



FEEDING OUR FUTURE

ABORIGINAL EARLY CHILDHOOD NUTRITION &
PHYSICAL ACTIVITY NEEDS ASSESSMENT REPORT



VACCHO



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List of Acronyms

ABA	Australian Breastfeeding Association
ABS	Australian Bureau of Statistics
ACCHO	Aboriginal Community Controlled Health Organisation
AHPACC	Aboriginal Health Promotion and Chronic Care
ANFPP	Australian Nurse Family Partnership Program
COAG	Council of Australian Governments
CCOPMM	Consultative Council on Obstetric and Paediatric Mortality and Morbidity
DEECD	Department of Education and Early Childhood Development
DEEWR	Department of Education, Employment and Workplace Relations
DH	Department of Health
DHS	Department of Human Services
FaHCSIA	Families, Housing, Community Services and Indigenous Affairs
IHS	In home Support
KMS	Koori Maternity Services
MACS	Multifunctional Aboriginal Children's Services
MCH	Maternal and Child Health
MCRI	Murdoch Childrens Research Institute
NCAC	National Childcare Accreditation Council
NHMRC	National Health and Medical Research Council
OATSIH	Office of Aboriginal and Torres Strait Islander Health
PCM	Prevention Community Model
RCH	Royal Children's Hospital, Melbourne
SNAICC	Secretariat of National Aboriginal and Islander Child Care
VACCA	Victorian Aboriginal Child Care Agency
VACCHO	Victorian Aboriginal Community Controlled Health Organisation
VACSAL	Victorian Aboriginal Community Services Association Limited
VAEAI	Victorian Aboriginal Education Association Incorporated
VAHS	Victorian Aboriginal Health Service
WHO	World Health Organisation



Executive Summary

This report, presented by the Victorian Aboriginal Community Controlled Health Organisation (VACCHO), contains the findings from a needs assessment of early childhood practitioners working in Aboriginal services and settings to promote nutrition and physical activity for children aged 0-8 years.

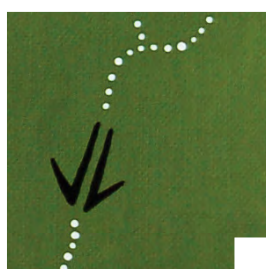
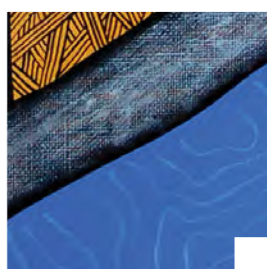
A new partnership between VACCHO and the Nutrition Department at The Royal Children's Hospital (RCH), with small grant funding from the Murdoch Childrens Research Institute and the Department of Health, has provided the opportunity to consult with Aboriginal families and practitioners.

The needs assessment examined:

- the current level of nutrition and physical activity content within Aboriginal health and children's services in Victoria;
- nutrition and physical activity needs of parents with young children;
- training and resource needs of early childhood practitioners; and
- opportunities to strengthen the promotion of nutrition and physical activity for Aboriginal mothers, infants and children.

Consultation through targeted group discussions in four urban and four rural/regional areas was conducted throughout July-September 2011 to canvass the views of Aboriginal Health Workers and other health and early childhood practitioners working within Aboriginal settings and services. Surveys and interviews were conducted by the project team and were complemented by discussions with the Department of Education and Early Childhood Development (DEECD) and Department of Health (DH). Parent consultations were held in one urban and one rural area and comprised men's and women's focus groups in each area. Local facilitators conducted the focus groups which were overseen by VACCHO and RCH Nutrition staff.

Surveys, interviews and documents were analysed by the VACCHO Nutrition Team, with technical support from a Senior Dietitian from RCH. The emerging themes and findings from both the practitioner and parent consultations, were presented to the Steering Committee in order to reach consensus and assist formulation of recommendations.





About VACCHO

The Victorian Aboriginal Community Controlled Health Organisation (VACCHO) is the peak body for Aboriginal health in Victoria. From its base in Melbourne, the role of VACCHO is to represent and build the capacity of its 24 member Aboriginal Community Controlled Health Organisations (ACCHOs) across the state. Capacity is built among members through strengthening support networks, increasing training and workforce development opportunities and through leadership on particular health areas, including early years. VACCHO coordinates the Koori Maternity Services program, and has also undertaken action research in order to reduce smoking during pregnancy.

To VACCHO, as the peak body for Aboriginal Health in Victoria, it is essential to enable Victoria to succeed in halving the life expectancy gap of Aboriginal and Torres Strait Islander people that a targeted and coordinated approach be taken. This requires working in partnership with the Aboriginal Community Controlled Health Sector using continuous quality improvement methods.

The timing is right for action in the Aboriginal early childhood nutrition arena. A suite of programs and activities from a range of federal and state funding sources are working towards improvements in health, development and educational outcomes for Aboriginal children. For example, in the Department of Health's "Prevention Community Model" for Victoria where 14 Local Government Areas have been identified to participate as part of this initiative. Resources for coordination and integration of Aboriginal Community Organisations into this process are essential if the partnerships are to be effective.

About MCRI Healthy Mothers Healthy Families Research Group

The Healthy Mothers Healthy Families Research Group was established in 2007 and leads a program of research in South Australia and Victoria. The Group's Vision is good health and humane care for all mothers and families. The strategic directions of the Group are based on three major aims. These are:

- To undertake research that contributes to improvements in the health and well-being of mothers and families, especially in vulnerable populations with complex social and health needs
- To engage collaboratively with stakeholders at all stages of the research process to achieve changes to policy and practice to benefit mothers and families
- To work in ways that value diversity and wisdom of team members, collaborators and stakeholders involved in the research.

About RCH Nutrition

The Nutrition Department at the Royal Children's Hospital (RCH) is the home of the *Filling the Gaps* program, which provided nutrition resourcing and training for early childhood professionals, as well as nutrition and physical activity expertise and knowledge integrity, to the previous Victorian government's *Kids Go for your life* program. The Nutrition Department at RCH is regularly consulted to provide expert child nutrition and physical activity advice to other programs and organisations, including local and state government initiatives such as the 'Get up and Grow' guidelines for Children's Services, the Better Health Channel, and the Raising Children Network.

Results

Forty-five practitioners from 14 sites participated in the consultation process. This included 20 Aboriginal Health Workers, three In Home Support Workers (IHS), one Aboriginal Best Start worker, four midwives, one Maternal and Child Health (MCH) nurse, two registered nurses, three dietitians, one Healthy Lifestyle Worker, two playgroup coordinators, three managers and five Multifunctional Aboriginal Children's Services (MACS) centre staff, including one cook. The majority of the practitioners consulted were female and were themselves mothers and community members. Approximately 75% of participants were Aboriginal.

Forty-five parents/carers participated in four parent focus groups in one rural and one metropolitan area of Victoria. There were two men's and two women's groups, one in each location (rural and metropolitan). There were 22 male and 13 female participants in the 4 groups. 34 of the participants were Aboriginal and one was Torres Strait Islander.

Key Findings (Practitioner consultations)

1. The most frequent nutrition issues identified by practitioners working in Aboriginal early childhood settings were low levels of breastfeeding, inappropriate introduction of solids, reliance on sweet drinks and bottles, takeaway and snack foods. These findings are consistent with findings in the mainstream needs assessment [1], particularly for high need families. Frequently reported health concerns included iron deficiency (which may be a marker for overall poor nutrition), poor oral health, overweight, and speech delays.
2. Physical activity concerns were not identified by practitioners working in Aboriginal early childhood settings for younger children, but reliance on screen-based activities (e.g. electronic games, television etc.) was noted for older children.
3. Practitioners requested strategies to more effectively empower parents, particularly around sensitive issues such as breastfeeding support, child feeding and child overweight.
4. The workforce within Aboriginal early childhood services lacks training and suitable educational resources in child nutrition and physical activity.
5. There are significant policy opportunities currently available, both state and federally-based, for improving nutrition and physical activity within Aboriginal early childhood settings.
6. There are significant gaps in service delivery for early childhood nutrition support, particularly through the universal MCH service.
7. Practitioners from Aboriginal early childhood settings have greater training and resource needs than practitioners from mainstream settings.
8. Food insecurity and other, broader social determinants of health, such as transport and housing, were frequently-reported barriers to good nutrition and physical activity.

Key Findings (Parent consultations)

1. Parents in all groups identified sweet drinks, fussy eating and 'junk' food as the most common nutrition concerns. Children's overweight and iron deficiency were mentioned by some parents.
2. Breastfeeding emerged as a dominant issue in both men's and women's groups and in both locations. Issues included low rates of breastfeeding, barriers to breastfeeding, attitudes of fathers and an overall lack of 'culture' of breastfeeding
3. Barriers to good nutrition identified were lack of appropriate information, lack of nutrition skills, parenting issues, and high food costs.
4. Barriers to physical activity identified were high costs, lack of outdoor play opportunities and reliance on screen-based activities.
5. The most frequently reported systemic issue was lack of continuity of care in early childhood for example; access to MCH services.
6. Aboriginal parents were more likely to experience difficulties accessing nutrition and physical activity information and support than non-Aboriginal parents.
7. Food insecurity and other, broader social determinants of health were frequently reported.

