help. Collaboration among addiction and relevant family and child services is an important step. These professionals often encounter the same types of problems and frequently have a similar client group. As a result they face similar challenges, such as locating services that families need and co-ordinating with agencies that provide those services.

Notwithstanding this, differences in organisational priorities or professional practices can hamper collaboration. When each of these types of agencies/service providers emphasises its own particular objective, it is unlikely that either will succeed; they serve to minimise responses to symptoms/indications of parental substance misuse or inhibit willingness to identify or confront parents who are clearly alcohol or drug-dependent (Beckman and Amaro, 1986).

Children have varying needs which change over time. Judgments on how best to intervene when there are concerns about harm to a child will often and unavoidably entail an element of risk – at the extreme, of leaving a child for too long in a dangerous situation or of removing a child unnecessarily from their family. The way to proceed in the face of uncertainty is through competent professional judgment based on a sound assessment of the child's needs, the parents' capacity to respond to those needs – including their capacity to keep the child safe from harm – and the wider family circumstances.

Identifying responsibilities/roles: Addiction services as well as family and child-support professionals recognise the need for family members to deal with their substance-misuse problem if children are to be safe. However, these professionals have very different understandings about the role (if any) they have to play in contributing to a child/family-centred outcome. Professionals working in child protection and in social work encounter families and children who experience multiple and complex problems, the extent of which few agencies would be prepared to address. Their work frequently concerns children in possible high-risk circumstances and entails investigating serious allegations of neglect, maltreatment and/or abuse.

It is important to note that child/family services serve many of the families that are, or potentially could be, in contact with treatment services; because of this there may be an important prevention role to play with these parents. There are multiple and complex barriers to substance treatment, including lack of childcare during treatment, co-occurring mental-health disorders (which can be exacerbated by the person's own attempts at abstinence) and concerns about relationships with partners/family/friends that still may be using substances. Where professionals in child and family support services encounter

parent substance misuse, substantial benefits could be gained from an understanding of the implications for the children/young people and the families they work with. Family and child agencies can help clients who have substance-use problems to identify the barriers to participate in treatment and support the development of strategies to overcome these barriers.

In relation to providing a family/child-focused approach, a number of issues and areas of tension arise for addiction, child-protection and family-support services alike. Some of these issues are:

- Engaging with adult clients and sustaining trust versus acting on child protection concerns
- Securing adequate and consistent information from clients about their children's wellbeing
- Differences between adults' and children's needs and services – different focuses and clients, gaps in worker knowledge and confidence, confidentiality issues versus risk to child, sharing of information between agencies, differences in timescales (need to move quickly with children), balancing parent's capacity to change with long-term risk to child
- Engaging with children, inconsistent evidence of how children are coping, difficulties establishing children's experiences and the impact of parental substance misuse on them
- Lack of guidelines for working with substance-misusing parents
- Difficulties in gaining a holistic assessment of families and working only with a snapshot of people's lives.

Whether adult substance-misuse services are directly involved or not with a parent, input from drug-treatment services in the form of advice and guidance will strengthen understanding of the substance-misusing parent and the issues for children. Liaison between addiction services and child/family care may not only improve the understanding that clients have of the statutory social-work role, but also lead to more trusting relationships between clients and statutory agencies (Woods, 1993).

On the one hand, professionals in each field (addiction and child/family support/welfare) must recognise that providing appropriate services to the entire family (not just one parent) is the most effective way of addressing the family's issues. On the other, many families affected by parental substance misuse have many other problems (e.g. domestic violence, poverty, mental illness) and require services that are beyond the scope of either family/child support or addiction services. By taking a whole-family approach and by working closely together, substance-use services and child/family services may be able to work together to ease some of the burden involved in locating and co-ordinating services, frequently for the same families. In addition, managers could design (joint) training programmes for staff in relation to the common issues.

Developing this screening/assessment capacity may involve the training of a range of childcare, guidance counselling, psychology, youth-work and addiction professionals. This would entail developing specific knowledge and skills-based training modules to improve knowledge and responses to children affected by substance misuse. Specific, culturally sensitive, multimedia resources on the impact of parental substance misuse would be useful to facilitate awareness-raising and skills development in responses to parental substance misuse.

