Title:

A public health approach to enhancing safe and supportive family environments for children

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Abstract

Best practice in child abuse prevention is grounded in a public health approach – identifying risk factors for maltreatment and putting in place strategies to reduce the 'burden of disease' by altering the risk profile of the entire population. Data from a representative study of Australian children suggest that potentially problematic dynamics within families occur on a continuum of severity. Changes in the family environment and child outcomes over time support the assumption that a balance of universal and targeted services (i.e., progressive or proportionate universalism) is needed to support the protective role families can play in providing a safe and supportive environment for children.

A public health approach to enhancing safe and supportive family environments for children

Families are the mainstay of safety and support for children's positive development (Bowes, Watson, & Pearson, 2009). Although families can be the source of harm (e.g., from child abuse, neglect, or exposure to domestic violence), they can also be the most important source of protection from harm for children when they provide a sense of security, foster self-esteem, and respond appropriately to children's needs.

Although most children live in safe and supportive environments, governments in western Anglophone countries are aware that too many children are becoming known to statutory child protection services. This has led to a shift in thinking away from solely concentrating on the actions of 'tertiary systems' (which respond to concerns about high-risk families) towards a broader public health approach to protecting all children (Bromfield, Arney, & Higgins, 2014). Rather than focusing on the primary or more severe manifestations of the problem, scholars and policymakers have sought to adopt a broader public health approach to the safety and protection of children (CFCA, 2014). The basic tenant of a public health approach is that the problem of child maltreatment (and its antecedent risk factors) exists on a continuum of severity, and that strategies can be put in place to shift the risk profile of the entire population, resulting in a reduced likelihood of children coming to the attention of statutory authorities (Higgins & Katz, 2008; O'Donnell, Scott, & Stanley, 2008; Scott, 2006).

Researchers in the child maltreatment field have focused their attention—and rightly so—on 'problematic families'. Not only are more children becoming known to child protection services, but also the range of problems and issues faced by these children and their families extends beyond the most extreme forms of abuse and neglect to encompass broader social problems and family dysfunction (Bromfield et al., 2010). In particular, researchers and policymakers have focused attention on the risk factors that statutory child protection services see as the typical 'drivers of demand' for statutory services. Reviews of family law, child protection services and the juvenile justice system reveal a common set of family problems that typically lead to engagement with these service systems—that is, family violence, parental mental illness and addictions to alcohol, other drugs, and gambling (Higgins & Katz, 2008). The common feature of such parental behaviours or circumstances is that they can impair a family's capacity to provide positive parenting and ensure that children are safe and protected from harm.

Although researchers know a lot about the familial risk factors for child maltreatment (e.g., see: Lamont & Price-Robertson, 2013), less is known about the precursors to some of those risk factors, and whether family environments that are more or less problematic an be identified in the general population.

By looking at indicators of children's wellbeing who are growing up in a range of different family environments, we can improve our understanding of how services may be provided to improve family environments more broadly in society than can be achieved through statutory child protection services or solely through targeted services to families of children identified through welfare services.

Child protection: Public scourge, or Public health issue?

In relation to the protection of children, many child welfare advocates and researchers have for over two decades recognised the value of a public health approach – and the language of public health is used in many policy documents and strategies internationally. However, Australia—along with similar countries such as the UK, US, Canada and New Zealand—still struggles under the weight of unsustainably high levels of notifications of child protection concerns.

Although there is debate about whether the underlying incidence of maltreatment has changed, there is no doubt that over the past two-and-a-half decades, there has been a very large increase in notifications to statutory child protection authorities (see Table 1). In line with this increase in notifications, there has also been a substantial increase in the number of children living in out-of-home care.[1] As shown in Table 1, the number of children in out-of-home care has risen in absolute numbers, as well as when expressed as a rate per thousand children in the population (from 3.0 in 1990 to 8.1 in 2014).

There are some indications in the past 3-4 years of a slow down in the rate at which notifications have been rising; however, the number of children living in out-of-home care—which is a more accurate measure of severe cases of maltreatment or high-level risks that children cannot remain safely in the care of parents—has continued to climb steeply.

Table 1:   Trends in child protection notifications and children living in out-of-home care in Australia: 1989–90 to 2013–14

Year	Total population of children in Australia (0-17 years)	Notifications to statutory child protection authority *		Children living in out-of-home care at 30 June	
		Number	Rate per 1,000 §	Number	Rate per 1,000
1989–90	4,188,795	42,695**	10.2	12,406***	3.0
1999–2000	4,766,920	107,134	22.5	16,923	3.6
2009–10	5,092,806	286,437	56.2	35,895	7.0
2013–14	5,286,000#	304,097	57.5	43,009	8.1

Sources: Child population data: Australian Bureau of Statistics (2010; 2014). Notifications and out-of-home care data: Australian Institute of Health and Welfare (2001, 2011); Productivity Commission (2015; Tables 15A.5 & 15A.18); WELSTAT (1991).

Notes: Data were updated from those originally cited in Higgins (2011).

* 'Notifications' refers to the total number of reports received by child protection departments about children in need of protection, not to the number of unique children about whom there might have been multiple concerns notified during the financial year.

** The number of notifications for 1989-90 excludes Tasmania and ACT, for whom data were not available. Therefore comparing the number and rate with other years should be interpreted with caution.

