

Western Australia's Children and Their Health

A COLLABORATION BETWEEN THE TELETHON INSTITUTE FOR CHILD HEALTH RESEARCH AND THE EPIDEMIOLOGY BRANCH, DEPARTMENT OF HEALTH



NORTH METROPOLITAN AREA HEALTH SERVICE - A HEALTHY HOME LIFE

A Healthy Home and Family Life

This paper explores aspects of home and family life among 0-15 year olds in Western Australia. Several aspects make this an important consideration for the public health system and government services more generally. Family structures and the lives of parents have changed quite dramatically over recent decades. These changes have been stimulated by transformations in areas such as family law, the economy and labour force participation, increases in the age at which couples choose to have children, smaller family sizes, and so on. Such changes have often required action by various levels of government to address or counteract potentially negative impacts.

Some health researchers have argued that within Australia as in other developed nations, there are signs that efforts to counteract the negative effects of social and economic change have not been altogether adequate. For instance, Vimpani, Patton and Hayes (2002) note that while there have been large-scale improvements in many areas of health, trends in some indicators are a significant cause of concern. In particular, they highlight signs that the health of children and young people is being most acutely impacted by the effects of social change.

While the mechanisms that underpin and influence the impact of social change on each child's health are not straightforward, family life undoubtedly plays a critical role. For example, the AIHW (2005) cites parent-child relationships, parenting style, the quality of parental care and general family cohesion as some of the factors that determine how children function. Change in family structures may affect these and other aspects of life for children and, as a result, impact upon their mental health and overall wellbeing (AIHW, 2005).

Science is playing an important role in highlighting trends in child health, providing explanations for these, and identifying some of the actions that can be taken to remedy threats to the health of children. For instance, in this State, communication of evidence about the influence that early life experiences in determining longer term health and wellbeing has been extensive and effective during the last decade. Recent years have also seen increasing emphasis being given by many decision makers in the State to translating evidence about the benefits of some early years interventions into practical programs that combat some of the negative effects of socio-economic disadvantage during early childhood. As McCain and Mustard (1999) have indicated, such programs should focus on helping those in our community most disadvantaged by social change to adapt and also strive to ensure that we retain social environments that are cohesive and of high-quality.

This paper outlines indicators relating to family and home life for Western Australian children and highlights areas that may be of interest to decision makers in health and social care services.

Papers on Western Australian Children and Their Health

Papers in this series will focus on the following topics:

- 1. A healthy start to life**
Pregnancy, birth and early caring behaviours.
- 2. A healthy home life**
Parenting and the home environment.
- 3. Health care needs**
Chronic health conditions.
- 4. Health care services**
Service utilisation.
- 5. Health behaviours**
Risk and protective behaviours.

POPULATION PROFILE	INDICATORS OF CHILD HEALTH NEEDS
HEALTH RISKS	
ILLNESS/DISEASE	
HEALTH CARE USE	
MORTALITY	INDICATORS OF CHILD WELLBEING
COMMUNITY WELLBEING	
<input checked="" type="checkbox"/> FAMILY WELLBEING	
INDIVIDUAL WELLBEING	

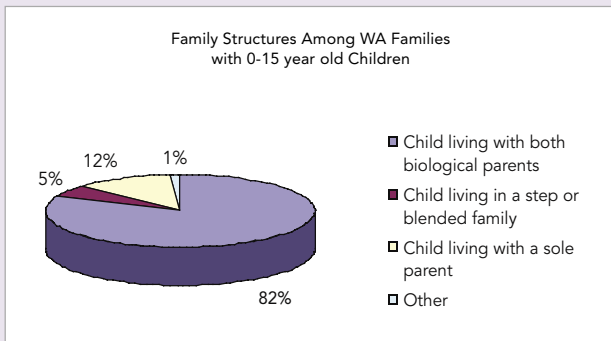
▲ **Indicator:** A statistic chosen to describe (indicate) a situation concisely, help assess progress and performance, and act as a guide to decision making... (AIHW 2006)

Family Structures

Family life plays a critical role in the development of children.