A better understanding between agencies/services of what services/interventions are provided by one another would help to avoid duplication and better target resources to address existing gaps. Network organisations and structures such as the Drug Task Forces are well placed to co-ordinate and disseminate information, guidelines and advice to the various professions working with children and their families.

5.2 Child and youth development: a caring community

Developing social capital: It is important not to write off children who have a bad start developmentally. Research shows that children who begin life in difficult circumstances can bounce back – although if not caught early, it may be more difficult and potentially more expensive (Cunha and Heckman, 2006). Relationships with non-substance misusing parents, support from relatives or a stable relationship outside the family can be important protective factors (Tunnard, 2002). These can provide children with access to a source of social capital that bring different and new influences, experiences and sets of expectations. In this way, social network ties can act as bridges to networks and new or different forms of support. They represent opportunities forge new ties which is particularly important where the child's existing family and friendship connections are largely confined to substance-using networks. Such bridges can be naturally forged through leisure activities, hobbies, local community events.

A relatively long tradition of studies has accumulated evidence that shows the benefits of supportive networks, particularly in providing access to three primary types of support: *information* support (e.g. advice and guidance), *emotional* support (including encouragement, coaching and regulation) and *practical* support (tangible help and assistance). Using the personal social network perspective, it is possible to see how children who have access to practical guidance/advice and positive emotional feedback are more likely to be strengthened in their resilience and coping capacity (Dolan, 2007). Relationships beyond the family can provide children with access to a source of social capital that represents new influences, experiences and sets of expectations. In this way social network ties can act as bridges to new social networks and new or different forms of support. Nurturing these bridging opportunities will be particularly important where the child's existing family and friendship connections are largely confined to substance-using networks. Such bridges can be naturally forged through leisure activities, hobbies, and local community events. This entails raising awareness among those in the community, who by virtue of their professional or community roles are a regular or routine part of the child's network.

While the traditional idea of raising awareness is relevant, the emphasis needs to be on building a level of *community responsibility* for supporting children in dealing with their parents' substance misuse[23]. Positive youth development and building on children's strengths and possibilities can be more easily realised where the community in which the child is living identifies itself with the role of promoting resilience among youth at risk – such as those, in particular, experiencing parental substance misuse. In an effort to protect children and young people, neighbourhoods can focus on building strong resistance against substance use. At times this is achieved through promoting a simple but unsympathetic depiction not only of substance misuse, but of the people who grapple with it. While this may have a valuable prevention effect on young people who otherwise might experiment with substances, for the families and children involved, unintended consequences can arise as children are forced to reconcile the different understandings and perceptions of substance misuse within their own environments and their personal experiences and feelings about their parents. Where this occurs, it does little to foster a sense of belonging to mainstream community and its norms, particularly given that the illegality and stigma of drug-use makes concealment of use common. It is important that a community develops alternative and child-centred messages as well as a capacity to support children through these experiences.

The advice contained in the National Guidelines for the Protection and Welfare of Children is useful

23 See also Jeyes (2011) for a very timely discussion of the role which social workers, other care and legal professions can play when working together in the community to protect children and the importance this plays in the HSE's change programme and in the potential of the new child and welfare protection agency.

in that it identifies some mechanisms for this. It highlights the role of services to enhance the friendship and support networks of the child and his/her family by working with extended family members and making links between the family and existing community resources. The advice contained in the National Guidelines for the Protection and Welfare of Children is useful:

"Services to enhance the friendship and support networks of the child and his/her family may involve working with extended family members and making links between the family and existing community resources. This may be done through workers in voluntary organisations or by drawing upon existing statutory services. Examples of community resources might be local community mothers who act as peer educators, parents/ carers groups, preschool programmes in early childhood, school-based and afterschool programmes for older children, and Neighbourhood Youth Projects for adolescents" (Department of Health and Children, 1999, p. 61).

Developing this requires the organization and coordination of children's services. In this regard, the progress made by initiatives set up for this purpose, such as *YoungBallymun* and Jigsaw, will provide important insights into providing multi-faceted forms of support and even one-stop-shop or wrap-around provision for children in need. Structures such as the Drug Task Forces are also well placed to co-ordinate and disseminate information and guidelines to the various professions working with children and their families.

