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on Family and Community Affairs

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Submission to:

**The inquiry into  
Improving children's health and well being**

**Led by the Minister for Children and Youth Affairs,  
the Hon. Mr Larry Anthony**

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Consistent with Women's and Children's Hospital's role as a statewide health service this response will focus on the following terms of reference:

- What is needed most to strengthen family relationships, parenting skills and confidence?
- What are the gaps in existing services for children and parents? How could tiers of government and the non-government sector work more effectively to enhance service coverage and delivery?
- What additional effort is required to meet the needs of Indigenous children, children from diverse cultural backgrounds, children with disabilities, children in jobless families, children known to be 'at risk' and children in foster care?
- What national goals and targets for improving the health and well being of children and families could be developed to measure progress?

## **1. The pre-birth period**

The health, well being and lifestyle of a mother prior to and during pregnancy can influence a child's growth, development and health in utero, with consequences for health and well-being during childhood and adult life. There are a number of key factors that impinge upon healthy birth outcomes. While some of these factors are not readily amenable to intervention, such as genetic and hereditary factors as well as some socio-environmental factors, there are modifiable risks where action can be taken to improve the quality of birth outcomes. These include folic acid, avoiding alcohol, smoking cessation, maternal nutrition, and accessible ante-natal care.

### **Folate**

There is clear evidence that taking a low dose of folic acid before conception and in early pregnancy can reduce by 70% a woman's chance of having a baby with a neural tube defect such as spina bifida.<sup>1, 2</sup>

Research following the Folate Before Pregnancy campaign in SA in 1994-95 showed an increase in knowledge about folate among health professionals and women of reproductive age, and an increase in the proportion of women taking folic acid supplements in the periconceptional period.<sup>3</sup> It also showed a significant reduction in the total prevalence of neural tube defects; prevalence declined by 21% in the 3 years following the campaign, and by 43% by 1999.

The figures for 2000 indicate that, while rates of neural tube defects continue to be relatively low compared to the baseline (pre 1994), they are higher than for 1999.<sup>4</sup> This highlights the need to maintain and increase the existing level of folate awareness among women, as well as to target those who are least likely to be taking folate, that is women whose pregnancies are unplanned, young women, women of low SES or low education level.

*Actions:* Expand folate before pregnancy promotion programs, consider subsidising folic acid supplements for low income women, and investigate adequate folate fortification in foods.

## **Alcohol**

Alcohol use during pregnancy is emerging as an important risk factor for a range of neuro-developmental problems in children. Some sources have identified Fetal Alcohol Syndrome as the most common non-hereditary cause of mental retardation in western countries.<sup>5</sup> The data for Australia on the use of alcohol during pregnancy is poor. Some experts suggest that there is no safe level of alcohol use in pregnancy, whilst others suggest that consuming up to two standard drinks daily is acceptable. All agree that excessive alcohol consumption during pregnancy is harmful.

The risk of alcohol consumption during pregnancy has received considerable attention within prevention programs within Canada and the United States.

*Actions:* Develop clear Australian guidelines on alcohol in pregnancy, develop community awareness programs promoting no alcohol or safe drinking among pregnant women, and tackle excessive drinking among high need women including Indigenous women.

## **Tobacco**

Smoking during pregnancy is a clear risk factor for adverse birth outcomes. The Pregnancy Outcome Report for South Australia 1999 indicated that 23% of women reported to be smokers at their first antenatal visit, with 5% having quit before their first visit. By the second half of their pregnancy at least 21% reported to be smokers. For Aboriginal women 56% reported to be smokers at their first visit and at least 47% in the second half of the pregnancy.<sup>6</sup>

*Actions:* Expand smoking cessation programs for pregnant women and their partners. Offer subsidised Nicotine Replacement Therapy to partners of pregnant women.

## **Maternal nutrition**

Inadequate nutrition during pregnancy can cause disruption and curtailment of growth in utero. For example, a diet low in micronutrients, if combined with smoking and low levels of physical activity before and during pregnancy, affects the health of the mother and infant over both the short and long term. The nutritional status of the mother influences foetal growth and birth weight. Infants with both high and low birth weight may be at increased risk of chronic disease as adults.<sup>7</sup> Low birth weight infants are also at risk of neuro-developmental problems which can impact learning and psychosocial adjustment in future life.<sup>8</sup>

Food insecurity affects up to 23% in some high risk population groups in Australia and is endemic in some remote Aboriginal communities<sup>9</sup>. Food assistance programs incorporating nutrition education and food vouchers in the US have demonstrated improved birth weight, reduction in low birth weight babies, prematurity and improved maternal haemoglobin levels and nutrient intakes<sup>10</sup>.