Key findings overall – practitioners and parents combined

1. Concerns associated with the initiation and retention of breastfeeding by Aboriginal women were a key finding of this project.
2. Reliance on sweet drinks and bottles which resulted in oral health problems was the most frequently-reported nutrition concern raised by both parents and early childhood practitioners alike.
3. Poor uptake of Maternal and Child Health services by Aboriginal families was a key finding of this project and a priority area within the Indigenous Early Childhood National Partnership Agreement.
4. There is a lack of child nutrition and physical activity training and resources for Aboriginal early childhood practitioners, and inconsistent access to information and support for parents
5. There is a lack of availability of culturally-relevant child nutrition and physical activity guidelines and resources for Aboriginal early childhood services. Evidence-based guidelines and resources require cultural adaptation, staff training and support to implement these guidelines within Aboriginal services.
6. Food insecurity and other, broader social determinants of health, such as transport and housing, were frequently reported barriers to good nutrition and physical activity.



Recommendations

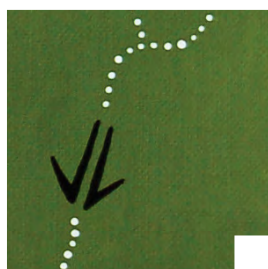
Based on the key findings of this needs assessment, a comprehensive program of work is required to improve nutrition and physical activity outcomes for Aboriginal children and families. This should begin with appropriate scoping in order to explore and develop opportunities for partnership work between the VACCHO Nutrition and Physical Activity team and other key Early Years stakeholders.

It is recommended that multiple health promotion and capacity building strategies are planned, implemented and evaluated in order to deliver the following outcomes for Victorian Aboriginal communities:

1. Improving breastfeeding rates and fostering a culture that supports breastfeeding
2. Improving infant feeding practice including appropriate introduction of solids
3. Improving oral health, particularly through reduced consumption of sweet drinks and prolonged bottle-feeding
4. Reducing consumption of energy-dense takeaway and snack foods
5. Identifying and treating deficiencies in micronutrients such as iron, which may be a marker for overall poor nutrition
6. Improving the capacity of the Aboriginal early childhood workforce to identify and address child overweight issues through appropriate health promotion and early intervention initiatives
7. Increasing physical activity and active play and reducing reliance on sedentary, screen-based activities
8. Improving food security for families with young children

Further to this needs assessment, VACCHO will endeavour to develop an evidence-based, culturally-relevant child nutrition program which should include the following key components:

1. Targeted social marketing campaigns involving local Aboriginal people
2. Nutrition education and support programs for Aboriginal parents, carers and children, which include:
 - Breastfeeding, introduction of solids, sweet drinks and infant feeding education
 - Healthy living skills such as budgeting, shopping, label-reading, cooking and parenting skills, such as dealing with fussy eating and encouraging active play
3. Locally relevant child nutrition and physical activity information and education resources utilising local Aboriginal faces to deliver evidence-based messages. These should include resources that specifically target Aboriginal men.



4. Regular training and up-skilling of the Aboriginal early years workforce to facilitate implementation of family-focused Child Nutrition and Physical Activity Programs within Aboriginal settings, especially in PCM sites. Essential elements include:
 - evidence-based nutrition and physical activity guidelines,
 - culturally-relevant resources,
 - workforce development
 - programs to empower parents, for example 'MEND' or 'INFANT' with cultural adaptation, using a solution-focused empowerment parenting model, such as 'Nourish' or the World Health Organisation's 'Infant and Young Child Feeding' project
5. Centralised support for Aboriginal organisations interested in developing and implementing programs and policies that support breastfeeding, child nutrition and physical activity.
6. An **Aboriginal breastfeeding strategy** in consultation with the VACCHO membership, to complement the Victorian Breastfeeding Action plan (DEECD) to increase breastfeeding rates among Aboriginal women, which may include key components such as:
 - organisational breastfeeding policies,
 - breastfeeding education and information for both mothers and fathers,
 - mentoring and peer support programs,
 - breastfeeding/lactation consultant training for the early years workforce,
 - further research and evaluation.
7. An **Aboriginal Maternal and Child Health strategy** to improve access to services and presentation of Aboriginal and Torres Strait Islander children at key MCH visits. This strategy may include such key components as:
 - Employing an MCH nurse at VACCHO to provide peer-to-peer advocacy and capacity building
 - Providing cultural awareness training specifically targeting MCH nurses and midwives working in both Aboriginal and mainstream services
 - Increasing the number of MCH nurses employed within ACCHOs
 - Employing Aboriginal child nutrition workers employed within ACCHOs to work in partnership with mainstream MCH services to improve access for Aboriginal families.
8. A research and evaluation framework which supports opportunities to:
 - Assist ACCHOs to identify information sources and collect relevant child nutrition and physical activity data
 - Use data to measure program effectiveness and inform development and/or expansion of new programs.
 - Develop a funding proposal to investigate new models of service delivery for infant and child nutrition by maternal and child health nurses working in partnership with AHWs within ACCHOs, using solution-focused counselling and infant and young child nutrition indicators as the outcome measures.



Background

The importance of action in the early years is a recurrent theme in various Government and non-Government strategies and plans aiming to improve a range of health and social outcomes for Aboriginal communities. The Council of Australian Governments (COAG) has set specific targets for closing the gap in this area, and the Victorian Government has defined *maternal health and early childhood development* as a strategic area for action within the Victorian Indigenous Affairs Framework.

The Victorian Government, together with the Commonwealth and all the other State jurisdictions, has committed to a series of National Partnership Agreements relating to Aboriginal health. Several of these agendas for reform specifically commit to improving health outcomes for Aboriginal infants and children. These include

- National Partnership Agreement on Preventive Health
- National Indigenous Reform Agreement (Closing the Gap)
- National Partnership Agreement on Indigenous Early Childhood Development

Within Victoria, key strategies and programs in place to improve outcomes in the early years include

- Dardee Boorai: Victorian Charter of Safety and Wellbeing for Aboriginal Children and Young People [2]
- Aboriginal Best Start
- Indigenous Kindergarten Program
- In-Home Support and Home Based Learning Program
- Koori Maternity Services
- Universal Maternal and Child Health (MCH) services
- Federally funded services such as MACS, Healthy For Life and New Directions

More recently, Balert Boorron: the Victorian Plan for Aboriginal Children and Young People (2010–2020) [3] outlines how the Victorian Government aspires to close the gap in a range of health and education outcomes, as well as child protection substantiations for Aboriginal families. The first section of the plan is devoted to parenting and the early years. Here, targets have been set under three aspirational headings:

- Babies will be born healthy,
- Parents will be capable, confident and supported,
- Young children will be given opportunities to learn and thrive.

Nutrition and physical activity are essential components of parenting and the early years of a child's life. Good nutrition is important during pregnancy to enable babies to be born healthy and not underweight. Breastfeeding and appropriate introduction of solid foods are important determinants of infant health, growth and development. Establishing and maintaining healthy eating and physical

activity patterns among toddlers and older children is important for supporting learning and development, as well as for maintaining optimum health and preventing chronic disease later in life. Australia's previous national nutrition strategy, *Eat Well Australia, 2000-2010* [4], identified infants and children as a priority group for public health nutrition action and also specified maternal and child health as a priority area. More recently, the Victorian Public Health and Wellbeing Plan 2011-2015 named Early Childhood as a key priority area [5].

The Victorian Aboriginal Community Controlled Health Organisation (VACCHO) is the peak body for Aboriginal health in Victoria. From its base in Melbourne, it represents the collective of all 24 Aboriginal Community Controlled Health Organisations or ACCHOs across the state and is also a Registered Training Organisation, which delivers accredited training to Aboriginal Health Workers across Victoria.

The role of VACCHO is to build the capacity of its member ACCHOs and to advocate for issues on their behalf. Capacity is built among members through strengthening support networks, increasing workforce development opportunities and through leadership on particular health areas including early years.

VACCHO advocates for the health of Aboriginal individuals, families and communities across Victoria, VACCHO seeks to prevent illness and to promote the health of all Aboriginal people so that they can achieve their potential. For infants, VACCHO advocates the need for mothers to be supported to make healthy choices during pregnancy, through antenatal care as well as continued support for families in the first year of life.

The Nutrition Team at VACCHO has demonstrated state-wide leadership in the area of Aboriginal nutrition and physical activity through authorship of the *Closing the Nutrition and Physical Activity Gap in Victoria: The Victorian Aboriginal Nutrition and Physical Activity Strategy* [6], which is considered a key strategic document both in Victoria and interstate. One of the eight key action areas identified in this document is to enhance the nutritional health of Aboriginal mothers, infants and children. The need for workforce development in this area, as well as a lack of culturally-relevant health promotion resources and programs, was identified through a consultation process with the VACCHO membership.

A new partnership between VACCHO and the Nutrition Department at The Royal Children's Hospital, with small grant funding from the Murdoch Childrens Research Institute, has provided the opportunity to consult with Aboriginal families to identify nutrition and physical activity practices, needs and concerns in two Local Government Areas (one rural and one metropolitan), and to provide recommendations for future research.