5.3 Responding to the needs of children and adolescents

For a variety of reasons, teenagers tend not to seek support from formal services/agencies. They may not be aware of the services available; they may be concerned about the stigma of obtaining assistance for family and/or emotional issues; they may be hesitant or unsure about seeking out an adult for assistance. Teens may be far more likely to seek assistance with employment issues than emotional issues. However, adolescents affected by parental substance use should have the opportunity to talk about their parents' substance dependence, the problems it entails and the effects on their families and lives. The active participation of the young person, in deciding what they want to do, is essential.

Below is a broad list of evidence-based practices for children and young people in relation to substance dependency issues, taken from a number of sources (Health Canada, 2001; Bloomquist & Snell, 2002).

In general, the literature underlines the value of providing services within the context of family, community and culture.

- Work within a strength-based approach that emphasizes positives, respect and trust, regardless of age of child
- Run programmes tailored to the developmental phase of the child
- Provide individualized counselling tailored to the child's development, culture, social background and interests
- Consider the use of art, play and narrative focus with children and youth; this would require applicable training and experience
- Provide mutual-support groups for young people who would like peer support with parental substance-use issues. These group programmes can reduce feelings of isolation, confusion and/or shame among such children while capitalizing on the importance to adolescents of peer influence and mutual support. Adult guidance is required in the running of such peer groups (examples of these are Alateen, Narateen and the Betty Ford Children's Programme)
- Follow applicable procedures for confidentiality. This may preclude disclosing information to parents and guardians.

It is desirable to have all community-based counselling staff proficient in working with children and young people, but it is not possible,

nor ethical, to work with cases for which one has no training.

5.4 Future research needs

Based on the review of the literature, a set of five inter-related studies is needed if Ireland is to develop the data needed for an evidence-based policy formulation and to be in line with existing practice in other jurisdictions such as the UK. The benchmark for assessing whether services are effectively responding to this problem must be ongoing improvements in outcomes for children of substance-misusing parents.

1. In circumstances were children can no longer remain in the care of their parents, the placement of the child within the social-care system is often necessary. The extent to which this occurs because of parental substance misuse in recent years in Ireland is unknown. Currently there is no up-to-date information available to provide a picture of this situation and what the relevant issues are in the Irish context. A study guided by the research question (RQ) outlined below would help to fill this gap. As a point of departure the Health Service Executive is responsible for the collection and collation of statistical information on child welfare issues and among others, collects information on why children have been admitted to care (including familial substance misuse). Work should be done to identify any other sources of information that may help to answer the following questions.

RQ. How many child welfare cases involve parental substance misuse? Identify whether there is information regarding substances used? What other relevant information may be recorded (e.g. gender, age, education, care arrangements, harms to child, etc)?

Records from the child protection and welfare system:

- Assess the suitability of the child-care interim dataset and any other relevant data to generate information regarding the question above
- Compile and report information on the extent and nature of cases involving parental substance misuse.

2. It is widely recognised in the literature that, for many trying to change their lives in relation to substance use, children can be a key source of motivation for entering treatment. However, for others, the care of children can be a major complicating factor in their recovery. It would be valuable to know not only the extent to which people in treatment have children but also the nature of the contact they have with these children and whether treatment enhances this. This is a vital area of information regarding the indirect benefits of the system of treatment for the children who live with substance-misusing parents. The research question guiding this is as follows:

RQ: How many people in treatment live with and/or have contact with their children? Does this change with treatment?

3. In 2003 the (British) Advisory Council on the Misuse of Drugs (ACMD) published *Hidden Harm*, the findings of an investigation into parental problem drug use and its effects on children (ACMD, 2003). The inquiry estimated that there were between 250,000 and 350,000 children of problem drug users in England and Wales, which represents 2-3% of all children under 16 (ACMD, 2003). In the UK these estimates provide an invaluable source of information to policymakers about the extent of this problem. In Ireland, the National Drugs Strategy 2009-2016 (Interim) acknowledges the considerable negative impact that problem drug and alcohol use has on families and notes that children in these families are likely to be at high risk due to the prevalence of drug/alcohol misuse within their families, peers and communities. Currently, however, there is no clear indication of how many children are involved and whether the number is changing over time.

RQ: How many children of problematic substance misusers are there in Ireland?

- Assess the suitability of the National Drug Treatment Reporting System to obtain estimates of the number of children of problem substance users
- Estimate how many children present with their parents to domestic violence services and are experienceing parental substance misuse
- Assess other existing treatment data for use as a multiplier.