*Actions:* Develop community programs which support pregnant women to maximise pregnancy outcomes. Investigate effective means of delivering comprehensive food assistance (nutrition information and extra money/vouchers for food) to 'at risk' pregnant women.

### **Accessible antenatal care**

Inadequate antenatal care is considered to be a risk factor for poor birth outcomes. Aboriginal women, teenage women and others from disadvantaged groups attend fewer antenatal visits, and are more likely to be economically disadvantaged and lack information and support<sup>11</sup>. This is of concern given that these groups of women are at greater risk of poor birth outcomes. For example, Aboriginal women had a perinatal mortality rate of 20/1,000 births as compared to 8 for non-Aboriginal women. 24% of Aboriginal pregnancies were in teenagers compared to 5% of non-Aboriginal pregnancies and 40% of Aboriginal pregnancies had inadequate antenatal care compared to 7% of non-Aboriginal women.<sup>12</sup>

Other potentially modifiable factors associated with poorer pregnancy outcomes include poverty, living with a violent partner, stress and factors associated with working such as amount and type of work and workplace conditions.

*Actions:* Expand alternative models of community based antenatal care targeting disadvantaged women. Expand community services and programs in areas of need.

## **2. Early childhood**

It is now well recognised that investments in parenting and early life have beneficial effects not only on health and wellbeing in adult life, but also on the future functioning of a community.

### **F a m i l y s u p p o r t**

Early intervention for families with babies and preschoolers that are at risk from poverty, relationship breakdown and poor parenting styles is acknowledged as a cost-effective strategy for the prevention of crime, child abuse and substance abuse.<sup>13</sup> In particular, early intervention programs, offering support to new parents in the first years of their child's lives are suggested as an effective primary prevention strategy.<sup>14</sup>

Reviews of parenting and early intervention programs highlight programs that both target the most vulnerable families yet offer a universal parenting service thus avoiding stigma associated with poor parenting are the most promising.<sup>15</sup> For example, programs that target all new parents in a high need geographical area, avoiding direct association with 'poor' parenting.

Whilst home visiting has been shown to be an effective and popular strategy to reach isolated families<sup>16</sup>, a knowledge of communities and social capital suggests that there is also a need to strengthen social networks and supports among young families.

*Actions:* Expand programs targeting disadvantaged localities that:

- strengthen social networks among families & reconnect families to the community
- develop parents' relationships with the child, skills and confidence
- foster children's early development and learning.

The United Kingdom Sure Start Program is an example of a comprehensive targeted program.

### **Early childhood settings**

The settings approach to improving health and wellbeing is well established in programs such as healthy cities and health promoting schools. Settings interventions have the scope to influence large numbers of people, in the everyday environments in which people interact. Settings approaches can also be an effective way of reaching people who do not access health or welfare services. Health and welfare agencies can provide services within childhood settings and also support early childhood services workers to provide a 'healthier' service (eg healthy menus in long day child care).

*Actions:* Use existing childhood settings as the 'hub' for parent support, early literacy, and family skills interventions. Effective inter-sectoral coordination is necessary for such programs.

### **Breastfeeding**

Breastfeeding protects against infectious disease and childhood malnutrition. There is evidence that breastfeeding may provide protection against heart disease, cancer, type 2 diabetes and asthma. Breastfeeding rates remain well below the National Breastfeeding target of 80% of all infants to be at least partially breastfed at 6 months by the year 2000. Exclusive breastfeeding for 6 months rather than 3-4 months has been shown to have benefits including fewer gastro-intestinal infections for the baby and reduced return to fertility and increased weight loss for the mother. Social and personal barriers to initiating and continuing breastfeeding include returning to work and women's body image. Urban Indigenous, low income and teenage mothers have lower rates of breastfeeding. Extra support to mothers as part of health service provision has been found to increase breastfeeding rates and have beneficial health outcomes for babies<sup>17</sup>

*Actions:* Expand alternative models of community based antenatal care targeting disadvantaged women. Provide extra support to mothers post-natally to continue breastfeeding. Encourage breastfeeding friendly workplaces and community spaces.

### **Other important health issues in early childhood**

Research evidence suggests that the following are not only responsible for significant variations in health outcomes but are also amenable to effective interventions:

- Early childhood nutrition (see also under obesity below)
- Childhood injury prevention.

### 3. School aged children

#### **Obesity prevention**

Between 1985 and 1995, levels of overweight amongst 7-15 year old boys increased from 9.3% to 15.3% and girls from 10.6% to 16.0%. Obesity levels increased by even more: 1.4% prevalence in boys and 1.2% in girls in 1985 to 4.7% in boys and 5.5% in girls<sup>19</sup>. A recent review of the evidence found that treatment of childhood obesity remains ineffective. Preventive approaches show more promise. The evidence suggests that prevention requires policy changes involving school and early years settings, the home, urban planning practices, marketing and media to increase children's physical activity levels, reduce intake of high energy density foods and reduce television viewing time<sup>20</sup>.

