PREVENTING CHILD ABUSE AND IMPROVING CHILDREN’S HEALTH OUTCOMES

A submission to the Health Committee

Paediatric Society of New Zealand, May 4, 2012

Introduction
This submission is made on behalf of the Paediatric Society of New Zealand (PSNZ).

We wish to make a verbal submission to the Health Committee.

Background
The PSNZ is an independent society of health professionals committed in their daily work to the delivery of health care services to children and young people. The Society includes almost all practising paediatricians in New Zealand, and also includes public health physicians, paediatric surgeons, general practitioners, paediatric dentists, child health nurses, midwives, allied health professionals (such as dietitians, physiotherapists, occupational therapists, speech language therapists, play specialists and pharmacists), child mental health professionals from several disciplines and social workers. The current membership of the Society is 510.

The Child Protection Special Interest Group (SIG) is a sub-group of Paediatric Society members who have a special interest in the provision of services to children and young people affected by abuse and neglect. It also includes, by virtue of their appointments, all child protection and family violence co-ordinators in the 20 New Zealand District Health Boards. Current membership of the SIG is 125.

The Paediatric Society and its Child Protection SIG therefore represents the largest national inter-disciplinary group of frontline health professionals working with children and young people, and specifically with issues of abuse and neglect.

Format of this submission
There have been many publications and submissions relevant to these issues in recent years, many of them very carefully researched and heavily referenced. It is pointless and inefficient to reproduce the content of those documents, some of which are referenced on pages 7 and 8. Three documents are attached as Appendices: (1) “The Role of Health Services in Child Protection” from Dr Patrick Kelly, (2) from Associate Professor Dawn Elder (with specific reference to antenatal and postnatal services) and (3) from Julie Chambers (with reference to the prevention of unintentional injury).

This submission therefore takes the form of a series of concise comments set out according to the Terms of Reference, and derived from the Appendices, from the literature on which those documents are based and (where such evidence is not available) from the personal opinion of the contributors to this submission.

We are happy to defend those comments point by point in any verbal submission.

“Health of our children: Wealth of our nation”
Health Committee Terms of Reference

1. “To update knowledge of what factors influence best childhood outcomes from before conception to 3 years, and what are significant barriers”.

1.1 Factors
Poverty, temperament and individual resilience, congenital or acquired disability, childhood experience of parents, parental education, age at parenthood, family size and composition, nutrition (both adult and child, and including breastfeeding), alcohol, tobacco, other drug use by parents / caregivers; housing, unsafe environments (unintentional injury), family violence, mental health, antenatal care, attachment, immunization, effective identification of (and provision of services to) “at risk” children and families.

1.2 Barriers
Lack of sufficient income and/or education, poor access to health services including contraception and sexual health advice; easy access to alcohol; food insecurity (inequitable access to affordable healthy food), failure to supplement flour with folic acid; continued exposure to tobacco smoke, poor housing stock and unaffordable housing (overcrowding); lack of availability of child restraints (car seats) to poor households; lack of parental leave; relative lack of mental health services (especially in maternal mental health) and services for those with problem drinking and substance use; lack of integration or comprehensive information-sharing between antenatal and postnatal health care (including mental health providers); fragmentation of healthcare delivery systems both antenatal and postnatal (including multiple incompatible software systems); failure of the Ministry of Health to include effective response to family violence among its “health targets”; limited training and workforce development in the health system with respect to family violence and child protection; failure to prioritize the needs of families and young children in healthcare funding. Failure to identify health targets for those at risk (such as prevention of recurrence in children who are identified as having been abused), to establish measures of success for those targets and to resource services to meet those targets.

2. “What practical improvements can be made to health, education, social and other services, targeted at the preconceptional period that will improve infant and child outcomes (including the maintenance of a healthy body weight)”.

Remove the barriers identified in 1.2. Some approaches need to be targeted (e.g., additional resources for low-income families or communities) while others involve population-based strategies and regulatory approaches (e.g., measures to increase the rate of reliable employment sufficient to cover living costs; increasing the minimum price of alcohol and taxes relating to alcohol; reducing exposure to television/media…). Environmental approaches need to consider implementation which gives priority to vulnerable and low-income communities (e.g. urban design, traffic and road planning, traffic calming measures, liquor outlet density).