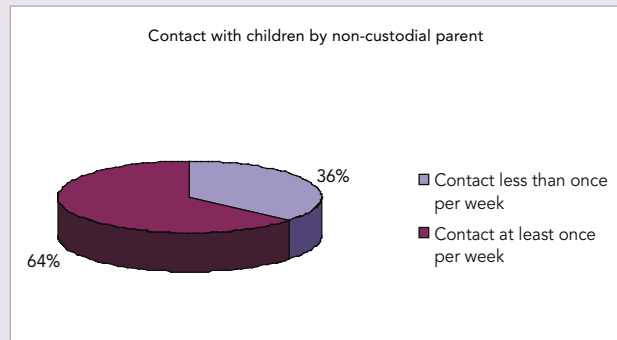
Since the 1970's, there have been significant changes in the profile of family structures in Australia (ABS, 2002). In particular, the proportion of sole parent families has increased as a consequence of a growing proportion of divorced people in the Nation (ABS, 2002).

The WA Health and Wellbeing Surveillance System (HWSS) included several items that examined family structures for households with children aged 0-15. The following graphs detail responses to these items.



The data suggests that four in five 0-15 year olds live with both biological parents (81.7%95% CI 80.4%-83.0%). Of the remainder, a substantial majority appear to live in sole parent households (11.7%95% CI 10.6%-12.7%), while a minority live in step or "blended" families. The estimate of "intact" families in WA is approximately 10 percent higher than that found among children 0-14 across Australia as a whole for (AIHW, 2005). The likely reason for this difference relates to the method of ascertaining family structure used in the HWSS rather than any actual difference between WA and other States/Territories.

Among those Western Australian children who don't live with both biological parents, two-in-three have contact with their non-custodial parent at least once each week (63.6%95% CI 58.6%-68.7%).



"In all developed societies, there have been growing concerns about issues relating to the health and psychosocial well-being of children and young people. These issues have spanned such matters as child health, child abuse, conduct difficulties, substance use, crime, teen pregnancy, and teen suicide. All of these outcomes are linked by the theme that they are more frequent among children and young people who have been exposed to adverse childhood and environments characterized by multiple social, educational, economic, and related disadvantages."

(Fergusson, Grant, Horwood and Ridder, 2005, p.803).

Family Environments

Family environments work in a number of ways to influence outcomes for children. Where they ensure children receive an effective mix of emotional support and developmentally appropriate challenge, they foster better long-term outcomes (Garbarino, 1995).

However, in circumstances where the family environment is compromised, perhaps as a result of parental stress or poor maternal mental health, children's health, adjustment and wellbeing are likely to be poorer (Cnic et al, 2004; Zimmer and Minkovitz, 2003). Family functioning can also indirectly impact upon the health of children via its effects on such things as the likelihood that children will receive recommended preventive health care (Zimmerman et al, 1996).

For children with underlying developmental problems (e.g. intellectual disability) poorer family functioning deprives them of a critical resource, thereby posing a risk for added health problems which further extend their disadvantage (Dekker and Koot, 2003).

The HWSS included a number of items that cast some light on aspects of family environments 0-15 year olds experience in Western Australia.

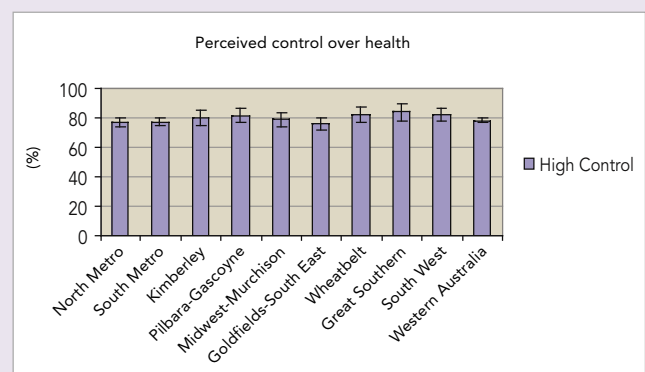
The first set of items relating to the topic of family environments asked parents of 0-15 year olds about the degree to which they felt they lacked control over: their health; life in general; and personal life during the past 4 weeks. For each of these three items, those who reported never or rarely feeling a lack of control were classified as having high perceived control. Conversely, those who reported sometimes, often or always feeling a lack of control were classified as having low to moderate control.