This project is an adjunct to the 2010 'Filling the Gaps' *Nutrition and Physical Activity Needs Assessment* [1] of young children and families from the Cities of Brimbank and Greater Shepparton. Families of 796 children aged 0-8 years attending early childhood services (MCH, childcare, kindergarten and primary school) completed surveys about their children's nutrition and physical activity. Researchers identified that very small numbers of parents/carers from Aboriginal backgrounds participated in the needs assessment surveys. Richer data from high needs populations required a more sensitive understanding of appropriate approach, delivery and research methodology [7,8]

The Nutrition Department at the Royal Children's Hospital (RCH) is the home of the *Filling the Gaps* program, which provided nutrition resourcing and training for early childhood professionals, as well as nutrition and physical activity expertise and knowledge integrity, to the previous Victorian government's *Kids Go for your life* program. The Nutrition Department at RCH is regularly consulted to provide expert child nutrition and physical activity advice to other programs and organisations, including local and state government initiatives such as the 'Get up and Grow' guidelines for Children's Services, the Better Health Channel, and the Raising Children Network.

A recent needs assessment of early childhood practitioners [1] showed that early childhood practitioners need additional nutrition and physical activity training, particularly for addressing childhood obesity with practical strategies which can sensitively address the needs of families with young children.

The purpose of this report is to identify the needs of Aboriginal families with young children and early childhood practitioners working in Aboriginal services and settings in relation to promoting nutrition and physical activity for children aged 0-8 years.



Key Data and Evidence

Victorian Aboriginal population

Victoria is home to approximately 36,700 Aboriginal and Torres Strait Islander people. Victoria's Aboriginal population is younger than the non-Aboriginal population, with approximately half under the age of 18 and about a quarter aged 8 years and under. There are more than 1000 new Aboriginal babies born each year in Victoria, and this number is expected to continue to grow. Children are present in most Aboriginal households, and they are highly valued as they are seen as the future of the community [9].

Aboriginal women in Victoria give birth at younger ages than non-Aboriginal women. These women are nearly five times more likely than other Victorian women to become pregnant under the age of 20. Furthermore, 50 per cent of Victorian Aboriginal families are sole parent households, compared to 21 per cent of all Victorian families with children [10]. It must also be noted that the sole parent of an Aboriginal child may be non-Aboriginal, and that aunties, uncles and grandparents often play a significant role in raising children.

While many Aboriginal parents and family members are managing well, some face significant life stressors. These include the death of a friend or family member, physical or mental illnesses, alcohol and/or other drug problems, unemployment, housing problems, legal problems, and exposure to violence [11]. Furthermore, Aboriginal families often encounter barriers to accessing health, education and other support services for their children. The major barriers may include cost, lack of access to transport, lack of awareness of the services available, cultural irrelevance of programs and information, and mistrust of mainstream service providers [9]. Furthermore, racism, discrimination and marginalisation have also been identified as factors influencing service utilisation and Aboriginal health outcomes [12].

Food insecurity is another important life stressor and barrier to good health for Aboriginal families. Food insecurity can be defined as limited or uncertain availability of, or access to, nutritionally adequate and safe food [13], and has been linked to obesity both overseas and in Australia [14]. In one Victorian study, 32 of 63 (51%) Aboriginal parents and carers, had run out of food and could not afford to buy more on one or more occasions during the previous 12 months [15]. Furthermore, according to the Victorian Population Health Survey [16], food insecurity is experienced by Aboriginal people at a rate three times higher than non-Aboriginal Victorians. Food insecurity is often associated with financial hardship. According to the 2006 census, the average household income for Aboriginal families was \$460 a week, compared to \$740 for non-Indigenous families [17]. When this is considered in the context of the rising cost of living in Australia, it is not surprising that food security is an increasingly significant problem.

Aboriginal maternal and child health and nutrition-related issues in Victoria

The risk of perinatal and neonatal mortality is 2-3 times higher for Aboriginal babies compared to non-Aboriginal babies [18]. Moreover the incidence of low birth weight among babies born to Aboriginal women remains double that of babies born to non-Aboriginal mothers in Victoria. Approximately 12.5% of Victorian Aboriginal babies born in 2007 weighed less than 2,500 grams [19].

and therefore were at risk of poorer physical and cognitive development and of chronic conditions later in life [20,21] However, more recently there has been a downward trend in the incidence of low birth weight among babies born to Aboriginal mothers [19]. This may be partly due to the establishment of Koori Maternity Services in an increasing number of Aboriginal communities.

Several factors influence birth weight. These include lack of antenatal care, poor maternal nutrition and smoking, alcohol and other drug use during pregnancy. While the Koori Maternity Services program [23] has improved access to antenatal care, there are currently no data available on the nutritional status of Aboriginal pregnant women in Victoria. What is known, however, is that almost half of Victorian Aboriginal women smoke during pregnancy, almost a quarter consume alcohol, and up to 10 per cent use illicit drugs [3].

VACCHO recently developed a project called Goren Narrkwarren Ngrn-toura – Healthy Family Air, that aimed to strengthen the capacity of Aboriginal Health Workers to deliver support and smoking reduction programs to pregnant Aboriginal women in Victoria. The project included training the early years worker within ACCHOs to better support pregnant women and young mothers to quit or reduce smoking; and to deliver a Group Support Program to build capacity, self-esteem, skills and knowledge amongst pregnant Aboriginal women and young mothers [24].

The World Health Organisation recommends that all infants should be exclusively breastfed until six months of age [25]. Breastfeeding provides the best start in life for all infants [21]; however, breastfeeding rates for Aboriginal mothers are lower than for non-Aboriginal mothers. Nationally, in 2004–05, 79% of Aboriginal and Torres Strait Islander infants aged 0–3 years had been breastfed compared with 88% of non-Indigenous infants [26]. Moreover, a survey of Victorian Aboriginal mothers found that 85% breastfed their babies initially. However, only half continued to breastfeed at 3 months, and just under one third of these women were still breastfeeding at 6 months [27]. Women aged under 20 years were less likely to breastfeed than older women. When asked about the barriers to breastfeeding, these women cited concerns about breastfeeding in public, lack of knowledge about the benefits, and fears about the adequacy of milk supply [25]. As a result, improving breastfeeding rates continues to be a priority within both Federal [26] and State [8] early years programs. Since there is a high proportion of young mothers within Victorian Aboriginal communities, additional action to support breastfeeding may be required.

Inappropriate introduction of solid foods has been reported as a significant issue among Aboriginal women living in urban areas [8]. Current guidelines recommend that complementary foods should be introduced with continued breastfeeding at around 6 months [18]. Early introduction of solids is associated with reduced duration of breastfeeding, increased risk of diarrhoea, a greater risk of wheezing, and increased percentage body fat in childhood [27]. Infant nutrition problems can arise if solids are introduced too early. Victorian studies have found that over half of the Aboriginal women surveyed had introduced formula and solid foods before four months [14, 24].

Oral health problems are a significant issue for Aboriginal children. It has been reported that approximately 50 per cent of Aboriginal families have problems in accessing oral health services, particularly dental health care [11]. Dental decay is the single most common reason for hospital admissions for Aboriginal children aged under four years [31]. Nutrition, particularly consumption of sweet drinks as opposed to fluoridated water, is an important determinant of tooth decay. In addition, consumption of sweet drinks in childhood has been associated with weight gain and obesity and continued consumption of sweet drinks into later life [32]. Use of a bottle is associated with dental concerns, as well as iron-deficiency anemia, and possible increased risk of overweight and obesity [33]. Supporting families to adopt healthy lifestyles, promoting tooth-cleaning, and ensuring dental service availability have been recommended as important strategies for supporting parents of young children [3].

After smoking, high body mass is the most important risk factor contributing to the burden of disease experienced by Aboriginal and Torres Strait Islander people [34]. While there are currently no data available on the prevalence of obesity among Victorian Aboriginal children, a study of children attending child care services in New South Wales reported that one quarter of Aboriginal children were overweight or obese, compared with 17 per cent of non-Indigenous children (Wolfenden et al. 2011) [36]. Furthermore, high intakes of energy-dense foods have been reported among Aboriginal primary school children in New South Wales [37] However, the same group of Aboriginal children tended to be more active than non-Indigenous children, completing an average of 125 minutes of physical activity per day compared with 107 minutes [38].



Aboriginal Early Years Programs in Victoria

Koori Maternity Services

The Koori Maternity Services (KMS) program is funded by the Department of Health and coordinated by VACCHO. This initiative was set up to provide culturally- appropriate maternity care and support during the immediate postnatal period.

11 ACCHOs across Victoria receive KMS funding which is used to employ an Aboriginal KMS health worker who identifies appropriate clinical services, assists women with attending appointments, advocates for the needs of Aboriginal women, and provides support, education and health promotion for pregnant women and new mothers. All sites also employ a midwife, who works alongside the KMS worker to provide clinical antenatal and postnatal care.

KMS sites are funded to provide support until 6 weeks after birth; however, in practice their role often extends beyond this period. Many KMS staff maintain contact with their clients through ongoing group programs such as 'Mums and Bubs' groups. VACCHO is funded to employ two KMS project officers, who provide state- wide support for KMS sites through site visits, resource development, an annual forum and advice to government. VACCHO also delivers the Certificate IV in Indigenous Women and Babies Health course, which is the recommended training for KMS health workers. This course includes nutrition as a core unit.

In Home Support for Aboriginal Families

The In Home Support (IHS) program is funded by the Department of Education and Early Childhood Development (DEECD) and coordinated by VAEAI. IHS is an early support program to improve healthy child development. Aboriginal IHS workers are employed at 6 sites across Victoria to provide intensive support for parents around parenting skills, learning, safety and wellbeing. Many IHS workers also run group programs, outings and activities such as cooking for families.