One practical and eminently achievable target is a reduction in unintended pregnancy by the universal free availability of long-acting contraception (e.g. hormonal intra-uterine contraception devices, implanted hormonal contraception). This has proved acceptable in women of all ages in an Auckland study. This should also be offered to
women who are ineligible for tubal ligation or who are on a waiting list for tubal ligation. There are numerous reports of pregnancy while on such a waiting list.

One of the few home visiting programmes known to be effective in reducing the long-term risk of child abuse is that led by Dr David Olds (“nurse-led home visiting”). Home visiting occurred in the first two years of life, but benefits in reduction of child abuse were seen many years later and not just in the index child. A significant factor is thought to be the better spacing of subsequent pregnancies in those women who had received effective contraceptive advice and support through the visiting nurses.

3. “What practical improvements can be made to antenatal maternity services so that children ‘at risk’ of adverse health outcomes are identified early, monitored appropriately, and followed through to achieve best outcomes”.

Implement targets for initiation of antenatal care against which District Health Boards are measured. The Perinatal Morbidity and Mortality Review Committee recommends that women commence antenatal care before 10 weeks gestation.

Create a standardized healthcare record for pregnant women accessible to all healthcare providers at presentation, including those who provide postnatal care to the mother and child. Develop an approach to the issue of “at risk” children (including definition, thresholds for information sharing and forms of intervention) that is agreed between providers of antenatal and postnatal healthcare services, with which all funded providers are expected to comply, for which they are required to be trained according to a consistent training package and against which they are audited.

Adjust funding schedules to enable these outcomes to be achieved, recognizing that identification, monitoring and follow-up of such children and families is expensive, and requires a high level of professional training and supervision, excellent information-sharing and carefully thought-out systems and processes.

4. “What practical improvements can be made to post-natal services (including the interface between lead maternity caregiver, Plunket and primary care) to ensure best outcomes for children”.

The first visit of the well child postnatal provider should be made before the infant is 6 weeks old – ideally, prior to birth. Shared patient records (as noted above). Shared definitions and screening tools for children and families at risk across all providers of antenatal and postnatal services, including mental health services. Adequate funding of both antenatal and postnatal services to ensure that no pregnant woman or newborn baby drops out of the system because they failed to attend an appointment, or were not at home when the health visitor called. Active pursuit of engagement with the family until physical contact has taken place with the child to the frequency required, and ideally face-to-face handover to the subsequent healthcare provider.

This requires some kind of register of care. This is not currently in place and it is difficult to identify women who have little or no care. In Counties Manukau District Health Board this is around 5% of women.
The law requires registration of all births from 20 weeks gestation. One suggestion to consider would be that all publicly funded maternity services provided could be entered on a central register that forms a basis for a well child record beginning at 20 weeks gestation. This would be a good gestation to assign an NHI to the infant if this has not already been done.

Free, accessible after-hours primary health care for children under 6 years, especially for low income communities.

With respect to children specifically felt to be at risk of abuse and neglect, better integration with secondary services. This is to ensure that primary health care providers (lead maternity carers, Plunket or other well child providers, general practitioners and Public Health nurses) have ready access to training, support, advice and further assessment from other health professionals with expertise in the area of child abuse and neglect (see pages 6 and 7). At present, there is no comprehensive infrastructure within the health system for primary practitioners with such concerns.

5. “What, if any improvements can be made to the ‘well child’ services (especially hard to reach children)”.

As above. Consider a national home visiting program funded for up to 15% of families identified to be “at risk” for a variety of poor health outcomes, which is evidence-based, conducted according to rigorous and consistent standards, integrated with existing primary healthcare provision and resourced to deliver outcomes sought.

We note that the promotion of secure attachment and assessing a parent’s capacity for reflective functioning can play an important role in the prevention of child abuse and neglect. Addressing factors affecting hard to reach or at risk children such as transience, family violence, substance abuse and mental illness may not automatically improve the care of babies and children unless combined with work which explicitly aims to promote secure attachment, positive relationships and good parenting.

6. “What practical improvements or interventions can be made to achieve optimal outcomes for children from the 6 week post-natal periods to 3 years of life, with particular reference to health services but not excluding education, social, housing, justice and other determinants of health?”

Remove the barriers identified in 1.2.