*** WELSTAT out-of-home care data for 30 June 1990 are for all children on care and protection orders, including those in residential care, boarding school, juvenile justice facilities, foster care, living other parent or other relative or other adult care, independent living, or unauthorised absence. For information on counting rules used in subsequent AIHW data collation, see: <http://www.aihw.gov.au/child-protection-counting-rules/>.

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[1] Children removed from the care of their parent(s) and placed in 'alternative care' due to their family environment being so unsafe that their wellbeing would be seriously compromised if they were not removed are referred to as 'looked after children' (e.g., in the UK).

This is a preliminary population estimate – subject to revision in future release of this ABS Catalogue.

§ As the number of notifications may include multiple notifications relating to the same child, the rate should be interpreted with caution.

Given the continued high demand on statutory child protection services, is the problem that the 'public health approach' per se doesn't work, or is it that the strategies being operationalised on the ground are not truly consistent with the stated approach? One could ask: Where are the features of true population-level prevention strategies, as demonstrated in strategies to address road safety or tobacco use? (see Text Box 1).

START TEXT BOX 1
Text Box 1: Road safety – the public health 'poster kid'
In Australia – and as has been seen around the globe in most advanced economies – the problem of road trauma, and fatalities has been tackled as a public health issue. Rather than focus on negligent or risky drivers, strategies have been put in place at a population level, targeting different issues:

- public awareness campaigns (wearing seatbelts; keeping below the legislated blood alcohol limit; driving within the speed limit) that are often strongly emotive, but with key messages that all drivers can relate to, and adopt in their everyday driving behaviour;
- messages target the individual – but also broader social attitudes (e.g., checking with guests at a dinner party that they are safe to drive home; nominating a designated driver who does not drink);
- programs to improve driving skills (longer learner/probation periods; expectations of specified hours of supervised practice; improved training at various skill levels, including 'defensive driving' programs; school-based road awareness courses, online Learner Driver training programs);
- regular surveillance (booze buses; speed cameras; random checks) and zero tolerance for not following the prescribed behaviours; and
- improvements in road design (lane width; median strip barriers; rumble strips; type and quality of bitumen surface, grade separation, etc.) and car safety (air bags, crumple zones, anti-skid braking, pre-tensioning seatbelts, traction control, etc.).

Such a comprehensive strategy locates the problem of road trauma and deaths at the intersection between the individual and the environment: individuals need to know that there is something about their behaviour that could be improved; they have the capacity to do it; they have the supports to achieve it; the community understands and support their intent to improve their behaviour; if they don't, they know that there's a high likelihood of being sanctioned. But also – society has invested in ensuring that it creates a less risky environment: cars can't be manufactured or imported that don't meet acceptable standards; the quality of roads are improved, and infrastructure is committed to monitor the public's compliance with community's expectations. Drivers realise that accidents don't just happen randomly – but that every action they take can contribute to the safety of themselves, the occupants of their car, and other road users. It's not just "bad" people that cause injuries on the road. Driving skills exist along a continuum, and there's opportunity for everyone to adopt safer driving behaviours with concrete messages aimed at all drivers: wear

seatbelt; don't drink and drive; don't use drugs and drive; don't tailgate; don't speed; adjust driving behaviour to the weather conditions, etc. There is a collective responsibility, and the public is prepared to curtail some of their freedoms in order to support safety for all road users. For further information on public health initiatives and their success, see: Ward & Warren, 2007]
END TEXT BOX 1

In the public eye, child maltreatment is often seen as being the problem of negligent, undeserving parents, or in the case of sexual abuse, perpetrated by 'dirty old men'. It is not seen as being a series of behaviours that occur along on a continuum of severity (and frequency), or that broader social attitudes play a role in creating or condoning situations in which child abuse is more likely to occur. I think its fair to claim that society largely sees it as a dichotomy: there are abusive families – and then there are the rest of us.

Do families where children experience emotional neglect, or physical punishment that is abusive start out with the intention of causing harm to their children? Parenting is a challenge for many people – not just those who come to the attention of statutory services. Although parents may from the birthing suite intend to love and care for their infant, life throws some 'curve balls', and we disappoint ourselves. And I suspect that's the reality for the majority of parents encountering the child protection system. I am not aware of any empirical evidence to show that parents in the statutory system are typically sadistic and ill intentioned. If they were, it would make very easy the job of caseworkers, and judicial officers of the children's courts. But in the absence of such evidence, let us assume that parents of maltreated children are not necessarily callous, intentionally bad people. Life circumstances – whether of their own making or not – have led them down a path where their children are suffering.

The point of my argument is *not* that we should pity these parents or fail to intervene to protect children. Where the risk is too great to a child's wellbeing for them to remain in the care of their parent(s)—and where all reasonable avenues have been tried to support parents in creating environments free from abuse and neglect—it is society's obligation to intervene. But in the circumstance where we have experienced unsustainable growth in the number of children removed from their parents and little data to show that growing up in alternative care is leading to substantially improved outcomes (Higgins & Katz, 2008) – the question remains: What more can be done?