IHS is designed to extend the services provided by KMS, targeting Aboriginal parents with newborn babies and continuing support until the child is 3 years of age. In addition, the Home-based learning program is an extension of the IHS for parents/families of children aged 3-5 years operating in three sites (Swan Hill, Mildura and Bairnsdale). Until recently, there has been no specific training or qualification for IHS workers. In 2009 VACCHO worked with the Queen Elizabeth Centre in Melbourne to adapt the Family Partnership and Keys to Caregiving training programs for Aboriginal IHS staff. These courses focus on engaging with families and interpreting non-verbal cues from babies and young children [39]. Furthermore, in 2009 VACCHO employed an IHS linkage worker who, in partnership with VAEAI, conducted a training needs analysis for the HIS workers. Nutrition training was identified as an area of need [40].

Koori Early Childhood Services/Multifunctional Aboriginal Children's Services

Various Koori early childhood services exist around Victoria in order to increase access to culturally-appropriate early childhood education and to prepare Aboriginal children for the transition into primary school.

Multifunctional Aboriginal Children's Services (MACS) are funded by the Commonwealth Department of Education, Employment and Workplace Relations (DEEWR). There are six MACS centres in Victoria which provide various services such as preschool, child care, play group, out of school hours care and homework centres. These centres provide meals and snacks to children, and usually employ a cook.

In addition, two new *Aboriginal Children and Family Centres* will be established in Whittlesea and Bairnsdale through the National Partnership Agreement of Indigenous Early Childhood Development. These centres will be funded to provide early learning, childcare and family support programs. VAEAI provides advice, support and assistance to all Aboriginal Early Childhood Services, as well as to government agencies involved in funding these centres.

All of the MACS centres as well as other Aboriginal community-controlled children's services are members of the Secretariat of National Aboriginal and Islander Child Care (SNAICC). SNAICC is the national peak body representing the interests of Aboriginal and Torres Strait Islander children and families. In addition to child care and early childhood education services, SNAICC members also include family support services, foster care agencies, family reunification services, family group homes and services for young people at risk. SNAICC provides support to its members through regular newsletters, conferences, publications and resources, as well as research and advocacy.

Aboriginal Best Start

Best Start is a Victorian government early years initiative. It supports families, caregivers and communities to provide the best possible environment, experiences and care for young children in the important years from pregnancy to school. Best Start aims to improve the health, development, learning and wellbeing of Victorian children aged between 0-8 years [9]. It supports communities, parents and service providers to improve universal early years services so they are responsive to local needs. It has a strong emphasis on prevention and early intervention.

These improvements are expected to result in:

- better access to child and family support, health services and early education
- improvements in parents' capacity, confidence and enjoyment of family life
- communities that are more child and family friendly.

There are six Aboriginal Best Start Partnership sites located in Echuca, Dandenong, Horsham, Baw Baw/ LaTrobe, Bairnsdale and Geelong. The sites employ Aboriginal Best Start Facilitators who liaise with the local Aboriginal community and early childhood universal services to promote improved access to health, education, child and maternal health and other support services for Aboriginal children and families. In addition there are 30 mainstream Best Start sites across Victoria, each of which is expected to support the development of cross-agency linkages with the Aboriginal community.

Best Start health and wellbeing indicators include increasing breastfeeding and participation in physical activity. Children attending school without breakfast was identified as an issue through the Best Start consultation. It was recommended that parenting programs including information on nutrition, basic hygiene, health and wellbeing, cooking and budgeting be available to young mothers

The Aboriginal Best Start program is coordinated by the Victorian Aboriginal Community Services Association Limited (VACSAL) which is the recognised state-wide Peak Advisory body on Aboriginal Community issues. VACSAL is a community-based, community-controlled organisation, comprising representatives from Koori organisations across the State. As well as having an advisory role VACSAL also delivers and manages a range of critical community services across Victoria. VACSAL works

from the following philosophical base in all of its advocacy work and service provision: Community and individual choices Self-determination and managing change, Strengthening Identity, Strengthening Culture, Strengthening families. Local partnerships are the cornerstone of each project site.

Aboriginal Playgroups

Several ACCHOs and MACS centres run playgroups. These groups may be part of In Home Support or Aboriginal Best Start programs, or they may be a function of the broader Aboriginal Cooperative. In addition, the Victorian Aboriginal Child Care Agency (VACCA) runs a Supported Playgroup program as part of its Early Intervention initiative which is funded by FaHCSIA. These groups are facilitated by a supported playgroup development worker, who aims to empower families to support young children's development through a variety of play experiences and activities which may or may not include nutrition as a component.

Healthy For Life

Healthy for Life is an OATSIH funded program that commenced in 2005. There are three broad aims: to improve the health of Aboriginal and Torres Strait Islander mothers, babies and children; to improve the quality of life for people with a chronic condition; and, over time, to reduce the incidence of adult chronic disease. Since 2008, an additional objective of Healthy for Life funding has been to improve men's health (OATSIH 2011). The program also administers the Puggy Hunter Memorial Scholarship scheme which aims to increase the number of Aboriginal and Torres Strait Islander people with professional health qualifications.

Each of the Healthy for Life sites is expected to demonstrate improvements in a number of key outcomes. These include improved antenatal care, adult and child health checks, and chronic disease management in the short term (1-4 years). Longer term (5-10 year) outcomes include increased mean birth weight, reduced incidence of low birth weight, reduced risk behaviours during pregnancy, reduced chronic disease complications, and improvement in numbers of patients with intermediate health outcomes within the acceptable range.

There are 8 Healthy for Life sites in Victoria, plus an additional site at Cummeragunja, which lies over the New South Wales border. The program sites consist of four individual ACCHOs, one Community Health Service and three consortia of approximately four regional ACCHOs working in partnership with one ACCHO named as the 'lead' organisation. While 14 out of the 24 VACCHO members are involved in the Healthy for Life sites, VACCHO does not receive any funding from OATSIH to provide coordination and centralised support for this program. Instead, funded agencies work with the Healthy for Life Contact Officer within their OATSIH State office to collect baseline data and develop local priorities and strategies. Some but not all sites have selected nutrition and/or physical activity as priorities.

New Directions Mothers and Babies Services

The Federal Government's 'New Directions' program aims to improve access to pre- and post-pregnancy care, information about baby care, advice and assistance with breastfeeding, nutrition and parenting, monitoring of developmental milestones, immunisation status and infections, and health checks and referrals for treatment for Aboriginal children before starting school. Of the 57 'New Directions: Mothers and Babies Services' funded throughout Australia, three are Victorian. Three of the Victorian sites are ACCHOs (in Bendigo, Ballarat and Robinvale), while the third is the Mercy Hospital for Women. As with Healthy for Life, VACCHO does not receive specific funding to support member ACCHOs funded through this initiative.

Australian Nurse Family Partnership Program

This program was founded by Professor David Olds from the University of Colorado. It is based on

a successful program in the United States that provides support to first time low-income mothers and their babies through regular home visits. A similar program specifically targeting mothers who are pregnant with an Aboriginal or Torres Strait Islander baby has been funded by the Australian government.

The Australian Nurse Family Partnership Program (ANFPP) consists of home visits from a registered nurse. The nurse supports the health of women during pregnancy, with their own health and the health and development of their baby until the child's second birthday. Nurses are provided with training and program materials which have been adapted from the American program. The ANFPP is currently being delivered at four ACCHOs around Australia, including the Victorian Aboriginal Health Service in Melbourne. OATSIH also funds an ANFPP Support Service to provide training, professional development, networking and implementation support from program sites.

The ANFPP is an evidence-based program. The American program on which it is based has demonstrated improved pregnancy outcomes such as reduced smoking and improved nutrition [40], as well as a significant reduction in verified cases of child abuse and neglect [42]. Whether or not the same outcomes have been achieved for the Aboriginal families involved in the ANFPP still remains to be seen. The Menzies School of Health Research is responsible for the long-term monitoring of the program.

Royal Children's Hospital Wadja Aboriginal Family Place

The Wadja Aboriginal Family Place is a specific unit within the RCH which provides a culturally sensitive space for Aboriginal children and families visiting the hospital. The unit has two Aboriginal Case Managers, two Aboriginal Family Health Workers, an Aboriginal Policy and Community Development Worker and an Aboriginal Administration and Outreach Support Worker. The team provides support to Aboriginal children and their families, while improving cultural awareness and sensitivity of other staff within the hospital. The unit also provides a weekly general medical outpatient clinic for Aboriginal children. At the Wadja clinic, the Aboriginal staff work with a paediatrician to support Aboriginal children with complex health and social issues.

Aboriginal Cradle to Kinder Program

This is a new initiative which is currently to be funded by the Department of Human Services. The Cradle to Kinder Program is a secondary prevention service targeting young pregnant women who have had a Child Protection notification in respect of a previous child, or for whom other concerns have been raised about the unborn child. It is planned that key workers will be employed in up to four Victorian ACCHOs to provide intensive support and case-management for 'at risk' pregnant women and their families. The program model includes supporting access to health and social services, early parenting support and service brokerage.





The Status of Services in Each Region

The key Victorian Aboriginal early years programs are summarised below. Program sites can be viewed on the map in Figure 1.