We bullet-point two simple examples:

- A simple reduction in the availability of alcohol could have a profound impact on the lives of many children. Most members of the PSNZ are astonished and disappointed by the failure to implement a strong and comprehensive approach to alcohol reform as recommended by the Law Commission.
- Most members of the PSNZ are similarly perplexed by the failure to fortify flour with folic acid, a simple evidence-based manoeuvre.
Discussion of some issues related specifically to child abuse and neglect

Most families strive to do the best for their children within their available resources. It is important to recognize that the factors that may lead to a particular child being abused or neglected (where another child in a similar situation is not) are often highly complex, and cannot be reliably predicted by a simple analysis of ‘risk factors’.

New Zealand needs an integrated family policy and practice framework tailored around families’ needs, that bridges prevention and protection, health services and children’s services provided by other agencies (especially education services), maternity and child health services, adult and child health services and invests in meaningful research (for example, better to understand the factors that lead some abused children to re-victimise their own children, and others not to do so). Within the health system, all health professionals should recognise prevention and intervention as their responsibility and have the training, confidence and support to act decisively.

Children under the age of 3 years are the children most vulnerable to abuse, the children most likely to be scarred for life by the effects of poor attachment, neglect or physical abuse, and the children whose abuse or neglect is most likely to go unrecognized by health professionals. Many live within families with a constellation of risk factors (many of them identified in 1.1, above), but by no means all.

Children under 3 who are experiencing neglect or abuse are those in whom early intervention (if successful) will have the greatest lifelong effect. They are also the children where no or ineffective intervention is most likely to result in lifelong consequences enormously costly to themselves and to society. Therefore, successful intervention in this age group is likely to be cost-effective, if the Government of New Zealand is able to take a long-term view of the investment required.

The preamble to this inquiry states that “Many of New Zealand’s services are ‘reactive’ to abuse, or poor treatment of a child, that has already happened”. We accept that primary prevention of child abuse (before it happens) would be the ideal. We also accept that there are countries (Sweden and other Scandinavian countries being most often cited), where the incidence of child abuse appears to be much less than ours. That does not necessarily mean that the simple implementation of social and economic measures (some of which are listed above) will prevent child abuse. There is no doubt that such measures will have dramatic effects on the health and wellbeing of children (including those experiencing abuse or neglect), but they may not prevent child abuse. There is no certain evidence-based method for the “primary prevention” of child abuse and neglect.

Children who are already experiencing abuse or neglect are simply the group of children in our population who are at highest risk. The problem is not that so many services are ‘reactive’. It is entirely appropriate that we ‘react’ to those at highest risk.

The problem is that the reaction is often delayed, poorly informed, poorly co-ordinated, under-funded, delivered by staff who are not adequately trained and supervised and (finally) not adequately followed up over time.
We apply a series of band-aid solutions to our population at highest risk, and appear surprised when those band-aids fail to solve the underlying problems. We are averse to intensive, expensive, privacy-invading intervention in the antenatal period and the first three years of life, and as a result we often end up struggling with almost insoluble problems in adolescents who have been recognized to be at risk for their entire life.

If we as a society were able to make it unlikely that no abused or neglected child under 3, once identified, were ever abused or neglected again, we would make a profound difference to the impact of abuse and neglect on New Zealand society. This is an objective that the Government and the health system have never regarded as a “health target”, to the detriment of many children and young people.

The PSNZ has consistently suggested that the health system needs to invest much more proactively in child protection. One form of these suggestions was advanced in the child protection submission to the Tertiary Services Review (“Through The Eyes of a Child”) in 1998. These proposals were repeated in an updated form most recently in the 2008 submission entitled “The role of health services in child protection” (see Appendix Two), and are repeated here.

These proposals obviously do not address the role of education services, a profoundly important player in the recognition of and response to children and families at risk.

These proposals are perfectly in harmony with the concepts put forward through Whānau Ora. The issue here is not “the state” versus “the family”. It is whether the state will fulfil its responsibility to vulnerable children, by ensuring that the state-funded services which work in partnership with whānau do so to the highest standards of evidence and multi-disciplinary professional practice.

We owe the next generation no less.

**Specific Proposals (see “The role of health services in child protection”).**

- That every District Health Board in New Zealand establish a dedicated “Child Protection Team”. The resource required would vary according to population, and would require the development of a population-based formula. For some small District Health Boards, a regional team may be a more appropriate solution.