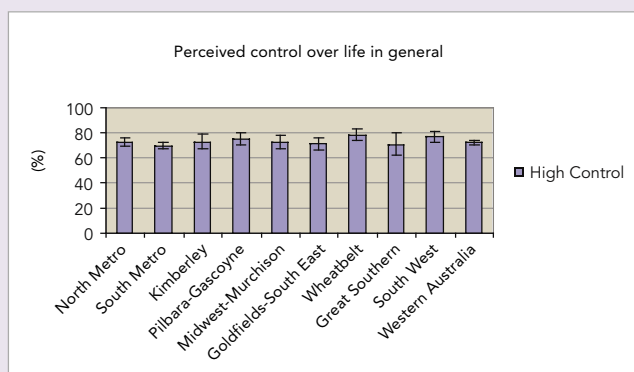
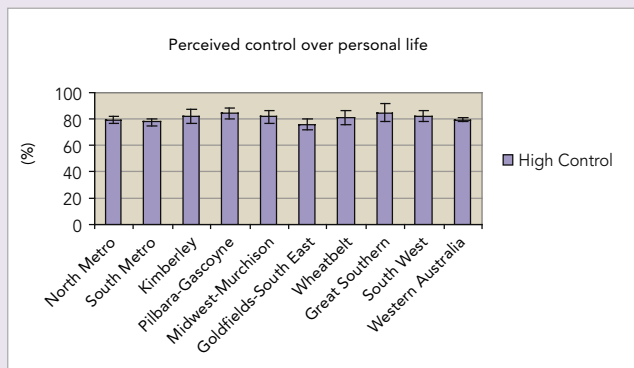
Each of the three dimensions of "control" outlined in the following graphs is an indicator of a potentially important type of stress in the lives of parents. Parents with high levels of stress will tend to have lower levels of personal "resources" available to invest in child rearing. For example, concerns about health can compromise one's capacity to



respond to the needs of a child. Similarly, low levels of control over one's personal life can reduce parental availability for child rearing tasks.

The following graphs detail the results of an analysis of responses to questions about parents' feelings of control over health, life in general and personal life during the last month.





HWSS data suggest that parents of 0-15 year old children in all parts of the State tend to experience high levels of perceived control over their health, personal life and their general circumstances. However, the results also suggest that low-to-moderate levels of perceived control over key dimensions of life are not uncommon among parents of 0-15 year olds in WA. On the key dimension of perceived control over life in general, approximately one-in-four respondents indicated that they had at least sometimes felt a lack of control in the last month.

A further set of items in the HWSS explored family relationships. These items included one which asked respondents whether their family "got on well together" and others which addressed the quality of decision making, planning and communication. Responses to this item were combined to form a four point scale (Family Functioning Scale), where 1 signified the most positive outcome.

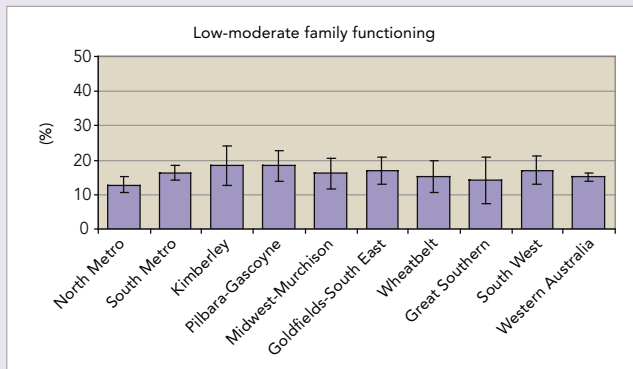
Analysis of Family Functioning Scale data indicated that a majority of Western Australian parents of 0-15 year olds have positive views about the general quality of relationships within their family.

In order to further examine possible geographic patterns in the data, scores on the Family Functioning Scale were classified into two categories: low-moderate and higher levels of functioning. Scores were considered low-moderate if they were more than one standard deviation above the mean score for all parents. Respondents in this category had given one or more negative responses to questions about their family relationships.

"Although it is important to recognise that parenting does not occur in a vacuum, there are many nurturing benefits for children living in families that get on together. These include having positive role models for building relationships, the ability to cope with stressful life events and the development of high self-esteem. On the other hand, families that do not get on well together tend to have high levels of conflict. These problems have adverse short- and long-term effects on the behaviour and wellbeing of children and young people."