Dietary intakes in 2-18 year olds are well short of National Goals and Targets: the 1995 National Dietary Survey showed that one quarter of children did not eat fruit and one fifth did not eat vegetables on the day of survey<sup>21</sup>. Going without breakfast is an indicator of poor nutrition and occurs for 6% of 2-11 year olds and 20% of 12-15 year olds. While the majority of children are physically active, the significant minority who are not (around one fifth) are probably also overweight or at high risk of overweight<sup>22</sup>.

Children born and living in disadvantaged families are likely to experience worse health in childhood and in later life. Obesity levels are higher in disadvantaged children<sup>23</sup>.

There are a number of good examples of effective cross sector work within South Australia, including the health promoting schools partnership between education and health agencies and the SA Child Care Nutrition Partnership between education, health, child care and parenting agencies.

*Actions:* Undertake and evaluate cross sectoral work with schools, early childhood services, planning authorities and the media to investigate policy changes which can effectively increase children's physical activity levels, improve dietary quality and reduce television viewing time.

#### **Food insecurity**

Food insecurity (running out of food and not having enough money to buy more) is highest among disadvantaged populations (remote Aboriginal communities, rental, unemployed and single parent households). Poorer child health outcomes in Australian disadvantaged groups including poor dental health, hospitalisations and behavioural disorders have all been associated with food insecurity.

*Actions:* Address issues of socio-economic disadvantage including cost of healthy food, transport issues, access to healthy food in geographically isolated areas. Ensure welfare benefits are adequate to purchase a healthy family diet.

## **4. Adolescents**

### **Mental health**

Fourteen percent of children and adolescents have mental health problems<sup>24</sup>. The WHO predicts that one of the greatest health burdens by 2020 will be depression. Australia's overall suicide rate is average when compared to other countries, however Australia has a very high rate of youth suicide.

There is strong association between youth mental health problems and problems experienced in infancy or childhood. Therefore the need for systematic prevention programs being funded throughout Australia is essential. The National Action Plan for Promotion, Prevention and Early Intervention for Mental Health 2000 provides an excellent developmental perspective on evidence based prevention programs that should be initiated. There has been a patchy implementation of these prevention programs across Australia, despite evidence of their effectiveness.

In general consumer consultation mechanisms in mental health have been geared to adult consumers. It is essential that processes be established to ensure that the voice of young people is heard in the development of mental health programs for this population. The Mental Health Council of Australia has been contracted by the Commonwealth to obtain stakeholder feedback on the development of a Third National Mental Health Plan. They enlisted the assistance of the Australian Infant, Child Adolescent and Family Mental Health Association (AICAFMHA) to ensure the views of young people were taken into account in the development of the Plan. The Council is to be commended for its inclusiveness on actively seeking young mental health consumers' feedback.

*Actions:* Implement evidence based mental health prevention programs for young people, starting in early childhood. Ensure young people are included in the development, implementation and evaluation of programs

## **5. Other**

### **Targets and goals**

The UK Sure Start program for families with children and the UK Health Improvement Plans (HIMPs) provide examples of coordinated, target driven programs delivered in communities.<sup>25, 26</sup>

### **Working with disadvantaged families and Aboriginal communities**

There is evidence that peer support programs based on accredited training, employment, and structured support are beneficial in working with long term disadvantage in communities<sup>27</sup>. This approach may be particularly beneficial working with Aboriginal communities, particularly in rural/remote areas where worker recruitment is a challenge.

## **6. Conclusions**

Based on international evidence<sup>28,29</sup> programs in the following areas require strengthening and expansion:

- Programs that target pregnancy and the early years of childhood;
- Programs that support families with young children living in poverty;
- Programs that address social and health inequities, including those related to lifestyle differences;
- Strategies that build settings and environments that support children's health and wellbeing, including health promoting schools and health promoting childcare settings;
- Intersectoral programs that seek to address the underlying determinants of health and wellbeing.

Programs that are developed should have a long-term time frame, secure funding and well developed evaluation. Too often the most disadvantaged families are vulnerable to short term funded programs that are not allowed adequate time to be properly utilised, developed or evaluated.



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<sup>1</sup> MRC Vitamin Study Research Group. Prevention of neural tube defects: Results of the Medical Research Council Vitamin Study, *Lancet* 1991; 338: 131-137.