4. Although research suggests that there are more fathers than mothers entering drug treatment, very little is known about fathering occurring in the context of chronic drug misuse. Given the absence of data/information in this area, public policy, service delivery and research continue to be defined by a deficit perspective on the fathering of drug misusing men.

5. Systematic research and data development are key to assisting good policy formulation. A coordinated approach should be developed to evaluate and monitor the impact of the various services, programmes and interventions on parental substance-misuse child and family outcomes. As part of this approach, consideration should be given to the potential for improving information on parental substance misuse from existing data-collection procedures (e.g. administrative data such as the National Drugs Treatment Reporting System) and relevant ongoing research in the drugs and child/family research fields. In addition, full use should be made of existing research data, to provide analyses for the purpose of informing policy on issues of parental substance misuse.

6. Overview and Summary of the Report

Introduction

Children depend on their family to meet their physical, psychological and social needs and their economic security and well-being. All of these can be jeopardised by parents misusing drugs. Recognising the problems that parental substance misuse poses to the functioning of the child's family, *The National Drugs Strategy (Interim) 2009-2016* underlines the need to target the child's needs in relation to parental substance misuse.

While not all substance use by parents disrupts family relationships, it is clear from the international literature that problem substance use undermines the potential of families. For a substantial minority of the affected children, the effect of their parents' substance misuse continues into their adult lives. For some, the impact can be multifaceted and persist not only into adult life but even into the lives of the next generation. In recognising this problem, the National Advisory Committee on Drugs undertook to develop a review of the main findings reported in recent national and international literature.

Over the last two to three decades, a substantial body of literature on parental substance misuse on children has developed. Several reviews have been published addressing specific aspects such the consequences for parenting of substance misuse (Hogan, 1998), the implications of parental substance misuse for child outcomes (Tunnard, 2002; Barnard and McKeganey, 2004), and others have addressed responding to parental substance misuse (e.g. Velleman and Orford, 1999; Velleman and Templeton, 2007; Tunnard, 2002). Despite the inter-related nature of these issues, there is currently no up-to-date work published providing an overview of the three areas. Considering the significant improvements in methodology and research design that have been made in recent years, as well as the increased prominence of the child developmental framework in this discussion, an up-date synthesis of the research literature is necessary. In order to give the reader the opportunity to assess the quality of the research evidence, this review also reports the key aspects of study design.

This review of the research literature was guided by two main objectives. First, to identify the needs of children of substance misusers, the review should describe the impact that parental substance misuse has on the lives of children involved. The second objective is to report the main findings on the provision of services that respond to the children's needs. While work to support drug and alcohol-dependent adults is ongoing, little is known about the extent to which the services involved assess the needs of their children. The main sources of this information on these issues hail from the UK and the US.

Structure

The structure of the executive summary mirrors that of the main report, which is presented in four parts. The first part relates to the consequences that substance misuse has for the care-giving environment. One of the most striking developments in the literature in recent years has been an increasing prominence of the child developmental framework in the discussion of parental substance misuse. This is reflected in the first part of the review, which begins by discussing the implications of drug misuse during pregnancy for the children born. In this regard, section (i) below summarises the main findings on the impact of prenatal exposure to parental substance misuse.

Given the importance of the quality of parenting to the child's development, the second part of the review focuses on examining the evidence on the consequences that drug misuse has on the type of parenting; where available, findings on the quality of parenting the child is likely to receive are also discussed. The main findings are summarised in section (ii) below. Section (iii) summarises what is known about how parental substance misuse affects the development and life chances of the children involved. Section (iv) summarises the findings on service provision and the main gaps. Section (v) provides an overview of the relevant research that has been undertaken in Ireland.

(i) Prenatal exposure

Prenatal consumption of alcohol and drugs impedes the development of the foetus and the literature reports that this can result in physical (e.g. low birth weight), cognitive (e.g. learning disorders) and behavioural (e.g. hyperactivity) consequences in the child. While these effects have been most documented for alcohol abuse, they pertain also to other substance such as opiates (including methadone) cocaine and other stimulants and cannabis.

(ii) Substance misuse and parenting

Because developmental trajectories can be self-sustaining (if not impossible to alter), experiences that shape early development have important ramifications for social policy. Again, the effects of specific drugs and/or the effects of confounding factors, on the child are difficult to disentangle. For example, in most cases, parents take other drugs and engage in lifestyles and circumstances that confound the issue. Early rearing or parenting plays an important role in shaping early developmental trajectories (Schonkoff et al, 2000) and the literature shows that the quality of the care-giving environment can be undermined in two key ways.