(AIHW, 2005, p.78)

The following graph details results from an analysis of the prevalence of low-moderate family functioning within each of Western Australia's Department of Health administrative Areas/Regions.



The data suggest that there are no significant differences in general aspects of family functioning across the State's health Areas/Regions. Further analysis examined whether children from families with low-moderate levels of functioning experienced greater developmental vulnerability than their counterparts in higher functioning families.

As part of the analysis of family functioning and developmental vulnerability, three child vulnerability scales were constructed. These scales incorporated the indicators available from the HWSS data relating to the following categories:

- poor parenting habits;
- child health risks; and
- negative child health outcomes.

Poor parenting habits included allowing smoking in the home, not ensuring children used sunscreen before going out into sunlight, and indicating that alcohol caused problems in the household.

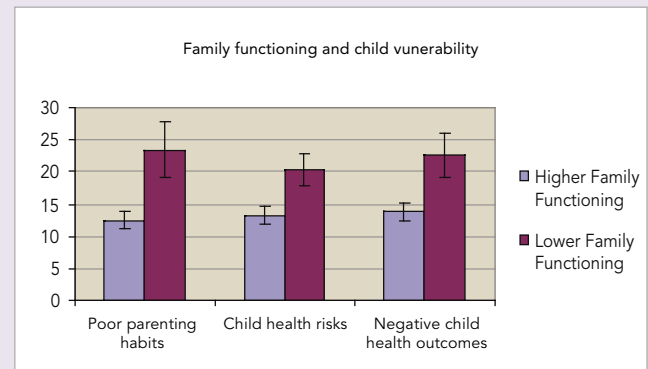
Child health risks included being sunburnt in the last 12 months, eating an average of fewer than 2 serves of fruit per day, and being sedentary for more than 25 hours per week (e.g. watching TV or videos or using a computer).

Negative child health outcomes included mental health problems, ADHD, asthma, coordination issues, delayed language, recent injury, and overweight/obesity.

The three vulnerability scores were classified as moderate-high if the following conditions were met:

- at least one of the three poor parenting habits were reported;
- more than one of the child health risk indicators were reported; and
- more than one of the negative child health outcomes were reported.

The following graph details frequencies of higher vulnerability children living in both lower and higher functioning families.





While it is important to stress that the results of this analysis must be interpreted cautiously, they do identify the potential relevance of family functioning to the health system and highlight matters for further policy relevant research. The results suggest that children living in lower functioning families are significantly more likely to be subject to poorer parenting practices, to experience health risks, and to have poorer health than their peers living in higher functioning families.

Further analysis considered the potential role of age of children as a confounder in the relationship between lower family functioning and higher child vulnerability (i.e. whether older children are more likely to be vulnerable and more likely to be in lower functioning families). The results of this analysis suggest that while family functioning does tend to be lower among families with older children, significantly greater vulnerability is found among both younger and older children from lower functioning families.

As noted, the results of this type of analysis must be interpreted cautiously. Certainly, the results cannot be assumed to suggest a cause and effect relationship between family functioning and childhood vulnerability to poor health and lower levels of wellbeing.

With this caveat in mind, however, the finding that children living in lower functioning households are between 50-90 percent more likely to experience vulnerability related to poor parenting habits, exposure to health risks, and incidence of health problems should be of some interest to health policy makers and professionals. At the very least, it suggests that family functioning assessments might be a useful aid for use in targeting early developmental health interventions. It is also possible that early intervention addressing family functioning might have important independent health benefits for children, although this aspect clearly requires further research.

Parental Disciplining Style

Parenting style refers to the general pattern of interaction that occurs in a parent-child relationship.

Baumrind (1996) identifies several styles of parenting. The style she identifies as most effective is one in which parents are both highly demanding of, and responsive to, their children. This requires balancing warmth and engagement with firm control "contingently applied and justified by rational explanation of consistently enforced rules" (Baumrind, 1996, p.412). Thus, a parent's approach to setting and ensuring adherence to rules by their children is considered to be an important part of their overall child-rearing role.

The HWSS asked parents about their approaches to disciplining their 0-15 year old children when they "broke the rules or did things they were not supposed to".