Public health interventions

Recognition of the value of a public health approach to the problem of child maltreatment is reflected in reframing of the policy approach to protecting children away from focusing mostly on statutory responses to risk-of-harm reports ('tertiary services') toward targeted services to those families potentially at risk ('secondary services'). There is also acknowledgment of the need to combine these with a primary prevention drawing on universal services to support the broader population of all families (see Bromfield, Arney, & Higgins, 2014; Hunter, 2011; O'Donnell, Scott, & Stanley, 2008; Scott, Higgins, & Franklin, 2012). However, I would argue universal services as a platform for taking action to shift the risk profile for the entire cohort of children is still lacking. The backbone of such public health interventions should be a suite of wide-scale, stepped or escalating interventions that can reach the broadest

of audiences, but link to more specific services for those in need of additional supports.

A public health approach is premised on the understanding that risks to children's safety and wellbeing exist on a continuum, and that protecting children is everyone's responsibility, as is explicitly referenced in Australia's National Framework for Protecting Australia's Children 2009-2020 (Council of Australian Governments (COAG), 2009a). Similarly, a public health approach, focusing on the causes (also referred to as risk factors or social determinants) of violence underpins the National Plan to Reduce Violence Against Women and their Children 2010–2022 (COAG, 2009b). Although there is commitment to making child safety "everyone's business", as it stands, more of the "business" has been funded toward the statutory end of the spectrum (see analysis of cost of child protection services reported by the Productivity Commission, 2015). Innovations are emerging however, such as differential response models that invest in secondary services to prevent moderate-risk families needing to receive statutory services (Bromfield et al., 2014).

To fully see the benefits of a public health approach, we need to identify practical strategies to shift the balance of activities into the public health domain, and identify population-wide strategies that can be employed (i.e., primary prevention). Although targeted interventions can and are being applied toward the known drivers of statutory child protection concerns—namely, families experiencing the parental problems of mental illness, drug/alcohol misuse, and violence—this does not itself constitute a public health approach. The emphasis should be on examining what are the precursors of child maltreatment (not just severe cases that come to the attention of statutory services) and putting in place actions to modify these on a population-wide level. Empirical data show that the clearest risk factors are problematic parenting behaviours (Lamont & Price-Robertson, 2013). Public health interventions begin with actions that are taken at a whole-of-population level, often through already existing universal service delivery platforms, where workers are already coming into contact with families (e.g., health, education, and child care services), complemented by community-based actions, and population-wide strategies (such as information, awareness-raising actions, regulations/controls, training, resources, and supports) (see: Herrenkohl, Higgins, Merrick, & Leeb, 2015).

Public health strategies have been used widely to deal with an array of health "issues", such as road deaths (see Text Box 1), alcohol misuse, smoking, and sexual health (prevention of HIV and other sexually transmissible infections). Such strategies are now also being used to frame social issues such as violence against women by targeting interventions to the social determinants of violence by organisations such as VicHealth and Australia's National Research Organisation for Women's Safety (ANROWS). Prevention efforts are being implemented in settings such as schools, community organisations, workplaces, and the media. There are also programs targeted at men and boys that aim to develop and promote gender-equal, respectful relationships with girls and women (Council of Australian Governments (COAG) 2009a, 2009b). See: <anrows.org.au> <vichealth.vic.gov.au>.

The role of parenting in safe and supportive family environments
Parents vary in the degree to which they use positive, effective, non-violent parenting behaviours. Some families struggle to provide consistently warm, nurturing and safe environments. A key strategy in child abuse prevention is to address problematic parenting behaviours, which are seen as being the primary modifiable risk factor. For

example, risk factors for child physical abuse include parenting characteristics such as low engagement and negative perceptions of the child (Cummings & Berkowitz, 2013).

The move towards a public health approach to child protection reflects, in some part, a move in research away from viewing parents who maltreat children as a distinct psychological category towards viewing them as being at one end of a continuum that includes **all parents** (Azar, 2002; Belsky, 1984; Holden, 2010). Children experience varying levels of risks across this continuum, which at its negative end may present as child maltreatment or cold, unresponsive, highly neglectful or abusive parents.

Two of the core elements of a safe and supportive family environment relate to parenting and the interparental conflict. Levels of parental warmth and hostile or angry parenting vary across families. At the extreme end, children may witness domestic violence between parents. However, interparental conflict arises in a broad range of families throughout society (Repetti, Taylor, & Seeman, 2002).

A safe and supportive family environment is one in which parents ideally provide a secure base from which children can safely explore the world to learn about themselves, others, and the wider world around them, and where children experience warm, positive interactions with their parents (Holden, 2010; Petit, Bates, & Dodge, 1997). This is best enabled in families that have well-defined (but not rigid) boundaries between parents and children, where there are positive parenting practices, and where parental discipline is consistently applied (Baumrind & Black, 1967; Lucas, Nicholson, & Maguire, 2011; O'Connor & Scott 2007). As children grow it is important that they engage in shared activities with their parents (Wise, 2003). These are important opportunities to develop both cognitive and non-cognitive skills. For example, shared parent–child engagement in reading (Senechal & LeFevre, 2002) and play (Tamis-LeMonda, Užgiris, & Bornstein 2002) has a positive influence on children's cognitive, social and emotional development.