Barwon South West

In 2009-10, there were 48 Aboriginal births in this region, 21 in Geelong and 27 in Warrnambool [31]. There were 60 births the previous year. Both Geelong and Warrnambool are KMS sites. The Wathaurong Aboriginal Co-operative in Geelong has a Family Services Unit which houses the Aboriginal Best Start facilitator and two IHS workers. Also in this unit are the Innovations and Aboriginal Family Decision Making programs, which are funded through the DHS Child Protection area. The unit operates a playgroup two days per week and two kindergarten sessions per week with an Aboriginal kindergarten assistant. The team plans to operate an Occasional Care service in 2012. Healthy foods are served at the playgroup, and parents and children are often involved in food preparation.

Wathaurong's KMS team operates from the Health Service, which is in a separate building to the rest of the co-operative. The full-time midwife and KMS Aboriginal Health Worker provide pregnancy education and childbirth classes for young mothers. The Aboriginal Health Worker has developed a nutrition booklet featuring local children, which covers healthy eating during pregnancy and lactation, as well as information on introducing solids, fussy eating and oral health. Wathaurong used to employ a MCH Nurse three days per week, who in addition to Ages and Stages checks provided information and support about growth problems and introducing solids. Wathaurong have since lost the funding for this position, which is seen as a major gap, as there is now no visiting MCH nurse at the service. There is also no visiting dietitian.

Gunditjmara Aboriginal Co-operative in Warrnambool is the lead agency in the Western District Healthy for Life consortium, which also includes Dhauwurd-Wurrung Elderly & Community Health Service (Portland), Winda Mara Aboriginal Corporation (Heywood) and Kirrae Health Service (Framlingham). The consortium has a focus on prevention and early intervention. The KMS team consist of a 0.8 EFT midwife and an Aboriginal Health Worker, who cover the whole Western District. The Aboriginal Health Worker also runs a play group, which provides parenting education as well as referrals to allied health professionals such as speech pathologists and occupational therapists. Winda Mara also has a well-established play group. Gunditjmara has a visiting dietitian who runs a women's cooking program. The service does not have a visiting MCH nurse, but tries to encourage women to attend the council services.

Gippsland Region

There were 83 Aboriginal births in Gippsland in 2009-10 [31]. The majority of these were in Bairnsdale and Traralgon, with the remainder in Sale and Warragul. There are five ACCHOs in this region: Moogji

Aboriginal Council in Orbost, Lake Tyers Aboriginal Health and Children's Services, Lakes Entrance Aboriginal Health Association, Gippsland and East Gippsland Aboriginal Co-operative in Bairnsdale and Ramahyuck District Aboriginal Co-operative, which has services in Sale, Morwell and Drouin. With the exception of Ramahyuck, these organisations form the East Gippsland Healthy for Life consortium, which also has involvement from Gippsland Lakes Community Health. Orbost Regional Health also employs an Aboriginal Health Worker who has a focus on child health.

Bairnsdale and Morwell are both KMS and Aboriginal Best Start sites; however, the Best Start workers are not based at the ACCHOs. Bairnsdale is the only IHS site in Gippsland, and has also been funded for the Home Based Learning program. The ACCHO in Bairnsdale employs a dietitian who also visits the health service in Lake Tyers one day per week. The dietitian works closely with the KMS Aboriginal Health Worker in Bairnsdale, but does not have an Aboriginal person working with her at Lake Tyers, which makes community access difficult. A local maternal child health nurse has been visiting the ACCHOs in Bairnsdale, Lakes Entrance and Lake Tyers, and is now well known in the community. The KMS team in Morwell does not have access to a dietitian, but one of the two part-time midwives is completing a Masters degree in Human Nutrition. An enhanced MCH nurse visits the service once per month, and the Aboriginal Health Worker liaises with the nurse to organise appointments. A healthy lunch and group education is also provided on MCH days.

There are two MACS centres in the Gippsland region. Bung Yarnda Day Care Centre in Lake Tyers takes babies from 6 months of age, while Gunai Lidj in Morwell accepts infants from 6 weeks of age, and also offers out of school hours care and holiday programs for children up to age 12. Both of these MACS centres are under the management of the ACCHO. A new Aboriginal Children and Family Centre is due to open in Bairnsdale in 2012. This centre will offer 65 childcare places, as well as education and support for families.

Grampians Region

There were 45 Aboriginal births at Ballarat Base hospital in 2009-10 [31]. In addition to Ballarat and District Aboriginal Cooperative, there are ACCHOs in Horsham (Goolum Goolum) and Halls Gap (Budja Budja). None of these ACCHOs has KMS or IHS programs; however, Ballarat provides MCH services through New Directions funding. Budja Budja has a MCH nurse who visits the co-op for one session (2-3 hours) per fortnight. Both Ballarat and Budja Budja have a dietitian who visits once a fortnight. The dietitian at Budja Budja works an additional two hours per month funded by the Medical Specialists Outreach Assistance Program (MSOAP).

Goolum Goolum Aboriginal Co-operative is a Healthy for Life site and used to have a visiting MCH service, which they are hoping to re-establish. Horsham is also an Aboriginal Best Start site; however, the facilitator is not based at the ACCHO. The Best Start program has done significant work aimed at increasing breastfeeding rates. There are no MACS centres in the Grampians region; however, Goolum Goolum is funded for an Aboriginal playgroup and kindergarten program. All the ACCHOs in this region see the lack of midwives within their services as a significant gap.

Hume Region

In 2009-10 there were 147 Aboriginal births in the Hume region, 79 in Shepparton and 68 in Wodonga [31]. Both these towns are KMS sites. Rumbalara Aboriginal Co-operative in Shepparton is also an IHS site. The KMS team at Rumbalara consists of a full-time KMS Aboriginal Health worker, an Aboriginal Support Worker who is completing a nursing degree, and a midwife who visits one day a week to provide an antenatal clinic at the ACCHO. The team also has a data entry position funded through Healthy for Life. The KMS team recently delivered a six-week antenatal education program, which they plan to repeat every six months. Education provided includes information about nutrition and breastfeeding, and a limited number of breast pumps is available. Rumbalara is currently undergoing renovations, and new space for breastfeeding mothers is being planned. The ACCHO does not currently have a visiting dietitian; however, referrals are made to Goulburn Valley Base Hospital for nutrition support. There are two MACS centres in the region, Lulla's Children and Family Centre in Shepparton and Lidje MACS centre in nearby Mooropna.

Mungabareena Aboriginal Corporation in Wodonga employs an Aboriginal KMS worker and a midwife. The KMS team works across both Albury/Wodonga and surrounding areas to increase

Victorian Aboriginal Community Controlled Health Organisations and auspiced Services