The items in the HWSS survey were used to construct scales which related to use of authoritarian, reasoning and non-directive approaches to disciplining children. Parents were rated as moderate-to-high on the authoritarian scale if they responded to situations in which their child broke rules or did something they were not supposed to by often or always doing at least one of the following:

- raising their voice, scolding yelling;
- physically punishing the child; or
- taking away privileges or putting their child in a room.

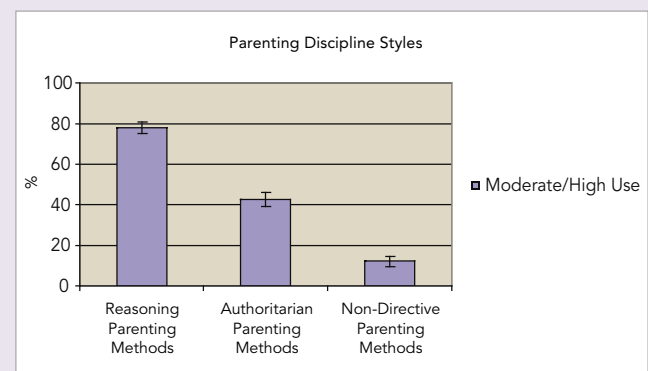
Likewise, parents were rated as moderate-to-high on the reasoning scale if they often or always responded to their child breaking rules or doing something they were not supposed to by:

- Calmly discussing the problem; or
- Describing alternative ways of behaving that are acceptable.

Similarly, parents were rated as moderate-to-high on the non-directive scale if they responded to their child breaking rules or doing something they were not supposed to by:

- often or always ignoring the issue; or
- rarely or never telling their child to stop the problem behaviour.

The following graph outlines the preferred approaches Western Australian parents to maintaining discipline among their 0-15 year old children.



While the data on parents' approaches to maintaining discipline offers a limited insight into the broader issues of parenting style, it does suggest that most parents use reasoning as a primary method of reinforcing family rules. A substantial minority also use punishment as part of their approach to parenting. Few parents opt for non-directive approaches (e.g. ignoring) when their children break rules.

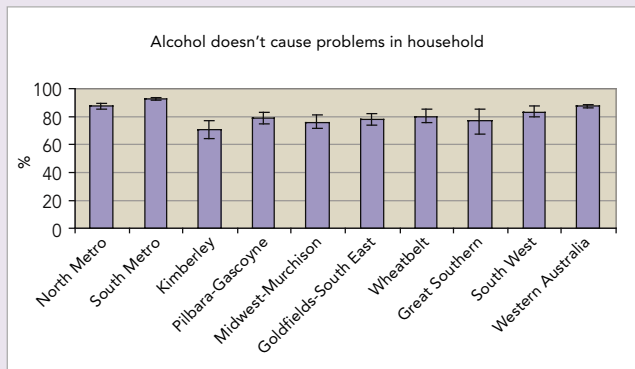
Analysis of the data on disciplining styles did not indicate any differences between the 9 Western Australian Department of Health (DoH) administrative Areas/Regions.

Alcohol Related Household Problems

Alcohol abuse within families is associated with poorer health and wellbeing outcomes. Aspects associated with alcohol abuse include the abuse of partners and children, financial stress, and a range of other major impacts on broader family functioning and the life course of individual members (U.S. Department of Health and Human Services, 2000).

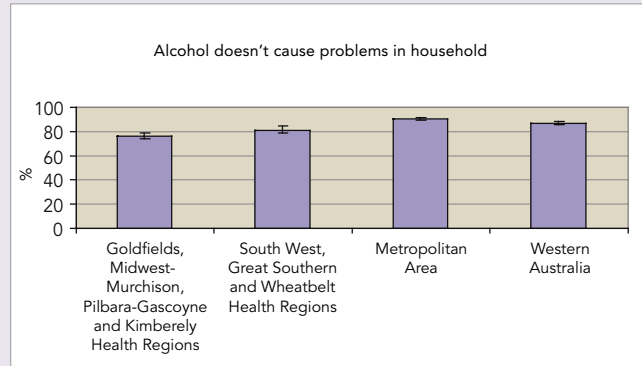
In terms of the direct impact of alcohol abuse on the quality of parenting, research suggests that children whose parents abuse alcohol experience less affection and higher parental aggression (Grekin, Brennan, and Hammen, 2005).