Researchers have identified a range of negative outcomes for children associated with poor parenting practices, including child aggression or social withdrawal (Petit & Bates, 1989); and risky behaviour in adolescence (e.g., alcohol consumption; Alati et al., 2010). Risky family environments are characterised by parental anger or hostility towards children (Repetti et al., 2002). Although interparental conflict is an inherent part of any normal relationship, ongoing high-level conflict is a feature of highly risky family environments and can lead to adverse psychological and behavioural outcomes for children (Cummings & Davies, 2010; Repetti et al., 2002; Zubrick et al., 2008). Negative conflict tactics, such as hostility, elicit negative emotional responses from children, whereas positive conflict tactics, such as calm discussion, elicit positive emotional responses (Cummings, Goeke-Morey, & Papp, 2003). As well as being distressed by hearing and seeing interparental conflict, children could themselves be drawn into—or become the focus or target of—arguments and conflict. Conflict can affect children indirectly through its negative impacts on parenting, and it can provide a poor model of interpersonal relationships (Amato, 2006).

The family as a system: theoretical and empirical research

From a family systems perspective, problematic family dynamics are understood in relation to the boundaries between family subsystems, which can range along a

spectrum from extremely rigid through to extremely diffuse (Minuchin, 1978). Families with extremely rigid boundaries ("disengaged") exhibit higher levels of distance between family members, are unresponsive to children's needs, offering little in terms of warmth and support, and generally provide less protection. At the other end of the spectrum are families in which this boundary is extremely diffuse ("enmeshed") where the relational distance between parents and children is extremely close, which can lessen autonomy and potentially heighten the intensity of parents' responses to relatively minor variations in children's behaviour. Families in the mid-range ("cohesive") exhibit warmth and support for children, maintaining clear boundaries to ensure that problems do not spill over between subsystems.

At the extreme, there is some degree of overlap between these types of families and child abuse and neglect. Neglectful families are clearly disengaged, being generally unresponsive to children's needs (Gaudin et al., 1996). As this boundary becomes more diffuse (as in more enmeshed families), interparental conflict tends to directly influence the child, particularly where parents deflect conflict onto children or attempt to involve them in the conflict (e.g., by creating a coalition with a child; see: Mullan & Higgins, 2014).

Proof of concept: Using representative population data to examine family environments that could be the subject of public health interventions

In order to examine the degree to which the family characteristics identified by Minuchin (1978) arise to some extent in all families, Mullan and Higgins (2014) analysed different types of family environments across Australia using the Longitudinal Study of Australian Children (LSAC)—a large, nationally representative study of two cohorts of children (5,000 recruited in infancy; and 5,000 in their kindergarten year, at age 4-5, and tracked every two years since 2004).[2] There are numerous measures of aspects of parenting and more limited measures of parental conflict used across the two cohorts within LSAC.

Mullan and Higgins' (2014) four key aims were to examine:

- the prevalence of different types of family "groups" or environments (cohesive, disengaged, enmeshed);
- the profile of these three 'family environments' in terms of parenting characteristics (warm parenting, angry parenting), parent–child interactions (shared activities to capture positive parent–child interactions and reflect, in part, the extent to which parents are a resource that their children can access), and parental conflict, as well as the social, demographic and economic characteristics;

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[2] Parents answered a number of questions relating to warm parenting (e.g., 'How often do you hug or hold this child?' 'How often do you tell this child how happy he/she makes you?'). The 'primary' and 'secondary' resident parents/carers answered a number of questions relating to angry parenting (e.g., 'How often are you angry when you punish this child?' 'How often have you lost your temper with this child?'). The primary parents and the parents living elsewhere from the primary parent stated how often during the week prior to the interview they had read or told a story to the study child, played indoors or outdoors with the study child, engaged in music or other creative activities with the study child, or included the child in everyday activities. In families with two resident parents, both parents answered questions relating to parental conflict (e.g., 'How often is there anger or hostility between your partner and you?'; 'How often do you have arguments with your partner that end up with people pushing, hitting, kicking or shoving?'). In families with a parents living elsewhere from the primary parent, the primary resident parent also answered questions relating to conflict with the other parent. The measure of interparental conflict was based on responses to a single question about how well the other parent gets along with the study child's primary responding parent. For information on LSAC, see: <http://www.growingupinaustralia.gov.au>

- whether these different family environments are associated with measures of child wellbeing; and
- whether positive changes in family environment over time lead to improvements in child outcomes.

Using a complex statistical technique called latent class cluster analysis, Mullan and Higgins (2014) identified three broad family environments across a broad age range of study children, both in families with two resident parents and in families with a parent living elsewhere from the primary carer:

- **Cohesive**: The largest group of families exhibited average or above-average levels of parental warmth and parent–child shared activities, and below-average levels of hostile parenting and parental relationship conflict (i.e., clear but flexible boundaries) (see Kerrig, 1995). Cohesive families represent an exemplar of a safe and supportive family environment. As we would expect, these families were the majority, supporting the proposition that most Australian children live in safe and supportive environments.

- **Disengaged**: A smaller group of families exhibited below-average levels of parental warmth and parent–child shared activities, average or below-average levels of parental conflict and above-average levels of hostile parenting (see Minuchin, 1978). In such families, there are rigid boundaries (as demonstrated by lower parental warmth) and a tendency to close off access to resources for children.

- **Enmeshed**: The last group was a small number of families who had strikingly higher levels of parental conflict than the other two groups. They had average or slightly above-average levels of parental warmth and parent–child shared activities. These patterns arise in families with boundaries that tend to be diffuse, and these families have been referred to as **enmeshed** in previous research (see Minuchin, 1978). Higher levels of parental conflict that tends to negatively affect parenting and lower levels of parent-child interactions distinguish these family environments from the two other groups.