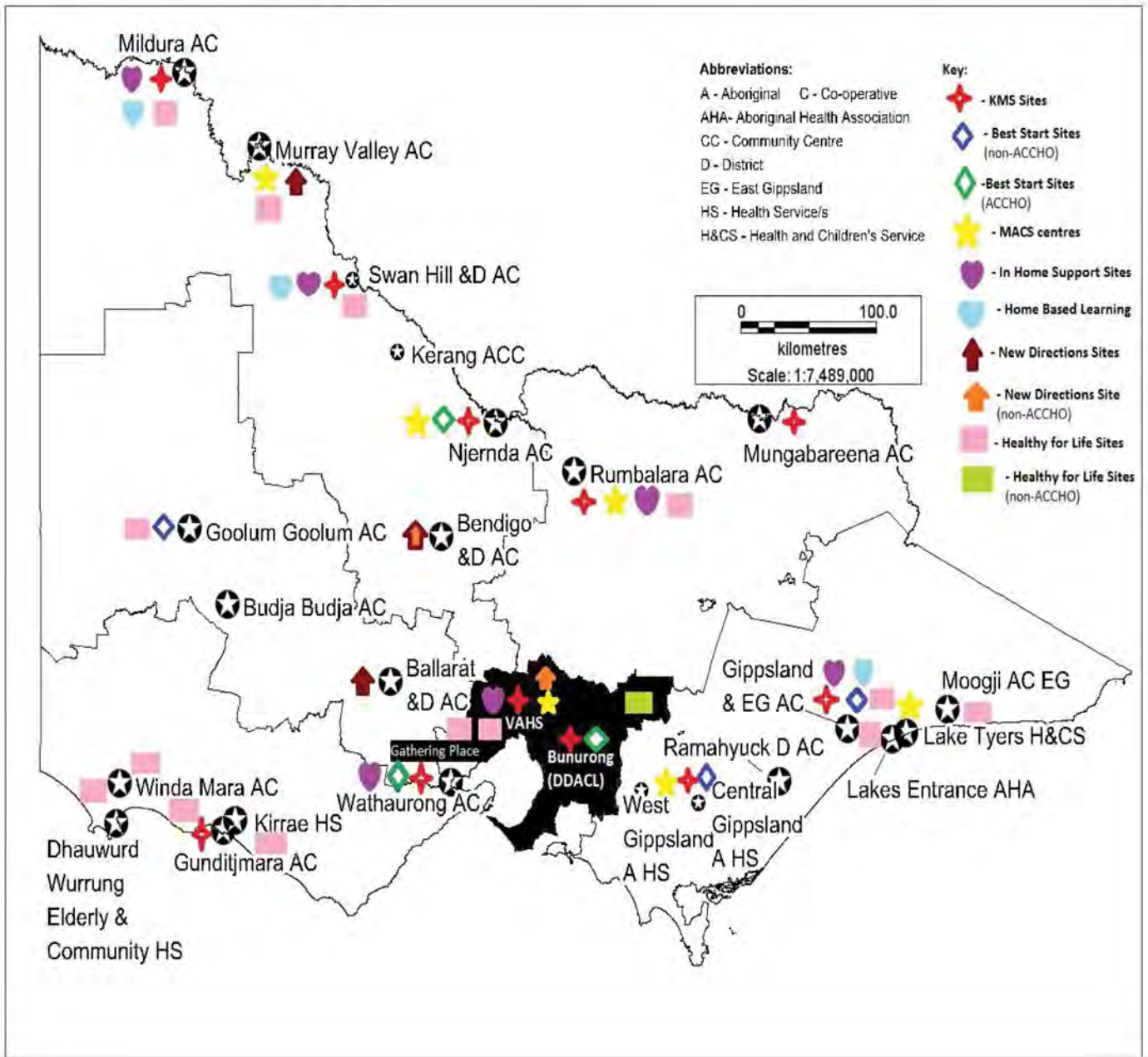


Figure 1: Map of Aboriginal Early Years Program Sites



access to and utilisation of pre- and post-natal care and MCH services. The KMS worker provides transport for women to attend medical appointments, including visits to the council MCH nurse. Mungabareena holds monthly KMS days which provide education on a variety of topics, including antenatal nutrition, breastfeeding and preparing food for babies. Additional health promotion days focussing on healthy eating have also been held. Mungabareena has an MOU with Albury Wodonga Aboriginal Health Service who provide clinical services including doctors, dietitian, speech pathologist, paediatrician, obstetrician and a dentist. Mungabareena also has a Koori First Steps program which provides a culturally-specific 4-year-old pre-school two days per week.

Loddon Mallee Region

There were 115 Aboriginal births in this region in 2009-10 and 131 the previous year [31]. The majority of these births occurred in Mildura, with the others in Swan Hill, Bendigo and Echuca. There are KMS teams located within the Aboriginal Health Services in Mildura, Swan Hill and Echuca, while Bendigo and Robinvale (the other ACCHOs in the region) are New Directions sites. Mildura Aboriginal Health Service employs an Aboriginal midwife who works alongside the KMS health worker. An enhanced MCH nurse also visits the service. Next door, at the Mildura Aboriginal Co-operative, there is a Family Services Unit which includes the IHS team, the Home-based learning program, a supported playgroup, an Aboriginal kindergarten and pre-school assistant, and the Family Preservation and Integrated Family Services programs which are linked to DHS Child Protection, Mildura.

Mildura Aboriginal Health Service is the lead organisation for the *Health for Life along the Murray* consortium also includes Robinvale, Swan Hill and two other ACCHOs which lie over the New South Wales border. A dietitian employed as part of the Healthy for Life program visits the ACCHOs in both Mildura and Robinvale. Swan Hill Aboriginal Health Service has a visiting MCH service, but does not currently have a visiting dietitian. Both services employ Healthy Lifestyle workers under the federally-funded Indigenous Chronic Disease Package. Swan Hill, which is auspiced by Mildura, is also a site for the IHS and Home-based learning programs.

Murray Valley Aboriginal Co-operative in Robinvale uses New Directions funding to employ a midwife and a MCH Aboriginal health worker. A MCH nurse also visits the service. The MACS child care centre in Robinvale is also managed by the co-op.

Bendigo New Directions funding employs two Mums and Bubs Aboriginal Health Workers who run a fortnightly group program. The local MCH visits the ACCHO one a fortnight, but there is currently no visiting dietitian. The co-op also has Communities for Children funding which employs a health promotion worker who has set up a Community Kitchen and runs holiday activities for primary school children.

Njernda Aboriginal Corporation employs an Aboriginal midwife and KMS health worker as part of the medical team. A MCH nurse visits the service once per week. The Family Services unit includes the Aboriginal Best Start Worker as well as a Family Services Worker who provides parenting support for families. Berrimba Childcare Centre is also managed by Njernda. Berrimba is a MACS centre which provides childcare, kindergarten and a Mums and Bubs group. There are two consulting rooms at Berrimba for visiting health professionals such as speech pathology and family counselling. The Best Start Worker is also based at Berrimba.

North-West Metropolitan Region

There were 186 Aboriginal births in the northern and western suburbs of Melbourne in 2009-10 [31]. This region has the highest number of Aboriginal births in Victoria. Just under half of these births occurred at the Mercy Hospital for Women which is a New Directions site. The other births were at the Northern Hospital, the Royal Women's Hospital and Sunshine Hospital, which has had a significant increase in Aboriginal births over the last 12 months.

The Victorian Aboriginal Health Service (VAHS) in Fitzroy has shared care arrangements with both the Mercy and Royal Women's Hospitals. VAHS has a Women and Children's unit, which consists of a manager and team leader who are both senior Aboriginal Health Workers, a midwife and KMS health worker, a full-time MCH nurse and MCH Aboriginal Health Worker, and two IHS workers. There

is a visiting paediatrician who also works at the RCH Wadja clinic. The Women and Children's unit hold monthly *Boorai classes*, which provide education for pregnant women and new mothers. A breastfeeding support group is also planned as part of the IHS program.

VAHS employs a full-time dietitian who works alongside an Aboriginal Physical Activity and Nutrition Worker. The dietitian position is HACC-funded, and, therefore, employed to work predominantly with Elders and people with a chronic disease. While the nutrition team is not employed in the Women and Children's unit, they help to deliver a weekly Healthy Eating Circus program for children in partnership with VACCA.

VAHS is also the only Victorian site for the ANFPP. The staffing for this program consists of 2 nurses, one of whom is Aboriginal, and an Aboriginal Health Worker. The ANFPP team is located at a different site to the rest of VAHS and provides a home-visiting service to pregnant women. The funding for this program ceases at the end of 2014.

Gathering Place Health Services is not currently a KMS site. The Gathering Place used to have a visiting midwife, but does not have one at present. Work is underway to establish a KMS program based at Sunshine Hospital. Both VAHS and the Gathering Place are Healthy for Life sites, as well as being sites for the Aboriginal Health Promotion and Chronic Care (AHPACC) program. The AHPACC program involves partnerships between ACCHOs and local Community Health Services. One of VAHS's AHPACC partners is Plenty Valley Community Health Service, which employs an Aboriginal health promotion worker. This worker runs a playgroup for Aboriginal mothers and babies, with a strong nutrition component.

Yappera Children's Services, based in Thornbury, is the only MACS centre in Melbourne. The centre takes children from six months of age up until five years. Yappera provides culturally-appropriate early childhood education and child care services, focussing on transition into primary school. It has an MOU with Darebin Community Health, and also work closely with VAHS to provide access to health professionals. The building includes a consulting room for visiting practitioners such as MCH. Yappera provides an accreditation advisory service to other Aboriginal childcare centres.

A new federally-funded *Aboriginal Children and Family Centre* is due to open in Whittlesea in 2012. The *Bubup Wilam Centre for Early Learning* will offer a 65 place childcare and kindergarten program for Aboriginal children aged from 6 months to 5 years. The centre will have four allied health consulting rooms for visiting practitioners. It is planned that nutrition education and support for parents will be part of the service model.

Southern Metropolitan Region

In 2009-10, there were 164 Aboriginal births in this region [31]. There is only one ACCHO in this region, Bunurong Health Service, which is both a KMS and an Aboriginal Best Start site. The Aboriginal Best Start worker is based at the ACCHO, and runs a weekly playgroup at a kindergarten facility.

VACCA has an office in Dandenong, from where they co-ordinate Lakidjeka, an Aboriginal-staffed program which represent the needs of Aboriginal children reported to child protection as being in danger or likely to be in danger of abuse or neglect. VACCA runs a number of Aboriginal playgroups in the Southern metropolitan region, staffed by a team leader and four part-time staff. VACCA has a healthy eating policy to ensure that appropriate and drinks are served to the playgroup.

42 of the Aboriginal births in this region were at Frankston hospital [31]. While there is no ACCHO in Frankston, Peninsula Health has a Koori health team which includes Aboriginal Workers in Frankston, Hastings, Mornington and Rosebud. The team has set up a Koori Community Kitchen, and runs school holiday activities for families. Peninsular Health is also part of the AHPACC program, which funds an Aboriginal Health Promotion Worker. Bunurong's two Healthy Lifestyle Workers are also based at Hastings.