- Such a team will require the expertise of a Paediatrician, a nurse specialist, a social worker, the participation of child and adolescent mental health services and administrative support. In most cases clinicians involved will not be full-time in that role, and their integration into other aspects of District Health Board-based child and youth health services will be crucial to their ability to fulfil their roles.

- These teams will train and support primary and secondary healthcare providers in each DHB, develop safe child protection systems and processes within each DHB, work collaboratively with their colleagues regionally and nationally to ensure seamless and systematic national child protection processes, and collaborate in the research and audit necessary to develop evidence-based interventions.
• These teams will work in partnership with Child Youth and Family and the Police. This will include participation in Care and Protection Resource Panels, Case Conferences, Family Group Conferences and legal proceedings, as well as a commitment to the development of collaborative policies and processes. Co-location of these teams in Multi-Agency Centres with Police and Child Youth and Family adjacent to secondary healthcare services can significantly enhance this partnership, and should be considered in larger or regional centres.

• That the New Zealand legislation be amended to require the health and education systems to take some responsibility for child protection – as is the case, for example, in the United Kingdom. This would need to go hand-in-hand with amendment of the child protection legislation to require Child Youth and Family to work collaboratively with professionals in the health and education systems.

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**Relevant Documents**

Submission to the Social Services Select Committee re the Social Security (Youth Support and Work Focus) Amendment Bill from Professor Innes Asher, Department of Paediatrics: Child and Youth Health, University of Auckland, 13 April 2012


The role of health services in child protection. A submission from Dr Patrick Kelly to the Minister of Health, December 31 2008

Appendix One: The Role of Health Services in Child Protection

Child Protection in New Zealand

There is a significant incidence of child abuse and neglect in New Zealand. However, there is remarkably little local research to address the question: what interventions (if any) can reduce the incidence? Policy decisions in New Zealand have been guided by the international literature to some extent, but have more often been driven by public pressure to respond to (yet another) death of a child.

An example of New Zealand responses to international trends has been the investment in home visiting programs, largely based on a “strengths-based” model of practice. These were based on the Hawaii “Healthy Start” program, which in turn was derived from a significantly different model of nurse-led home visiting in Elmira, New York. Unfortunately, not all home visiting programs are equal, and careful analysis of the Hawaii program has shown that it does not prevent child abuse. One local program has been shown to have some effect in preventing child abuse, but is not representative of the way home visiting has generally been applied in New Zealand.

The evidence for the efficacy of many home visiting programs was aptly summarised by one author who commented that in the absence of hard data, “child abuse prevention programs and other psychosocial initiatives have been based more on advocacy, theory, weaker program evaluation designs, fashion, guesswork and hope”.

More recently, there has been a significant international movement to address family violence. The New Zealand government also has chosen to focus its efforts to prevent child abuse by tackling the issue of family violence – for example, the current social marketing campaign sponsored by the Ministry of Social Development. In addition, government has taken the view that prevention is better than cure, and has no doubt hoped that addressing wider issues affecting society (such as poverty, substance abuse, poor educational attainment, unemployment and social disadvantage), will have a beneficial downstream effect on child abuse. This remains to be seen.

It is important to note a common error in designing policy around child abuse and neglect. It is possible to distinguish between “primary” prevention (stopping abuse before it happens), and “secondary” prevention (stopping it after it has happened). The distinction becomes an error, if it is made in order to suggest that our efforts should focus on the former and not the latter. This is an error for several reasons:

1. There is very little evidence to date for the effectiveness of “primary prevention”. This is probably because most families do not abuse or neglect their children, so the effect of any population-based intervention is very difficult to assess. The same is true even in a “high risk” population. Many interventions directed at families “at risk” may have beneficial effects on a number of health outcomes, but may have no effect on child abuse statistics because even in many families “at risk”, there was never going to be an episode of serious child abuse or neglect.