The HWSS asked parents of 0-15 year old children whether alcohol caused problems in their household. The following graph details responses to this item broken down by DoH administrative Areas/Regions.



The data suggest that for approximately nine-in-ten Western Australian households with 0-15 year old children, alcohol isn't considered to cause problems. Despite this overall result, the variation between Regions/Areas of the State is significant, with the highest reported prevalence of alcohol related household problems being 30 percent in the Kimberley Health Region.

To further assess the prevalence of alcohol related household problems, responses to this item were examined across regional clusters. The results of this analysis are detailed in the following graph.



This data suggest that overall, the prevalence of reports of alcohol being a cause of household problems is higher across WA's Regions than in the metropolitan area. In WA Regions, approximately one-in-five 0-15 year olds live in households in which alcohol is considered to cause problems. In contrast, 0-15 year olds in Perth appear to be half as likely to live in a household in which alcohol causes problems.



Households Affected by Mental Health Issues

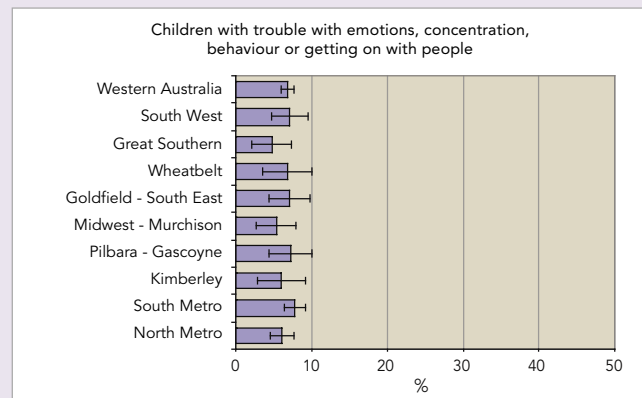
Children who have parents that are afflicted with mental health problems are more likely to experience a psychological disorder during childhood and many times more likely to suffer with a psychotic illness during the course of their lifetime than their counterparts in the general population (NSW Health, 2003).

The underlying causes of this additional burden of mental illness include an increased risk of parenting practices that pose hurdles to healthy development (NSW Health, 2003).

The HWSS included items which asked about parents' experience of mental health illness and their perceptions of their children's emotional difficulties. It needs to be noted that as only one parent in each household responded to questions about their mental health, estimates obtained from the HWSS in relation to this issue are likely to significantly understate the extent of parental mental ill-health among families with 0-15 year old children.

With this caveat in mind, the data suggest that at least one in four 0-15 year olds in the State have a parent that has ever been told they had a mental health problem by a medical practitioner (26.8% 95% C.I. 23.8-29.7%). Of these parents, approximately one quarter are estimated to be currently receiving treatment for their mental health condition (6.6% 95% C.I. 23.8-29.7%). A further 4.9% of parents who have ever been told they had a mental health problem are estimated to be currently experiencing symptoms of the problem but are not receiving treatment (95% C.I. 3.6-6.2%). In total, therefore, at least one-in-ten 0-15 years olds in WA have a parent who is currently experiencing a mental health problem.

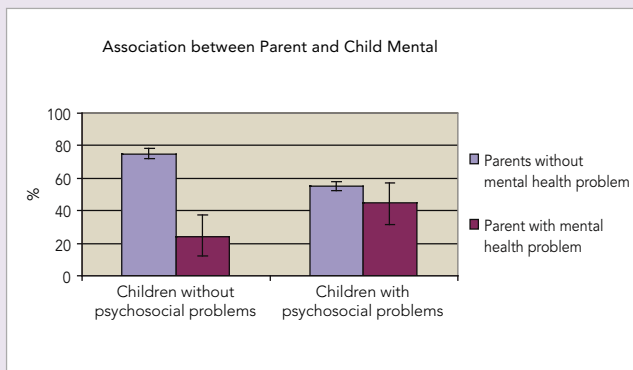
The HWSS also asked parents whether, overall, their child had trouble with emotions, concentration, behaviour or getting on with people. The following graph details responses to this item that fell into the "quite a lot" or "very much" categories with data broken down by DoH Regions/Areas.