Practitioner Consultations

METHODS

Consultation through targeted group discussions in four urban and four rural/regional areas was conducted throughout July-September 2011 to canvass the views of Aboriginal Health Workers and other health and early childhood practitioners working within Aboriginal settings and services. Surveys and interviews with the following groups of practitioners were conducted by the VACCHO Nutrition Team:

- Aboriginal Health Workers
- Koori Maternity Services staff
- In-home support workers
- Aboriginal Best Start workers
- Australian Nurse Family Partnership Program staff
- Dietitians, Midwives and MCH Nurses in ACCHOs
- Multifunctional Aboriginal Children's Services staff
- VACCA Supported Playgroup staff
- NCAC Indigenous professional support services
- Department of Education and Early Childhood Development staff



The purpose of the consultation process was to explore the current level of nutrition and physical activity content within Aboriginal health and children's services available in Victoria to identify the training and resource needs of early childhood practitioners, and to identify other opportunities to strengthen the promotion of nutrition and physical activity for Aboriginal mothers, infants and children. Data was gathered by asking practitioners questions such as:

- What are the most common nutrition/physical activity-related problems you see among children from birth to 8 years of age?
- As part of your work role, do you give advice/information to children or families about nutrition/physical activity?
- Have you ever done any training in children's nutrition/physical activity?
- What additional child nutrition/physical activity training, information, resources or staff do you feel that you need?
- As part of your role, do you run any activity programs for children from birth to 8 years of age?
- Does your program provide meals, snacks or drinks to children?
- Does your organisation have a food, nutrition or catering policy?
- Does your organisation have a physical activity or active play policy?
- What else do you think is needed to improve nutrition and physical activity for young children?

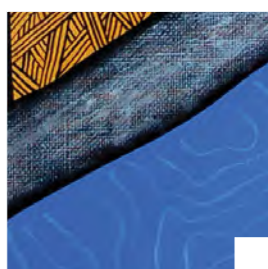
Examples of models of support for families with young children were also discussed in order to gather feedback and perceptions about whether these models would be appropriate and effective. All interviews were digitally recorded and transcribed. The project team analysed the transcripts for key themes. Ensuring confidentiality for participants and organisations was a priority throughout the project.

In addition, key policy documents and reports were reviewed in order to identify relevant data, evidence, opportunities and models of support for families with young children to improve nutrition and physical activity. These included reports from government and non-government agencies describing previous and current Aboriginal and mainstream Early Years program areas and recommendations, as well as documents outlining new initiatives such as:

- The National Indigenous Reform Agreement (Closing the Gap)
- The National Partnership Agreement on Preventative Health
- The National Partnership Agreement on Indigenous Early Childhood Development

This report, therefore, attempts to summarise the aspirations of the Government departments responsible for funding Aboriginal programs, as well as the views of the organisations and practitioners delivering these services and providing grassroots support for Aboriginal children and families.

Surveys, interviews and documents were analysed by the VACCHO Nutrition Team, with technical support from a Senior Dietitian from RCH. The emerging themes and findings were presented to the Steering Committee in order to reach consensus and assist formulation of recommendations.



RESULTS

During the Aboriginal Early Years Needs Assessment Project discussions were held with Aboriginal workers and other early childhood practitioners from the following organisations:

- Victorian Aboriginal Health Service, Fitzroy
- Yappera Children's Services Cooperative, Thornbury
- Bunurong Medical Service, Dandenong
- Wathaurong Aboriginal Cooperative, Geelong
- Gunditjmara Aboriginal Cooperative, Warrnambool
- Bendigo and District Aboriginal Cooperative, Bendigo
- Mildura Aboriginal Corporation, Mildura
- Swan Hill and District Aboriginal Cooperative, Swan Hill
- Mungabareena Aboriginal Corporation, Wodonga
- Ramahyuck District Aboriginal Corporation, Morwell
- Gippsland and East Gippsland Aboriginal Cooperative, Bairnsdale
- Lake Tyers Aboriginal Trust, Lake Tyers
- Lakes Entrance Aboriginal Health Association, Lakes Entrance
- Victorian Aboriginal Child Care Agency (VACCA)

A total of 45 practitioners participated in the consultation process. This included 20 Aboriginal Health Workers, three In Home Support Workers, one Aboriginal Best Start worker, four midwives, one MCH nurse, two registered nurses, three dietitians, one Healthy Lifestyle Worker, two playgroup coordinators, three managers and five MACS centre staff, including one cook. The majority of the practitioners consulted were female, and were themselves mothers and Aboriginal community members. Approximately 75% of participants were Aboriginal.



Key Nutrition and Physical Activity Issues

Practitioners involved in the consultation reported a range of nutrition and physical activity issues affecting Aboriginal mothers, infants and children. Nutrition-related issues identified included low birth weight, growth and development problems, micronutrient deficiencies, inappropriate infant feeding practices, poor oral health, and childhood obesity. Many practitioners also expressed concern about consumption of take-away foods and sugar-sweetened beverages, as well as low intakes of fruit and vegetable.

While improving birth weights is central to many of the Aboriginal Early Years programs in Australia, many practitioners reported that low birth weight was not common among the families with whom they worked. There was a perception that the increased focus on antenatal care programs such as KMS had positively impacted birth weights. Despite this, several practitioners reported that they still saw 'a few' low birth weight babies.

'A few, like we're measuring low birth weight under the 2.5 kg. Most of them are over that but only just. Still in the 6 pound ones most of them'

'We have low birth weights according to our stats'

'Over the last 6 years with our mums, our community, birth range is actually becoming the normal, it is, because they're going through the antenatal checks and all that following up on appointments'

'We're noticing with our group, the girls are going pretty much full term and the babies are pretty good sizes'

'They're not a bad birth weight... There's a few but not a lot'

Growth and physical development problems appeared to be much less common. This was, again, often attributed to the concerted effort many services put into early years programs. However, failure to thrive and underweight was still an issue in some areas. Concern was expressed by services which did not have access to staff, such as an MCH nurse, to perform development checks that growth and development problems may go unnoticed. Speech and language delay was the most commonly observed developmental problem, but it was not reported at all services.

'We're pretty lucky here, we don't actually see much of any of that... A lot of our programs are focused on those first 4 years so all our babies are reaching milestones and developing very well and good weight gains and things like that'

'It's more failure to thrive and underweight for age than the other way'

'Their growth and development aren't being checked now at all'

'We occasionally get families to play group that have fallen through the cracks a bit so then we're able to refer them on and have Maternal and Child Health come and pick them up'

'There is, like, language delays, yeah speech. I think the others are probably more subtle with their developmental delays that happen but it's mostly just the language'

'Speech is massive. Speech is huge. I'd say just about every child without exception has got speech delay... Yeah not starting to speak and then not having the appropriate vocabulary that corresponds to their age'

Some practitioners also expressed concern that some children may not be given enough opportunity to develop motor skills. Parenting issues and lack of role modelling and encouragement with play activities were identified as possible reasons for this. Social problems such as homelessness or overcrowding observed among some families may result in excessive use of prams and further restrict opportunities for daily movement. Playgroups were seen as an important strategy for providing opportunities for activity, developing motor skills, and supporting families with parenting skills and confidence.

'There's not too much positive play and whether that comes from some of the lack of role modelling of the parent and just the daily reading of a book at night and those sort of things'

'There are some kids that are a little bit delayed as far as, I think it's usually the first one or the last will get carried around a bit, and so they're not down on the floor developing those muscles'

'Some of the mums are a bit protective of their kids and they don't get a lot of floor time. They won't put them down on the floor cos the older kids are there so the kids are in the pram a lot so some of them are sitting up a bit later than they should be or not crawling when it's appropriate'

'There's been a couple of instances where I've seen a bit of delay and that's usually because they haven't had their own home, they've been wondering around in prams from place to place so its lack of opportunity rather than an organic reason'

'We have got some children in out of home care whose development is delayed or may not be quite where it needs to be, where it could be; but we find with if they stick with coming to playgroup and families are getting the support, then slowly that begins to change'

The main micronutrient deficiency mentioned was iron deficiency. Some practitioners reported seeing iron deficiency during pregnancy, while others were concerned that some children were iron deficient. The other micronutrient abnormality that had been observed in some areas was vitamin D deficiency. While most services appeared to routinely screen for and correct iron deficiency, vitamin D deficiency may still be going undetected.

'We had a little baby didn't we that was really really (iron deficient) and none of the family picked it up. Not even DHS picked it up. It was one of our workers here that picked it up. The baby was just lying there. Nutritionally deficient. He was tiny'

'The mums talk about the lethargy and stuff and we need to look at the red meat intake it's not adequate'

'We've got a couple that come back with reoccurrence of iron deficiency so we try and educate them and I've done sheets up at day care to show what foods would be good to eat to build your iron up for the kids'

'(Iron deficiency is) huge in my area (among) kids...I think the iron tablets go out automatically with mothers with the midwife. I think that's stock standard. They test for iron... Some of them have to have injections and it's usually the whole family so it's connected to what they're eating.'

'There's a few with iron deficiency, the mums, quite a few during pregnancy have iron deficiency...and vitamin D'

'Heaps (of iron deficiency) and Vitamin D. Oh no, not in the babies and that sort of stuff but in the mums while they're pregnant'

Infant Feeding issues

Issues with infant feeding practices reported by practitioners included lack of breastfeeding, prolonged bottle-feeding, introducing solid foods too early, and introducing energy-dense foods rather than recommended weaning foods. The frequent use of sweet drinks in bottles for babies and young children was an overwhelmingly common problem discussed throughout this consultation process. As a result, poor oral health appears to be one of the issues of greatest concern to practitioners working with Aboriginal children.