Substance misuse is one of several factors contributing to poorer outcomes for children who experience parental substance misuse. Parental substance misuse exacerbates or compounds any risk that may be present in the environment (e.g. socio-economic disadvantage, high drug-consumption neighbourhoods). It can also play a causal role – for example, exposing the child to the parent's lifestyle and behaviours. Some of the key consequences that substance misuse has for parenting are summarised below.

Quality of parenting

The first of these concerns the parent's ability to provide the child with sensitive care and warmth, the basis for a child's formation of attachment relationships. Throughout childhood, adolescence and even into adulthood, attachment relationships remain important in the elicitation and regulation of emotional states (Kobak, 1999).

- The quality of parenting experienced by children who grow up with parental substance misuse is more likely to be characterised by instability and inconsistency. Problem drug use in particular is characterised by regular intoxication and withdrawal and a firm focus on the acquisition and ingestion of substances. This repeated cycle involves regular physical absence and repeated emotional instability and unavailability. The more problematic the substance dependence is, the more likely the child is to experience poor parental involvement and low responsiveness
- Even when the child's mother does not use substances, living with a partner who does negatively affects her relationship with her child; it undermines the mother's ability to cope with stress and strain in the family environment.

Parenting and boundary setting

The second dimension affected by misuse of substances is the parent's capacity to monitor and discipline. This dimension of parenting sets boundaries, standards and guidelines for the child, the experience of which are crucial for learning to fit in, to adapt and cope in our social environment.

- The type of parenting styles used are more likely to:
  - be authoritarian (overly high control strategies and rigid responses to the child)
  - involve inconsistent disciplinary methods.
- Mothers' substance misuse is associated with an authoritative or controlling parenting style.
  - This approach, however, may reflect the mother's attempts to protect her child in a high-risk environment (e.g. the neighbourhood in which she lives)

- This approach is also likely to reflect the norms of parenting that are applied in the social context to which the family belongs.

Little attention has been given to the father's substance misuse, in particular in relation to research on the children of drug users. The literature highlights the following issues:

- The father's illicit drug misuse is associated with low levels of monitoring and low/ sporadic involvement with his children
- Where the father monitors his children, this has a positive effect over and above the effect of the mother's monitoring
- A father's poor monitoring of adolescent behaviour predicts the child's associations with drug-using peers.

As a result of the paucity of data/research, public policy, service delivery and clinical research are defined mainly by a deficit perspective on the fathering of drug-misusing men.

Substance misuse is associated with a wide range of other high risk factors and behaviours. Involvement in crime and imprisonment are significant threats to family relationships and family cohesion. In very poor circumstances, child neglect can involve abandonment, inconsistency, harsh and erratic discipline, and low tolerance towards the child.

Children whose parents misuse substances are more likely to suffer disrupted and inconsistent family arrangements. Separation from the parent can be inherently stressful and also undermines the parent's ability to provide care, the primary determinant of security for the child.

- Children of substance misusers are more likely to have a non-resident parent and to be in the care of a friend or extended family member (e.g. grandparents). In Ireland many children in out-of-home care, arising either from informal or statutory arrangements, have experienced parental substance misuse. The likelihood of being re-unified with their family one year later is low and has not changed significantly in recent years
- When compared to other children who have been separated from their families, children of substance misusers enter care earlier, stay longer and frequently return to relatives or friends rather than to their parents
- The child in these circumstances is most likely to depend on the care of their mother, regardless of her substance-use status
- Most substance-using mothers have partners who misuse substances. Where both mother and father misuse substances, the risk of child neglect increases.

Particularly where parental substance misuse is involved, the presence of a child in a family nearly doubles the risk of domestic violence in the family. Compared with non-substance-misusing fathers, children in families where their father misuses illicit drugs are far more likely to witness physical violence and relationship conflict, and to be assaulted themselves.

- Where domestic abuse and substance misuse co-occur, the health and wellbeing of family members can be severely affected. In these circumstances family members are reluctant to seek help from services
- When parental substance misuse and domestic abuse co-exist, the impact on all aspects of children's lives is even more serious.