Distinguishing between different family environments

The results highlight that risks to children's safety and wellbeing operate along a continuum that spans all families. There was some limited association between dysfunctional family environments and socioeconomic status. At different points in children's lives, different aspects of socioeconomic status are associated with particular aspects of family environments. In other words, there is not a consistent pattern. This provides some support for the validity of a public health approach to child protection, because it shows that factors associated with risks for children are evident to a greater or lesser degree across the entire population (as observed with nationally representative LSAC survey data). Of course, it is important to recognise that looking at parenting behaviour and parental conflict is not the only way to assess whether an environment is safe and supportive.

Often, statutory child protection authorities and the secondary service system (support for families needing extra assistance, with a focus on early intervention) focus their efforts towards low-SES families, where many of the risks of child maltreatment are congregated – either because service delivery (and surveillance) is concentrated in areas of geographic disadvantage or because services are otherwise allocated to those with the greatest apparent need. However, this is not to assume all

children growing up in poverty have worse outcomes—or that all socioeconomically advantaged children are doing well. The results that Mullan and Higgins (2014) reported suggest to some extent that potentially problematic dynamics within the families are not concentrated in particular socioeconomic groups.

The targeting of services to those most in need could be enhanced by identification of families with problematic intra-familial dynamics and targeting people by behaviour rather than targeting people by demographic characteristics. Different family environments are likely have different needs requiring different types of responses.

Public health campaigns that address parenting practices across the population may be an effective means of addressing the more problematic family environments identified by Mullan and Higgins (2014), as population-wide screening of parenting behaviours may not be cost-effective and may have unintended consequences. However, existing services that come in contact with many parents (e.g., perinatal services, health, early childhood education and care providers, etc.) could have a role in identifying those with seriously problematic family dynamics for receiving additional services.

Family environments and child outcomes

Mullan and Higgins (2014) considered the associations between family environments and six measures of child wellbeing: weight status; injuries; social and emotional wellbeing; cognitive development; literacy; and numeracy.

There were few consistent significant associations between family environment and children's **cognitive development**. However, children in families located toward the disengaged end of the boundary range had, on average, lower reading and numeracy scores, even after controlling for other factors. Patterns were very similar across family environments for children in families with a parent living elsewhere from the primary parent.

There were few significant associations between family environment and children's **health outcomes**. Significant results were restricted to children 2–3 years living in families with two resident parents:

- Children aged 2–3 years in families lying toward the enmeshed end of the boundary range were significantly more likely to be underweight (than normal weight).

- Children aged 2–3 years in families located toward the disengaged end of the boundary range were significantly more likely to have two or more injuries per year.

Although there weren't strong relationships with later cognitive development and health outcomes, Mullan and Higgins found a different pattern in relation to children's **social and emotional wellbeing**:

- In families with two resident parents, children in families positioned toward the disengaged end of the boundary range had significantly lower levels of pro-social behaviour, higher levels of total problem behaviour, and higher levels of externalising problem behaviour when compared to children from more cohesive families.

- Results were very similar for children in families with a parent living elsewhere from the primary parent. There were also significant associations highlighting

negative social and emotional outcomes for children in enmeshed families, but these were not as pronounced compared with the results for more disengaged families.

Do changes in family environment affect children's wellbeing?

Mullan and Higgins (2014) then went on to look at children whose family environment changed – and whether this change is reflected in children's outcomes. They found that across the two LSAC cohorts:

- 54–60% of families with two resident parents remained cohesive; in families with a parent living elsewhere from the primary parent, 62% of the birth cohort and 22% of the kinder cohort remained cohesive.

- In families with two resident parents, the family environment of 16% of the birth cohort children and 19% of the Kindergarten cohort became more cohesive (15% and 20% respectively in families with a parent living elsewhere from the primary parent).

- Children in regional or rural areas were significantly less likely to experience a worsening of their family environment; children with two or more siblings were significantly more likely to experience a worsening of their family environment.

- Changing family environments were significantly associated with changes in children's social and emotional wellbeing in families with two resident parents.

- Children whose family environment improved (i.e., became more cohesive) showed improved social and emotional wellbeing. In contrast, children whose family environment worsened (i.e., became significantly less cohesive) exhibited increased social and emotional problems.

While changes in family environment were seen to have impacts in relation to children's social and emotional wellbeing, they were not strongly related to health or cognitive outcomes. The exception was for families with two resident parents, children 10–11 years old in families that transitioned toward the middle of the boundary range (that is, they became more cohesive) has significantly improved literacy.

Changes in children's family environment were significantly associated with changes in their social and emotional wellbeing. Children whose family environment moved closer toward one resembling cohesive families (more warmth and involvement, less anger and conflict) exhibited increased pro-social behaviour and decreased problem behaviour. The reverse was the case if their family environment moved away from being a more cohesive environment. Although these results relate directly to social and emotional wellbeing, it is important to emphasise that there may be links between socio-emotional outcomes and other child wellbeing outcomes (AIHW 2011b; Hamilton & Redmond, 2010). Therefore, family environments that promote socio-emotional wellbeing are likely to have benefits for other domains of child wellbeing.

It is perhaps not surprising that Mullan and Higgins (2014) found that children's social and emotional wellbeing is most significantly associated with their family environment measured as a function of indicators of parent–child and parent–parent psychosocial interactions. This is consistent with the literature showing that children in families marked by higher levels of parental conflict also exhibit relatively poorer social and

emotional outcomes. The particularly strong negative effects for children in families with lower parental warmth and involvement point to the importance of the family in providing children with a secure base and a sense of connection or togetherness (Bowlby, 1988).