2. Risk assessment in child protection is a notoriously unreliable science. The sole absolutely reliable risk factor for abuse, is abuse itself. The family most likely to abuse or neglect a child, is the family which has done so already. It is of the first
importance, that in cases where abuse and neglect is occurring, it is recognised and stopped. “Secondary prevention” is, in fact, merely a matter of identifying the population of infants and children who are at the very highest level of risk, and intervening appropriately. This is likely to be an extraordinarily cost-effective intervention, if done well, and done early in life. If we could ensure, that in every case where abuse and neglect is recognised, it is not allowed to re-occur, it is likely that we would have an enormous impact on the health of New Zealand.

3. At a practical level, the distinction is artificial. The professional who works with families to help them care for their children, must be also a professional who is able to recognise and respond to abuse and neglect when it occurs.

**Child Protection Services in New Zealand**

Child protection legislation in New Zealand is innovative and in some respects widely admired internationally. The legislation makes it clear that children and young people should remain within their families wherever possible, and seeks to empower the family to make the decisions necessary to keep the child safe.

However, it is clearly the perception of the New Zealand public that it is the role of the Department of Child, Youth and Family Services to intervene to keep children safe. Despite the fact that New Zealand deliberately chose not to implement mandatory reporting of suspected child maltreatment, notifications to the Department have increased from around 6000 per annum in 1988, to 120,000 in 2008.

The increase in notifications has overwhelmed Child Youth and Family, but has had no effect on the rates of serious child abuse. The response has been to seek to divert many of these notifications to alternative (usually non-governmental) organisations, on the premise that most do not require statutory intervention.

**The Role of Health Services in Child Protection**

One approach not taken in New Zealand, is to enrol professionals other than Child Youth and Family and the Police as the “front-line” in child protection. This is remarkable, given that large publicly-funded professional services, particularly in health and education, are already functioning in the zone that lies between the extended family (the true home of child protection) and the “statutory authorities”.

While lip-service has been paid to the role of health and education in child protection, it has focused only on the provision of information to the statutory authorities. As a consequence, health professionals as a group have been able to avoid taking responsibility for child protection. Unlike some other countries (such as the United Kingdom), no legislation in New Zealand (whether health or child protection) requires health professionals to shoulder some of the responsibility for keeping children safe.

The focus of this paper is on the potential role that health services could play, particularly in the protection of infants and young children from abuse and neglect. The salient facts are as follows:

- Most serious abuse and neglect occurs in children under 3. Recognising it requires skill and vigilance, depending as it does on the interpretation of patterns of
growth, physical injury and infant and child behaviour. It cannot depend on verbal or written statements, as the victims are too young to interview, and those responsible for the neglect or abuse are highly unlikely to volunteer the truth.

- The long-term consequences in this age-group are particularly severe. Abusive head injury is not rare, the mortality and morbidity is high, and the numbers diagnosed are almost certainly only the tip of an iceberg. Even apart from direct physical injury, the emotional environment in the early years is crucial to the development of stable and secure children and adults. Much adolescent and adult failure and criminality can be traced back to infant and childhood experience.

- Many children eventually diagnosed with abusive injuries are found to have been injured before, and have often been seen by health providers who did not realise the significance of earlier symptoms. Appropriate health provider training and supervision could have a significant effect in the prevention of serious abuse.

- Most infants and children diagnosed with serious abuse are not known to Child Youth and Family at the time their abuse is first recognised (although their extended families may well be). It may therefore be impossible for the statutory authorities, in many cases, to prevent that abuse.

- In contrast, all children born in New Zealand are known to a health practitioner – if one includes lead maternity carers and all primary healthcare providers. If there is any possibility for early intervention, health practitioners are a key to it.

- There are many more health professionals in New Zealand with expertise in the care of children and young people, than there are Child Youth and Family social workers. A conservative estimate suggests that there are at least 11,000 such health providers, in comparison to less than 1000 statutory social workers.

- The health system will remain engaged with children and families, through one provider or another, long after the statutory authorities have closed the file.

- There is an extremely low rate of notification from many healthcare providers to statutory authorities. Many have limited experience of child protection processes and distrust the statutory authorities. For many healthcare providers, there is no infrastructure of advice and support within the health system to guide them in making decisions about what to do when they suspect abuse and neglect.

- Child health professionals have the necessary background to assess and interpret child health and behaviour, but have minimal training and support in the recognition and management of child abuse and neglect. With such training and support, they could become a very competent child protection workforce.

It is also important to note that health professionals, like most people, become energised by issues they are required to address in daily practice. In most parts of New Zealand, there are few health professionals with time dedicated to child protection, and initiatives are driven by committed individuals working in isolation.