The stress that families endure can undermine health and wellbeing – particularly of core family members – and place enormous strain on relationships.

- Frequently, families fail to comprehend and/or acknowledge the full extent of the affects on the child. This is most likely when the family denies that their relative has a substance-use problem, and assigns responsibility for the problem to others. The stress caused may be more complicated and intense where the substances abused are illicit drugs rather than alcohol, due to the association with criminality.

Child neglect is not associated specifically with parental drug misuse as a single risk factor, but with the complex interplay between substance use, parental psychopathology, parenting practices, family environment (including spousal relationship and the availability of social support) and socio-economic factors such as unemployment and poverty. Substance-misusing parents experience many of these problems to varying degrees throughout their lives.

- However, for some families where parental substance misuse is involved the relationship with child maltreatment and neglect is independent of contextual and other confounding factors.

(iii) Child Outcomes

The review of the literature indicates that parental substance misuse renders children vulnerable and in need of support in many domains of their lives and at various stages in their development. From the child's point of view, it makes little difference whether parents misuse alcohol or illegal drugs – the damage can be equally profound in both circumstances.

Many children experience psycho-social problems which in turn undermine key life chances (e.g. academic and social skills) and wellbeing. While most children will not go on to develop substance dependence, a significant group will do so. Children whose parents misuse substances exhibit a heightened risk of the following problems:

Psychopathology, mental health and substance use

Children whose parents misuse substance are more likely to experience depression and anxiety and to have a psychiatric diagnosis than children of non-substance-misusing parents.

Substance misuse, dependence and disorders

Until recently it has not been clear whether the risk of developing a substance use problem (dependence and/or disorder) would be higher with respect to the consumption of alcohol or drugs. The evidence now indicates that for this group of children the risk of development problems with either of these groups of substance is the same. This is not the case for children who do not have substance-misusing parents, regardless of their age, gender, ethnicity and level of parents' education.

Children whose parents misuse substance are more likely to engage in early-onset alcohol and drug misuse than children of non-substance-misusers.

- Girls growing up with parental substance misuse and who begin drinking early show a greater risk than boys of developing an alcohol disorder
- Studies show an escalating trajectory of heavy drugs and alcohol use from adolescence to emerging adulthood
- For children with parents who misuse substances, affiliating with substance-using/promoting peers can maintain and/or increase adolescent substance use over time. This in turn increases the likelihood of long-term negative consequences, such as developing a substance-use disorder rather than simply experiencing an adolescent-limited period of substance-use experimentation
- There is evidence that, for some children of drug users, father's supervision or monitoring of behaviour mitigates the influence of substance-using peers
- Children whose parents exhibit dual diagnosis or co-morbidity[24] progress from onset to substance-use disorder more quickly (telescoped trajectory) when compared to parental substance disorders without co-morbidity.

24 Co-morbidity is a disease or condition that coexists with a primary disease but also stands on its own as a specific disease. For example, someone can have hypertension (high blood pressure) and not have diabetes. On the other hand, someone with diabetes very often has hypertension too. So hypertension is a common co-morbidity of diabetes.

- Adolescents whose parents misuse substances and who have more friends who use/tolerate substance use show the steepest increase in substance use
- The long-term effects of low-level adolescent alcohol or drug experimentation may be relatively small for most adolescents. However, others may experience a cascading chain of problems in many domains of their lives. For example, if domains such as academic functioning, peer influences or social skills become compromised by parental substance misuse, they may exert bidirectional influences both concurrently and longitudinally, producing longer-term negative effects, including substance use disorders
- In this regard, the literature distinguishes between distal (near/current) and proximal (early/distant) effects of parental substance misuse. This distinction should be reflected in the approach to prevention and other interventions that target long-term and recent effects of parental substance misuse on children.

Parenting moderating child substance use outcomes

High-quality parenting for example, where the parent participates consistently, is involved in the child's life and is responsive to his/her needs, can mediate the negative relationship between parental substance misuse and drug-use disorders in their children.

- The risk of poor social skills is highest among girls where parental substance misuse is present. It is highest for girls where there is paternal (rather than maternal) substance misuse; where two (rather than one) parents misuse substances, and where a parent's substance-use status is 'active' rather than 'recovered'.