Implications for policy

The results of Mullan and Higgins' (2014) analysis supports a public health approach by demonstrating in a large-scale representative sample the variability in children's outcomes, the prevalence of suboptimal family environments (enmeshed, and disengaged), and the improvements in wellbeing that occur when children's family environments become cohesive.

With respect to identifying different family environments, Mullan and Higgins (2014) found firstly, that different family environments were able to be identified; second, that they are not strongly related to factors we would normally associate with difficulties with the family affecting child welfare (such as socioeconomic factors); and finally, that family environments do change – and that these changes can affect children's wellbeing.

The aim of a public health approach to protecting children is to shift the focus away from a narrow band of children requiring statutory intervention toward addressing the needs of all families, and to move the population distribution on risk factors—such as poor parenting skills and dysfunctional family dynamics—toward the positive end for all families. Shifting the profile of all families would potentially reduce the number that would be at risk of statutory intervention and improve the daily lives of many children. In terms of public health interventions, three possibilities arise, and this study may provide some helpful insights. The three potential types of interventions are (a) parenting programs and supports, (b) public information programs, and (c) targeted referrals for more intensive family support (i.e., progressive or proportionate universalism).

(a) Parenting programs and supports

Parenting programs have been widely used in early intervention strategies targeted toward vulnerable families (Hayes, 2014).[3] However, some argue that parenting programs can be delivered as part of a public health approach to strengthen and support parenting (Sanders 2008), and to prevent child maltreatment (Sanders, Cann, & Markie-Dadds, 2003; Sanders & Pidgeon, 2011). Prinz et al. (2009) provided evidence showing a significant prevention effect following from the delivery of a parenting program in the United States. An Australian example, the Every Family initiative, trialled the delivery of the Triple P-Positive Parenting Program in 30 sites across three metropolitan Australian cities – Brisbane, Sydney, and Melbourne (Sanders et al. 2005; see: <triplep.net>). As identified by Sanders et al., for success in a public health initiative of this nature it is necessary to have a good understanding of the prevalence of the particular problem behaviours in children being targeted, the prevalence of parent risk and protective factors, and evidence that changing risk and

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[3] For an example of a state/territory initiative, see: Brighter Futures <www.community.nsw.gov.au/brighter-_futures_program.html> and a Commonwealth initiative, see: Stronger Families and Communities Strategy <www.dss.gov.au>. Similarly, in the US, the Centres for Disease Control and Prevention has developed the *Essentials for Childhood Framework* – see Herrenkohl, Higgins, Merrick, & Leeb, 2015.

protective factors improves child outcomes. (*See article by Pickering et al. in this edition of FM*).

There is a range of other evidence-based approaches to supporting parents and addressing problematic parenting behaviour—for example, through individual parenting education, counselling and mediation (particularly in the context of parental separation). Parental education and support is also a key feature of home visiting programs (see Holzer et al. 2006), and a range of other evidence-based interventions for families (Casey Family Programs, 2012). Wise et al. (2005) provided other examples of parenting supports and early childhood interventions whose efficacy is supported by good research evidence.[4] [OR: should footnote 4 be a small text box?]

A large body of research provides strong evidence that the home environment—in particular, concrete behavioural patterns of parents (that is, parenting characteristics)—is an important determinant of children's early development and wellbeing. However, it should be noted that, while parenting programs (even those with the highest evidence of their effectiveness, particularly those that are modularised, structured, manualised, etc.) and home visiting programs (which are usually a suite of services that may include particular components such as parenting programs and coaching or mentoring) have been shown to improve parenting skills, with the notable exception of Prinz et al. (2009), there is not strong evidence that they are sufficient to prevent child maltreatment (Casey Family Programs, 2012; Holzer et al., 2006; Mildon & Polimeni, 2012).

(b) Public information campaigns

Public information programs are a more familiar tool used by governments to effect broader changes in the behaviour of the population in general. Examples abound, including public health campaigns around alcohol, smoking, skin cancer, drink-driving and safe-driving campaigns. A recent Australian campaign that highlighted how parental alcohol consumption affects children offers an interesting template for how such campaigns can be used to educate parents about the influence their behaviour has on children.[5]

Consistent with the World Health Organization Ottawa Charter for Health Promotion[6], a range of actions can be taken to improve outcomes, based on advocacy, enabling people to take control of factors that affect their wellbeing, and mediating between differing interests in society for the pursuit of health. They need to be targeted at attitudes or behaviours that are modifiable, with clear links to strategies for achieving the desired change. Adopting a broad information campaign may have limited effect if it is not directed toward behaviours that can be changed and does not point to sources of support for bringing about that change. For example, the national and

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[4] See Holzer et al. (2006) for other examples of parenting programs that have been evaluated. For a comprehensive summary of profiles of programs that have a good evidence base, see: <https://apps.aifs.gov.au/cfca/guidebook/programs>. For a list of other publications on parenting programs, see also: <www.aifs.gov.au/cfca/topics/parenting.php>. Casey Family Programs (2012) published a synthesis of evidence-based interventions that address common forms of maltreatment – many of which are focused on improving parenting capacity. For further information on the evidence based for home-visiting interventions, see: <www.casey.org/home-visiting>. Mildon and Polimeni (2012) reviewed programs that have specifically targeted Indigenous families.