The consequences of the disengagement of the health system from child protection are many. They include poor clinical practice and outcomes, failure to learn from those outcomes, inadequate health data, failure to share information between health
providers, failure to develop good systems and processes, failure to engage with statutory child protection processes, and failure to research either the problem or the possible solutions. Despite the mortality and morbidity, child abuse has received almost none of the attention that health researchers have devoted to other conditions.

A simple analysis of the numbers of children notified to Child Youth and Family throughout New Zealand, broken down according to the population base in each District Health Board, makes it very clear that (within those numbers alone) there is more than enough clinical work to justify the specific allocation of DHB resources to child protection. Even if every child under 2 notified to Child Youth and Family were seen promptly by a Paediatrician, there would be a significant clinical workload.

The Violence Intervention Program (VIP), with a funded network of Family Violence Co-ordinators, has shown how much can be achieved with a relatively small investment, but it is only a beginning. The development of dedicated clinical child protection resources within District Health Boards would provide the nucleus from which a much more integrated and systematic local and national program of training, support, intervention, inter-agency collaboration and research could grow. The Paediatric Society of New Zealand already has a primitive national child protection network which could provide a framework for further development.

Specific Proposals

- That every District Health Board in New Zealand establish a dedicated “Child Protection Team”. The resource required would vary according to population, and would require the development of a population-based formula. For some small DHBs, a regional team may be a more appropriate solution.

- Such a team will require the expertise of a Paediatrician, a nurse specialist, a social worker, the participation of child and adolescent mental health services and administrative support. In most cases clinicians involved will not be full-time in that role, and their integration into other aspects of DHB-based child and youth health services will be crucial to their ability to fulfil their roles.

- These teams will train and support primary and secondary healthcare providers in each DHB, develop safe child protection systems and processes within each DHB, work collaboratively with their colleagues regionally and nationally to ensure seamless and systematic national child protection processes, and collaborate in the research and audit necessary to develop evidence-based interventions.

- These teams will work in partnership with Child Youth and Family and the Police. This will include participation in Care and Protection Resource Panels, Case Conferences, Family Group Conferences and legal proceedings, as well as a commitment to the development of collaborative policies and processes.

- That the New Zealand legislation be amended to require the health system to take some responsibility for child protection – as is the case, for example, in the United Kingdom. This would need to go hand-in-hand with amendment of the child protection legislation to require Child Youth and Family to work collaboratively with health professionals engaged in child protection.
Appendix Two: Antenatal and Postnatal Services

1. The fetus at risk
The prevention of child abuse and neglect begins in utero. It is increasingly being recognised that the fetus can be damaged in a number of ways that are very preventable. This injury to the central nervous system may predispose the newborn to sudden infant death and may also result in long-term behavioural effects in later childhood that place the child at increased risk of maltreatment.

1.1. Exposure to smoking: Exposure to cigarette smoking in utero is associated with increased risks of placental abruption, fetal growth restriction and increased risk of stillbirth. There is also an increased risk of infant mortality and in particular sudden infant death. Antenatal smoking also affects lung development. Parents who continue to expose the fetus and young infant to cigarette smoking are failing to provide an appropriate environment for their child.

1.2. Exposure to alcohol: Fetal alcohol syndrome disorder (FASD) can occur after exposure to alcohol in pregnancy. Effects in the affected child include growth retardation, structural brain disorders and developmental delay. Children with FASD and attention deficit hyperactivity disorder (ADHD) are more likely than children with ADHD alone to have increased whole brain cortical thickness. This is likely to be an expression of immature brain development. Exposure of the fetus to heavy alcohol consumption pregnancy is associated with an increased risk of cerebral palsy.

1.3. Exposure to non-prescription drugs: Use of cannabis in pregnancy is associated with an increased risk of low birth weight, preterm labour and admission to neonatal intensive care after birth. The use of opioids in pregnancy has been associated with an increased risk of stillbirth, prematurity, neonatal abstinence syndrome and sudden infant death syndrome and the use of methamphetamine in pregnancy has been associated with fetal growth restriction.