(iv) Service response to parental substance misuse

Children living in high-risk family circumstances, particularly where there is parental substance misuse, are generally reluctant to seek adult help. In fact, in Ireland, this can be a taboo undertaking for both the parents and children involved (Hogan 2003, 2007). Yet the evidence is that families and children living with drug- or alcohol-dependent parents can benefit from interventions.

The review of the international literature highlights a spectrum of interventions in relation to parental substance misuse. Traditionally, the focus has been on treating the parent's substance misuse, assuming that, as the parent's lifestyle changes, improvements in the child's welfare/ wellbeing will be realised. In this regard, the international literature identifies a range of interventions for families. These include:

- Recruiting adult family members and friends (adult significant others) in the substance treatment process
- Involving spouses/partners in relationship therapy.

In Ireland some drug rehabilitation services have begun to provide childcare facilities. This is extremely important to facilitate access for women with children.

The process of drug treatment can be stressful for the service user and for family and friends closest to them. Thus, supporting clients with their parenting responsibilities is an important step, building on their motivation to make improvements for their children's sake as well as making sure clients have the support they need to alleviate the strain of childcare responsibilities.

A particularly difficult issue with these interventions is whether and how to involve children and young people (Orford et al, 2009). The prevailing view is that it is inappropriate to ask children and young people to become involved in the treatment of their parents' substance use. The review discusses five forms of intervention in

which children are directly involved. These prevention approaches have in common interactive methods for behaviour change, methods for engaging hard-to-reach families, and programme material/content that focuses on family processes:

- In-home family support (high-risk families; children aged 0-5)
- Family skills training (general population; children aged 12/14)
- Parent training (high-risk families; children aged 0-5)
- Family therapy (families in crisis; children aged 12/14)
- Family in-home education (general population; children aged 12/14).

The indications are that these types of interventions are most effective with younger children, compared to those in late childhood and adolescents. However, in many cases interventions are offered to older children and/or when the circumstances have deteriorated or an emergency has arisen (Barnardo's, 2008). This work is a vital part of a much-needed early intervention and prevention system for children at low risk but high need in Ireland. Such a system needs to complement the child-protection system based on family support services (Barnardo's, 2008).

Measuring child outcomes Where the child is perceived by the service to benefit from programmes, interventions or other activities, it is important to reflect this in evaluation and data-gathering procedures. Among other measures, matched information should be collected on (i) the activities delivered and (ii) the outcomes for the children involved.

Raising awareness across services and at community level

If a drug or alcohol service user is a parent, the outcome of their treatment will be affected by the demands of caring for their children. Similarly, it can be traumatic for children when their parents are going through treatment, particularly as the family dynamic associated with addiction begins to change. Failure by treatment services to recognise this or to ensure that clients receive the support from parenting and family services could put both the service user's outcomes and those of their children at risk. By asking drug or alcohol users whether they are parents or have childcare responsibilities, treatment services can make sure that treatment supports – and is not undermined by – the needs of the family. Where appropriate treatment services can help to ensure that clients access the wider forms of support that sustain treatment outcomes. In liaison with child/family services, treatment providers can also support their clients' parenting through referrals to and other forms of collaboration with these services.

Those working in child protection, child welfare and family support regularly encounter the problems of parental substance misuse. Engaging some parents and adolescents in a process of support can be difficult. These issues are particularly complicated by domestic violence. Research shows that a greater familiarity with parental substance misuse among professionals working with these cases can be generated through inter-agency linkages (e.g. advice, information flows, referrals) among relevant substance-use and other relevant specialist and generic agencies/services.

Embedding children in a caring community: The literature on developing resilience among children and young people highlights the value of positive social ties as a source of support in the child's community. Health professionals, school teachers and guidance counsellors, community-based programme personnel and social workers are some of the adults who regularly come into contact with children and are thereby a relatively fixed and regular point of contact for them. Besides continuing to develop a capacity to support children experiencing parental substance misuse, it is important to take into account the effects of the stigma and negative associations that children experience in their communities regarding their parents' substance misuse.

Positive child-centred messages need to be conveyed and used by professionals in contact with children in these communities. The aim of these messages should be to challenge stigma and as far as possible, foster a sense of acceptance by and belonging in their (mainstream) community.