[5] For example: DrinkWise Australia's "Kids Absorb your drinking" campaign <drinkwise.org.au/campaigns-initiatives/kids-absorb-your-drinking>; DrinkWise Australia's "Under your influence" campaign; see: <drinkwise.org.au/videos-mobile>; NAPCAN's "Children See: Children Do" campaign: <napcan.org.au/children-see-children-do>

[6] See: <www.who.int/healthpromotion/conferences/previous/ottawa/en/index.html>

state/territory Quit initiatives are effective in responding to the problem of smoking because it is targeted at broad social attitudes as well as suggesting concrete actions and providing access to supports for quitting smoking.[7]

Research has explored the utility of popular media to promote positive parenting practices more generally (Sanders & Prinz, 2008) and to promote the prevention of child maltreatment (Saunders & Goddard, 2002). Although public information programs can assist, there are limitations to their effectiveness, particularly when knowledge or attitudes alone are insufficient to effect change. There is limited evidence to address the question of whether or not social marketing campaigns are effective in addressing concrete outcomes like rates of child abuse and neglect (unless linked to a suite of other parenting supports and interventions, proportionate to the needs of parents; see Pickering et al. in this issue). Also, evaluations of public information campaigns are notoriously difficult to conduct with any rigour (Horsfall, Bromfield, & McDonald, 2010).

(c) Targeted referrals for more intensive family support

Often the distinction between universal and targeted services is presented as a dichotomy; however, there is scope for it to be seen as a continuum, with universal services being the platform for the ramping up or integration of services that would then be classified as targeted. The principle of proportionate universalism (or progressive universalism, as it is also termed) was outlined in the Marmot review of the social determinants of health inequalities in the United Kingdom (see: *Fair society, healthy lives: the Marmot review* <http://www.marmot-review.org.uk>). According to this principle, actions must be 'proportionate to the degree of disadvantage, and hence applied in some degree to all people, rather than applied solely to the most disadvantaged' (Lancet, 2010, p. 525). It is also important to remember that disadvantage is not static—families (or even communities) can move into and out of disadvantage (Qu, Baxter, Weston, Moloney, & Hayes, 2012).

Although child abuse and neglect (particularly child sexual abuse) occur across all family forms and socioeconomic strata and are under-reported, poverty and social disadvantage are generally associated with higher risks of harm, particularly from neglect (Higgins, 2010a). Key issues relating to the economic security of families are the availability and adequacy of employment, and systems to support families on low incomes or experiencing unemployment, such as housing, health care, and income support, as well as job search and other employment-related services (Adema, 2012; Howe, 2012). Although Australia has a relatively low level of joblessness overall, the number of Australian families in which no adult member of the household is in paid employment is high compared to many other Organisation for Economic Co-operation and Development (OECD) countries. This is the single most important cause of child poverty in Australia, and has been linked to poorer developmental outcomes for children (Hand, Gray, Higgins, Lohoar, & Deblaquiere, 2011). Jobless families are therefore reliant on government income supports. In the past couple of decades, many government payments have become conditional, in an attempt to address concerns about the welfare of children. An example is compulsory income management or welfare quarantining, which aims to ensure household expenditure on priority items that meet children's needs rather than gambling, pornography,

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[7] See: <quitnow.gov.au> <quit.org.au> <www.vichealth.vic.gov.au>

alcohol and junk food, particularly in circumstances where authorities have concerns about child neglect (Taylor, Stanton, & Gray, 2012). Such conditionality is directly or indirectly aimed at shaping parental behaviours and the family environments in which children grow up.

Although services targeted at the most disadvantaged have the greatest impact, it is also true that targeted services would then mean the majority of the population misses out on the particular interventions. Mullan and Higgins (2014) have demonstrated through their analysis of a representative sample of Australian children that less-than-optimal parenting practices and family environments are not restricted to particular demographic groups and cannot be easily targeted—so there is value in considering the role of universal services to deliver information, supports, and services for all Australian families, with increased intensity for those who need it most. Universal services can provide the platform to refer people who require them to more specialist services, or provide a continuum of service, so that within the universal service platform more intense services can be provided to those in need. A number of authors have argued for the importance of using universal services as a base or soft-entry point for engaging families that might otherwise be hard to reach (Muir et al., 2009; O'Donnell, Scott, & Stanley 2008; Scott, 2006).

Children identified as being at highest risk tend to be concentrated in circumstances of relatively high disadvantage; however, a public health approach would seek to broaden the policy focus to address wider needs that will make positive changes for the bulk of the population. The research is intended to inform policies to address most Australian families, so that child protection systems have to deal with a decreasing proportion of families for whom a public health approach is not enough. However, other examples of vulnerability over time might include parental separation, which increases the risk to the safety and wellbeing of children. Family courts often face difficult choices when parents raise concerns about child abuse or violence by their partner during disputes over children's matters (Croucher, 2014; Higgins 2007; Kaspiew, Gray, Weston, Moloney, Qu, et al. 2009).

Further research is needed that explores in more depth the population prevalence of parenting skills, family environments, and other characteristics associated with the risk of child abuse and neglect, and the various transition points or 'vulnerabilities' across the life cycle for families where children's wellbeing may be at greater risk.