Responses to this item suggest that overall, approximately 7% of 0-15 year old Western Australians are considered by a parent to have a significant psychosocial problem ($6.8\% \pm 0.8\%$). For the North Metropolitan Area Health Service, the estimated prevalence translates into approximately 10,000 0-15 year olds living in the Area Health Service that are considered to have a significant psychosocial problem (95% CI 7625-12,691).

Further analysis of the HWSS data considered the degree to which parent mental health and psychosocial problems among children appear to align. While the results of this analysis need to be interpreted cautiously in light of the earlier mentioned issue of "one parent reporting", they do highlight issues which may be of interest to policy makers.

The first issue considered was whether the prevalence of mental health problems among parents predicted the prevalence or severity of psychosocial problems among children. The following graph details the results of this analysis.



This data indicates that children who are considered to have significant psychosocial problems are more likely to have a parent that has a mental health problem. Both genetic and environmental factors might play a role in this association.

In an effort to highlight possible factors in the family environment that might contribute to the above parent-child association, measures of poor parenting habits and child health risk were crosstabulated with a parent mental health variable.

The analysis indicated that there were no differences between parents with and those without a history of mental illness on the measure of poor parenting habits (i.e. doing things that

are likely to harm a child). However, there was a significantly higher prevalence of health risks among children of parents who had a history of mental health problems (29.7% versus 20.7%). This difference in health risks among the children of parents in the two groups may reflect differences in levels of "availability" among parents with and without mental health problems. Thus, those without mental health problems may be better psychologically resourced to exercise the firm control "contingently applied and justified by rational explanation of consistently enforced rules" suggested by Baumrind (1996, p.412).

Smith (2004) has argued that one of the key ways in which parent mental health negatively affects children is through its impact on parenting practices. In recent years, programs that provide support for expectant and new mothers that have mental health problems have become a focus for the DoH, the Department of Community Development, and other social service agencies. Using evidence-based and intensive intervention approaches, such programs are likely to reduce the risk of "environmental" transmission of mental health problems from parent to child over the coming decades.

"Rigorous scientific research has demonstrated that early childhood interventions can improve the lives of participating children and families in both the short run and longer run. We examined the following benefit domains: cognition and academic achievement, behavioral and emotional competencies, educational progression and attainment, child maltreatment, health, delinquency and crime, social welfare program use, and labour market success. For each of these domains (with the exception of social welfare program use), statistically significant benefits were found in at least two out of every three programs we reviewed...In one case, lasting benefits were measured 35 years after the intervention ended...a few studies indicated that the parents of participating children can also benefit from early intervention programs..." (Karoly, Kilburn and Cannon, 2005).

The data indicate that...

- Most 0-15 year olds in the North Metropolitan Area Health Service live in intact families and where they don't, contact with the non-custodial parent is frequent.
- Most parents of 0-15 year olds in the North Metropolitan Area Health Service report high levels of perceived control over their health, personal lives, and other aspects of life. Most also report high levels of family functioning. However, a small but significant minority of parents occasionally or frequently feel a lack of control over key areas of their life.
- Low levels of family functioning are associated with poor parenting habits, higher health risks, and poorer health outcomes for children.
- Most parents of 0-15 year olds in the Area Health Service favour the use of positive approaches when disciplining their children.
- Most children in the North Metropolitan Area Health Service live in households in which alcohol does not cause problems. However, for one in ten 0-15 year olds, this is not the case.
- It is estimated that approximately 10,000 0-15 year olds in the North Metropolitan Area Health Service have a significant psychosocial problem.



About the Data...

The WA Health & Wellbeing Surveillance System (HWSS) is a continuous data collection system using Computer Assisted Telephone Interviews (CATI) to survey 550 people throughout Western Australia every month. The system began in March 2002 and up to July 2006, 27,000 interviews had been conducted.

People are asked questions on a range of indicators related to health and wellbeing. Topics include chronic health conditions, lifestyle risk factors, protective factors and socio-demographics. Since the surveillance system began, response rates have been between 78-80 percent of all the people contacted.

Discussion points for Area Health Service decision makers...

Are programs that address family functioning among high risk parents adequately resourced in the North Metropolitan Area Health Service?

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