1.4. Exposure to violence: Exposure to violence in pregnancy is associated with adverse fetal outcomes. This includes increased risk of preterm delivery, antepartum haemorrhage, intrauterine growth restriction and perinatal death. Bilateral subdural haematomas have been reported in an infant in relation to maternal physical assault indicating that the infant can sustain direct damage during a physical assault during pregnancy as well as being affected indirectly through effects on placental function.

1.5. Exposure to stress: There is increasing evidence that exposure to stress in pregnancy is associated with developmental delay in early infancy. The mechanisms are unknown but may include effects on placental blood flow mediated by maternal stress hormone responses.

1.6. Antenatal psychosocial risk: A systematic review of the available literature found that child abuse and abuse of the mother by her partner were most strongly correlated with a history of lack of support, recent life-stressors, psychiatric disturbance in the mother and unwanted pregnancy.
2. The newborn at risk

Unless social work and child protection services within the home DHB have been alerted to the at-risk fetus, infants born at term after a normal delivery may be discharged home very quickly after delivery making it difficult for appropriate risk assessments to be undertaken. This places the burden on the LMC to make any risk assessment in regard to the vulnerability of the infant. Sometimes the mother has not had a robust relationship with an LMC and has presented late in pregnancy with little antenatal care.

2.1. Breast-feeding: Breast-feeding should always be encouraged. Breast-feeding appears to be protective for maternal child maltreatment.\textsuperscript{14} It is hypothesised that this effect is the result of the positive maternal effects of oxytocin.

2.2. Prevention of shaken-baby syndrome: The early newborn period is an important time to educate parents about maltreatment risk and in particular the risk of shaken baby syndrome. Education of parents can improve their knowledge about infant crying and the risk of shaking a baby in frustration and therefore prevent child abuse head trauma.\textsuperscript{15,16,17}

2.3. Sudden infant death newborn period: Around 90\% of infants who die suddenly and unexpectedly in the first month of life are found in a co-sleeping or bed-sharing situation at the time of death.\textsuperscript{18} In many cases babies have been regularly cared for in a non-recommended sleep situation despite having an increased risk of sudden infant death because of exposure to maternal smoking in pregnancy.

2.4. Maternal and Paternal mental health: Mood disturbance in pregnancy has persisting effects on sleep problems in early childhood.\textsuperscript{19} There is some evidence that paternal depressive symptoms during pregnancy may also be associated with excessive infant crying in the first months of life.\textsuperscript{20} Providing information to mothers about normal sleep patterns and management of sleep for infants improves maternal mental health.\textsuperscript{21}

2.5. Exposure to family violence: Infants who live with mothers who disclose intimate partner violence are less likely to be engaged with a regular primary care provider and complete regular well child visits and immunisations.\textsuperscript{22} Also infants as young as one-year of age exhibit trauma symptoms after exposure to family violence.\textsuperscript{23} Exposure to family violence also ameliorates the beneficial effect of nurse visitation programmes for the prevention of maltreatment.\textsuperscript{24}

2.6. Risk of re-abuse in the first year of life: The risk of re-abuse after presentation in the first year of life is high. A cohort of 69 physically abused infants under a year of age was followed in the UK for three years.\textsuperscript{25} Five died from the abuse, 14 were permanently removed from the home and one was lost to follow-up. Of the 49 returned home 15 (31\%) were re-abused.

Summary

Infants born to socially disadvantaged and dysfunctional families are at increased risk of perinatal death and central nervous system damage at birth because exposure to drugs, alcohol, violence and stress during pregnancy can have irreversible effects on brain structure and function during development. This sets these infants up to be more
vulnerable to maltreatment. Also they have a higher risk of sudden death in unsafe sleep situations and their caregivers appear to be more likely to sleep their infants in unsafe sleep positions.

Infants born to mothers and fathers with mental health issues, and in particular depression are at risk of poor attachment and neglect. They are also at risk because their caregivers may not being able to manage normal variations in infant behavior such as persistent infant crying. There is some evidence that a self perpetuating cycle will exist where infants of depressed and stressed parents are more likely to have sleep problems and excessive crying in early infancy while their caregivers are in turn less resilient to the stress of managing these behaviours and also less likely to have access to the support that will help to educate them about how to manage the behaviours.