Conclusion

Building on the growing consensus that communities are best served by a public health approach to child protection (COAG, 2009a), in this article I have taken this one step further, and—drawing on empirical evidence outlined in detail in Mullan and Higgins (2014)—demonstrated 'proof of concept' that it is possible to identify family environments at a population level that could be the subject of public health interventions. In broad terms, representative population–based data show there are distinct family environments across society that are similar in certain factors associated with parent–child and parent–parent interactions, and that these groups are not directly linked to particular socioeconomic groups. The majority of families had high levels of parental warmth and involvement with children ("cohesive"). A smaller group—though substantial—were different in that they had below-average parental warmth and parent–child involvement, and tended to have above-average levels of angry parenting ("disengaged"). A third group, equally substantial, was

notable for significantly higher levels of parental conflict but average levels of parenting warmth and parent–child involvement ("enmeshed").

Different family environments, with their dynamic nature, have a strong influence on certain child outcomes, particularly those relating to children's social and emotional wellbeing. Children with warm, highly involved parents had higher social and emotional wellbeing. Those with less involved parents, and who experienced above-average angry parenting, tended to have lower social and emotional wellbeing. Children in families marked by higher levels of parental conflict were between these two groups. This highlights the importance of parent–child and parent–parent interactions in shaping aspects of the family environment to which children's social and emotional wellbeing are sensitive.

However, I think the most significant aspect of the analysis provided by Mullan and Higgins (2014) was that due to the longitudinal nature of the LSAC dataset, these environments were examined repeatedly over time from infancy to middle childhood. There was considerable change in the family environments for children – and most importantly, that positive changes (where families scores on the measures moved towards the more 'cohesive' end of the spectrum), were associated with improvements in children's social and emotional wellbeing (though the pattern was not as evident in relation to educational outcomes). The reverse was also true: wellbeing deteriorated for children whose family environments became less cohesive.

This highlights the potential for public health interventions aimed at improving—and sustaining—dimensions of the family environment that are strongly associated with children's social and emotional wellbeing (Hunter, 2011). A public health approach draws on families' strengths, but seeks to support all families to do a better job of providing children with a safe and supportive environment, reducing the likelihood of exposure to violence, maltreatment or neglect (Scott, 2006). Possible interventions include parenting programs and public information programs. Careful tailoring of interventions to specific dynamics arising within families would be beneficial, and programs that can reach a broad cross-section of society are necessary.

Rather than seeing the protection of children solely as the role of statutory authorities, a public health perspective sees the opportunity for all families to have supports to improve their capacity to protect children and creating safe environments for them. However, it is not sufficient to simply 'bolt on' preventive programs to the current child protection processes. Researchers and commentators have argued that the role and function of child protection systems need to be reviewed in the context of the wider range of policies and programs aimed at supporting parents and promoting the wellbeing of children. This is of particular importance in the context of minority and/or marginalised groups, such as Indigenous communities in Australia, for two reasons: (a) Indigenous children are over-representation in statutory child protection activities in Australia (and similarly with First Nations peoples in Canada; see: National Collaborating Centre for Aboriginal Health, 2013); and (b) community-owned and community-led initiatives can be used to to support the health, wellbeing and safety of Indigenous children in culturally appropriate ways (Higgins & Katz, 2008).

I am not suggesting that community wide-interventions to identify and ameliorate poor parenting practices should occur at the expense of statutory services, or of early intervention services to those at high risk. I am instead arguing for a 'proportionate' or 'progressive' universal approach: as well as community-wide interventions (parenting campaigns), linked to easily accessed information and services for those parents

wanting assistance, further work would need to be done to identify how existing universal service providers who are in touch with families could be used to identify such problematic environments, and reengage them in an evidence-based practice to improve their parenting capacity and the nature of the family environment. This could include a range of services such as antenatal services, maternal and child health services, early childhood educators, and schools. These represent the existing service infrastructure that all families access. In addition, where there are points of crisis in a families life—like a serious illness, parental unemployment, a bereavement, or separation/divorce—then the services that interact with families at time could be provided with resources and training to screen for, and provide additional support for families at risk of slipping into a less positive environment. This could include government agencies providing financial assistance to the unemployed or managing child support arrangements post-separation, family relationship services to separating couples (such as those providing mediation services, or conducting assessments for family courts), and hospital social work staff.

Families remain the central focus of identifying risks of maltreatment of children (which are often characteristics or behaviours of parents); families are also cewntral to strategies for protecting children. Although families are not always the only site of violence and maltreatment of children, they can still—along with other agencies and institutions—be enlisted to assist with interventions to support children and keep them safe. Even in relation to prevention of child sexual abuse, while most abuse occurs in families or by known perpetrators, when it does occur outside of the family, families can still play a protective role to prevent abuse, and respond appropriately if it does occur.

The association between family environments and child wellbeing outcomes (especially around social and emotional wellbeing) suggest that the efficacy of policy may be enhanced if policies and services: (a) are attuned or sensitive to different family environments; (b) target behaviour (parental family dynamics) rather than people on the basis of their socio-demographic characteristics; (c) recognise both that families can change for the better and that they can potentially draw on their own prior (positive) experiences; and (d) are directed to all families (e.g., through universal services), based on a public health approach to promote safe and supportive family environments.

All families have a vital role to play in providing children with a safe and supportive environment. The public health space provides governments, agencies, and communities with opportunities to recognising that problematic family environments could arise in any family at any time and appropriately intervene.

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