<sup>2</sup> Czeizel A, Dudas I, Prevention of first occurrence of neural tube defects by periconceptional vitamin supplementation, *N Engl J Med* 1992; 327: 1832-1835.

<sup>3</sup> Chan A, Pickering J, Haan E, Netting M, Burford A, Johnson A, Keane R. Folate Before Pregnancy: The impact on women and health professionals of a population-based health promotion campaign in South Australia. *Medical Journal of Australia* 2001 in press.

<sup>4</sup> Information supplied by South Australian Pregnancy Outcome Unit, Department of Human Services.

<sup>5</sup> Stratton K, Howe C, Battaglia F (Eds). *Fetal Alcohol Syndrome: Diagnosis, Epidemiology, Prevention and Treatment*. Washington, DC: National Academy Press; 1996.

<sup>6</sup> Pregnancy Outcome Unit, *Pregnancy Outcomes in South Australia 1999*, Epidemiology Branch, Department of Human Services, Nov 1999.

<sup>7</sup> National Public Health Partnership. *Eat Well Australia: An agenda for action for public health nutrition, 2000-2010*. <http://hna.ffh.vic.gov.au/nphp/signal/>

<sup>8</sup> McCain M, Mustard J. *Reversing the real brain drain: early years study, final report*. Toronto: Ontario Children's Secretariat; 1999.

<sup>9</sup> Booth S, Smith A. Food security and poverty in Australia - challenges for dietitians. *Australian Journal of Nutrition and Dietetics* 2001; 58: 150-6.

<sup>10</sup> Basiotis P, Kramer-LeBlanc C, Kennedy E. Maintaining nutritional security and diet quality: the role of the food stamp program and WIC. *Family Economics and Nutrition Review* 1998; 4: 1-11.

<sup>11</sup> *Family Facts for South Australia*, Department of Human Services. Adelaide, 2000.

<sup>12</sup> *ibid*

<sup>13</sup> National Crime Prevention. *Pathways to prevention: Developmental and early intervention approaches to crime in Australia*. Canberra, Attorney-General's Department, 1999.

<sup>14</sup> Tomison AD and Wise S. Community-based approaches in preventing child maltreatment. *Issues in Child Abuse Prevention*, 1999: Number 11.

<sup>15</sup> Vimpani G, Frederico M, Barclay L and Davis, C. *An Audit of Home Visitor Programs and the Development of an Evaluation Framework*. Canberra, AGPS, 1996.

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<sup>16</sup> Olds D, Henderson CR, Cole R et al. Longterm effects of nurse home visitation on children's criminal and antisocial behaviour: 15 year follow up of a randomised control trial. *JAMA*, 1998;280 1238-1244.

<sup>17</sup> National Public Health Partnership, *ibid*

<sup>18</sup> Cochrane Collaboration Consumer Network. Support for breastfeeding mothers; Exclusive breastfeeding for six months does not slow a baby's growth, but reduces gastrointestinal infections, delays return to fertility and helps the mother lose weight. [www.cochraneconsumer.com](http://www.cochraneconsumer.com)

<sup>19</sup> Magarey AM, Daniels LA, Boulton TJC. Prevalence of overweight and obesity in Australian Children: reassessment of 1985 and 1995 data against new standard international definitions. *Medical Journal of Australia*: 174: 561-64; 2001.

<sup>20</sup> Ebbeling, CB, Pawlak DB, Ludwig DS. Childhood obesity: public health crisis, common sense cure. *Lancet* 360: 473-82; 2002.

<sup>21</sup> Magarey A, Daniels L, Smith AM. Fruit and vegetable intakes of Australians aged 2-18 years: an evaluation of the 1995 National Nutrition Survey data. *Aust NZ Journal of Public Health*. 2000; 25: 155-61.

<sup>22</sup> Australian Institute of Health and Welfare. *Australia's children: their health and well being, 2002*. Canberra: AIHW; 2002

<sup>23</sup> *ibid*

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<sup>25</sup> [www.surestart.gov.uk](http://www.surestart.gov.uk)

<sup>26</sup> [www.doh.gov.uk](http://www.doh.gov.uk)

<sup>27</sup> Anliker J, Damron D, Ballestros M, Feldman R, Langenburg P, Havas S. Using peer educators in nutrition intervention research; lessons learned from the Maryland WIC 5 a day promotion program. *Journal of Nutrition Education* 1999; 31: 347-354.

<sup>28</sup> Acheson, D *Independent Inquiry into Inequalities in Health*. London, United Kingdom, The Stationery Office, 1998.

<sup>29</sup> World Health Organisation. *The Social Determinants of Health: The Solid Facts*, WHO Regional Office for Europe Copenhagen, 2000.