**Recommendations**

1. In the context of child abuse and neglect the fetus must be recognised as being entitled to care and protection in the same way that the law is applied to children and young persons.
2. There should to be ongoing education of LMCs about the assessment of fetal risk in the context of family violence, abuse and neglect
3. Screening for family violence and other risk factors for later child abuse must be considered a standard of pregnancy care
4. The mental health of both mothers and fathers should be assessed during pregnancy and referral made to appropriately resourced and expert perinatal mental health services
5. DHBs need to be supported to provide targeted multidisciplinary outreach pregnancy services for women living lifestyles that pose a high risk to their fetus.
6. Efforts should be made to improve breast feeding rates for infants born into families with a high risk for child abuse and neglect.
7. All new parents must receive education about infant sleep patterns, crying, risks of shaking, safe sleeping situations and risks for sudden infant death syndrome
8. Efforts must be made to ensure that all infants and their caregivers get access to free primary care services in the first years of life.

Associate Professor Dawn Elder
May 3, 2012

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Appendix Three: Prevention of child trauma from unintentional causes

1. To update knowledge of what factors influence best childhood outcomes from before conception to 3 years, and what are significant barriers.

Child injury from unintentional causes has been identified as an important health issue in both MSD and Ministry of Health Briefings for Incoming Ministers (NZ Government 2011). Outside the perinatal period; injury is the leading cause of mortality for New Zealand children aged 0-14 years, with transport related incidents (children injured as pedestrians, cyclists and car passengers) being the leading cause of injury related death (Craig et al 2007).

New Zealand children in lower socioeconomic communities have almost twice the risk (RR of 1.88 to 1.00) of hospitalisation for unintentional injury than those in higher socioeconomic communities (Craig et al 2007).

There has been a traditional separation of child protection services (intentional abuse) from those offering advice for the prevention of unintentional injury (accidents). This separation does not reflect the fact that risk factors for both are often the same. Schneiderman (2010) reports that “Over ten percent of children who remained at home after a maltreatment investigation... reported a serious injury that required medical attention during the subsequent 15-month period...Children who had a chronic illness or had a caregiver with depression were at highest risk for an injury. Children with caregivers who were older had lower risk of a reported injury when compared to children with younger caregivers.”

Child restraints are recommended to reduce the incidence of injury and death of child passengers up to the age of twelve. The correct use of child restraints within New Zealand has been reported to be as low as 40% of vehicles checked (Cameron 2006).

Best practice guidelines for improving the use of restraints identify that improving parental knowledge and availability, accessibility, cost and ease of use of child passenger restraints will impact their uptake. In New Zealand this could be coupled with supplying high risk families with better access to child car restraint products. ‘Public awareness’ campaigns on their own are least effective and the provision of ‘free’ products are not associated with improved outcomes (Turner 2005, MacKay 2006).

From 2003 to 2008 ACC provided approximately 1,000 child car seats a year for distribution to low income families through child restraint rental outlets. This minimal expenditure was stopped in 2008 with an announcement that “most good things come to an end...” (Plunket 2008). No equivalent source of child restraint supply exists nationally for low income families.

References
New Zealand Government Briefing to the Incoming Minister: Ministry of Health 2011

New Zealand Government Briefing to the Incoming Minister: Ministry of Social Development 2011


Royal New Zealand Plunket Society Newsletter “ACC Thinksafe Restraint programme for low income families update” 2008

6. What practical improvements or interventions can be made to achieve optimal outcomes for children from the 6 week post-natal periods to 3 years of life, with particular reference to health services but not excluding education, social, housing, justice and other determinants of health?

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From 2003 to 2008 the Accident Compensation Corporation provided approximately 1,000 child car seats a year for distribution to low income families through child restraint rental outlets. This minimal expenditure was stopped in 2008 with an announcement that “most good things come to an end...” (Plunket 2008). No equivalent source of child restraint supply exists nationally for low income families.

Some good things start up and can continue. A New Zealand Transport Agency website established in 2011 provides access to local child restraint technical advice and coupled with the Retail Association Unit Standards for becoming a child restraint technician, fulfils many of the best practice criteria identified. http://www.nzta.govt.nz/traffic/students-parents/child-restraints-technician-list.html

This initiative represents a start for best practice delivery and collaboration with commercial and community agencies. The adoption and active use of this programme within Social Agencies and Health Providers, such as District Health Boards would achieve improved restraint use and better child health outcomes.

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