Mutual-support, peer networks

The literature underlines the importance of adolescents affected by parental substance having the opportunity to talk about their parents' substance dependence, the problems it entails and the effects on their families and lives. The active participation of the young person, in deciding what they want to do, is essential. Additionally, given the differences in how adults and young family members are affected by a relative's substance misuse, access to positive child-centred messages in the community is important. Additionally, peer support – e.g. mutual-support groups – concerning parental substance-use issues is provided in many countries.

(vi) Future research and data needs

The review of the literature has highlighted several gaps in Ireland's research, statistics and information regarding children and parental substance misuse. Outlined below is a set of areas of research that would help to fill these gaps. To help assess the feasibility of each study, where possible, section 5 discusses each of these areas and provides pointers as to how such studies might be approached. The five areas are as follows:

1: Determine of the total number of child welfare cases in Ireland, how many involve parental substance misuse.

2: Describe the contact people in substance misuse treatment have with their children and what affect does being in treatment have on this contact.

3: Estimate the number of children of problematic drug users.

4: Develop a comprehensive understanding of fathering in the context of substance misuse.

5: Examine the potential for improving information regarding parental substance misuse from existing data-collection procedures (e.g. administrative data such as the National Drugs Treatment Reporting System) and relevant ongoing research in the drugs and child/family research fields. In addition, full use should be made of existing research data, to provide analyses for the purpose of informing policy on issues of parental substance misuse. For example, assess the suitability of data currently collected by domestic violence services for providing an estimate of the number of children who present with their parents and experience parental substance misuse.

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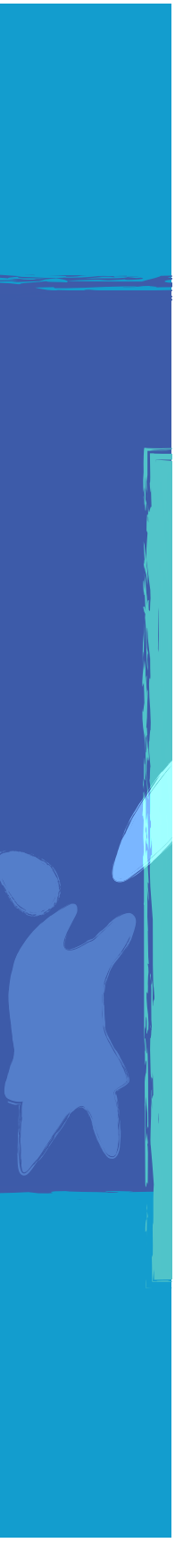

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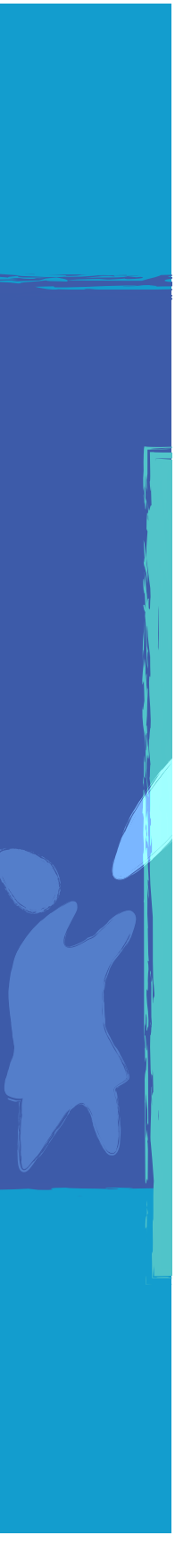

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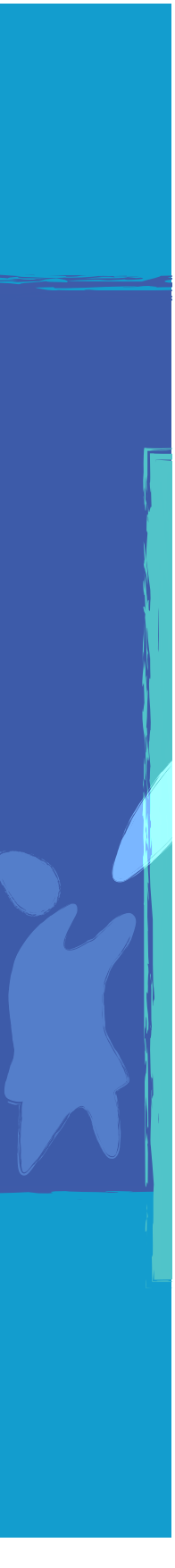

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