'We have a bit of trouble with Coke and cordial and juice in bottles'

'People don't realise the sugar content of juice. They think they're giving their child a healthy drink by giving it juice. We've been giving heaps of literature on the sugar content of juice and Coke and cordial. But again I think people are putting it in the bottles'

'It's more the dental nutrition, like, Coke is one of my biggest things that I'm always having to tell the parents how much sugar's in it and what it's doing to the kids teeth ... Yeah that's one of my biggest things, the dental... I've had about 10 kids go up to have teeth surgically removed and this is, like, little kids not adults'

'I know someone that's got a 3 year old girl. She's got 4 teeth left in her head. The mum kind of says that she's got something wrong with her teeth but I've seen... Coke, Red Bulls... This poor little kid who's still trying to eat a lolly and got nothing to bite it with ... that's years that the poor little girl has to eat with just her gums'

'I guess we see things like, poor oral health, obviously we've had some of those issues. High sugar diets; we notice a lot of young children, even when entering care... So oral, is probably the biggest thing... so we do see some children with, you know, the teeth rotten at the gum line'

'Through the kids health checks, we're picking up dental, you know, if they've got bad dental hygiene, you're not going to be eating properly'

Many practitioners were concerned that a large proportion of the women with whom they work do not breastfeed their babies. It was observed that the younger generation of mothers appeared to be less inclined to breastfeed compared to the previous generation. Some practitioners reported that many women initiated breastfeeding, but for various reasons switched to infant formula within three months. There appeared to be no more than 'a few' babies exclusively breastfed for the first six months of life. Despite this, practitioners continue to support and encourage their clients to breastfeed wherever possible, even if only for a short duration.

'There's not a lot of our mums doing a lot of breastfeeding'

'Fewer and fewer we find are breast fed, which is disappointing... You know many years ago when I started here, every child was breastfed... We still have a couple, but it's a very low percentage'

'It's a whole generational thing. The whole watching your mother and your grandmother feeding. That generation has stopped'

'Always encourage to breastfeed! Most of our clients that we've been involved with have breastfed for as long as they can... even if it's only 2 weeks; but they've tried and if they continue it well good on em.'

'Up to the two or three month mark that I know of. At the beginning of their life, then they go off on to bottle'

'Probably 90% of our mums breastfeed, at least, initiate breastfeeding. It probably drops down to about 75% still breastfeeding at 6 weeks. We've even got a few mums at the moment who are still breastfeeding at 9 and 12 months of age, which is fantastic'

Barriers to breastfeeding

Various barriers to breastfeeding were discussed. These included late presentation for antenatal care, lack of time or patience, self-consciousness, returning to work, putting babies in childcare; becoming pregnant again, drug and alcohol issues, and feeding problems such as difficulty attaching, milk not coming in, mastitis or blocked milk ducts. Lack of family support appeared to be a common problem, especially for single mothers who have other children to look after. Furthermore, it was reported that without additional support, first-time mothers may lack confidence in their ability to breastfeed successfully, and may choose bottle feeding as it is easier to quantify.

'Some start and if baby's not attaching then they give up'

'I've asked the mums that have finished breastfeeding and it is because they've had a problem with one of their breasts, you know, whether it's not being released properly or they've got a duct blocked'

'Our mothers don't stay in hospital. Generally you hope they stay in 48 hours but a lot of them leave within 24 hours so therefore your milk hasn't come in. If you're a new time mum, you want to get home. If you're a mother that's already got 4 children at home and the family connections aren't that strong well then she has to get home to look after these children'

'Some people don't have the family support to help cope with breastfeeding or to look after other kids while you sit there and you have a baby on your boob while your kids are doing something else they shouldn't be doing'

'It's much easier to see that your baby's had 100mL rather than they fed successfully at the breast...I think it's quite difficult to imagine that your baby's satisfied. If you're feeding every couple of hours you think 'oh they're not settling, maybe I didn't give them enough'. It's easier to use a bottle'

'They buy a bottle and a sterilising kit and they take all this to hospital just in case and they don't get over that so much. It's so much more quantitative'

The health care system was also seen as a potential barrier to breastfeeding. Practitioners reported that shorter stays in hospital meant that there was less time to establish breastfeeding before discharge. Difficulty accessing appropriate support to overcome feeding problems was another significant issue. It was reported that many mothers would sooner give up breastfeeding than go through the hospital system.

It was suggested that there is a need to employ specific staff, such as a lactation consultant, to provide intensive support for women after delivery, and to assist with attachment and any problems that arise. Some organisations are already providing this service.

'They'll go down to hospital and they're not being serviced properly and they just think 'oh I'll just give up'. It's just easier just to give up'

'We have problems with breastfeeding and all that sort of stuff. By the time you get to the hospital and try and get seen to...it's not worth it, for most parents it's not worth it. The actual stress of it all'

'I think they need someone sitting there with them for a long time. You need somebody for a couple of half days right at the start'

'We would be better off employing our own breastfeeding expert that would work with our mums to make sure they were catered for in hospital as well as at home'

'We've got a handful of staff that can go out and help mum attach baby to breast so that's kind of on the increase'

Shame and embarrassment, particularly among younger mothers, was another barrier to breastfeeding identified by many practitioners. Conversely, in some areas, women attending support groups had demonstrated increased confidence about breastfeeding in front of other people. Despite this, practitioners remained concerned that society in general was not supportive of breastfeeding, resulting in women feeling uncomfortable about feeding in public places. This may contribute to the low persistence with breastfeeding reported among Aboriginal women.

'They're self-conscious and not initially thinking of baby. We try to encourage but it doesn't always work'

'Not shame at all. And if there was anything, if they don't want to look, look the other way; grab a sheet, cover over. We had one at playgroup just recently breastfeeding. There was dads around as well and it doesn't matter. This child needs to be fed. You don't like it, you walk away'

'We've had a pocket of mums that are breastfeeding really well and they've been a good support for each other and I think because they've continued, they've all continued so they don't feel isolated flopping the boob out or anything like that. They're not the only one in the group doing it'

'When they go down the street, they don't feel comfortable enough to breastfeed because of how society is about breastfeeding so it deters them from that because you can't stop what you're doing and breastfeed your baby. There's no real place for that... you might as well do it in a toilet. That's pretty much the feeling that you get within the town, that it's out of sight, out of mind'

Many practitioners reported that one of the biggest influences over whether a woman breastfeeds was whether or not her partner is supportive. While some fathers support breastfeeding, others see breasts as sexual objects rather than a source of nutrition, and may therefore discourage their partners from breastfeeding, especially in public where they may be seen by other men. Furthermore, women may choose bottle feeding because their partners want to be involved in feeding, despite the fact that there are many other aspects of baby care in which they can participate.

'We have heard where some of the partners see them as a bit more sexual and want their boobs back'

'We've got a lot of younger dads as well and they see them as a sexual thing and there's a little bit of jealousy'

'Some of the mothers have said that they wanted to bottle feed so that their partner could have experience, but there's bathing, there's changing nappies'

These consultations have revealed the authority many men exert over their partners. This influence extends beyond infant feeding to affect some women's ability to attend clinic appointments or how shopping money is spent. Practitioners highlighted the need for a greater focus on educating men, as the majority of early years programs target only the women and are staffed almost entirely by women. There is a belief that better engagement of men in infant and child health initiatives will help overcome some of the barriers to breastfeeding that women experience at home.

'They don't get that support and if baby's a bit sooky or anything like that they're very quick to say "oh it's your milk, put it on the bottle'

'Not having the support at home. The dad's not been properly informed. If he has more of a say over the woman, he'll put his foot down and go "no" and she'll just...you know'

'We had a couple of dads come along so they heard all that breastfeeding information and stuff. I think that helps as well because it's already in their mind that this is normal and this is what boobs are actually for'

Bottle-feeding

In addition to its impact on breastfeeding rates, practitioners expressed a number of concerns about prolonged bottle-feeding. Childcare staff reported that they often saw babies and young children who were 'bottle dependent'. In addition, various practitioners observed that excessive use of bottles of formula or cow's milk resulted in children missing meals, which could have an impact on iron intake.

'I think a lot of them have that issue around when to stop. Babies stay on. I know my kids stayed on bottles too long... so then they're not getting enough nutritional needs'

'Just too long...just having it until you're 4. There's no need to have a bottle for that long'

'We had one child that's new at the centre - won't eat anything. Still on a bottle'

'Way too much milk and because of that they get the...I don't think its consciously substituting. It just happens to work out that way because their bellies are so full'

'There's a few babies who don't have breakfast because they've had- they're the bigger babies- they're having two bottles overnight and they get up in the morning and they don't have breakfast'

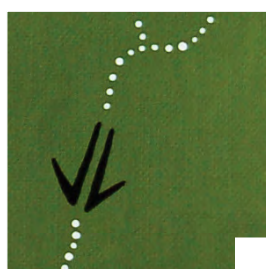
Another issue related to bottle-feeding was the observation that parents often use feeding to pacify children. Some practitioners were concerned that babies are being put to sleep with bottles, while others reported that bottle feeding was being used to comfort a crying baby when the underlying problem might be wind rather than hunger. Some parents may also use food to pacify older children in order to avoid arguments or tantrums.

'The pacifying thing with the drink bottle. Another milk drink, another milk bottle'

'They're just giving them more bottle, the kid's screaming more so they think more bottle, screams again, more bottle, not realising that they just have to burp the baby'

'A lot of mothers use bottles or breasts to put the child to sleep... maybe we need to work more with: Breast, Play, Sleep...so we don't put them to sleep with a bottle'

'I think food is used as a bit of a pacifier even though he's now turning four. I think she gives him what he wants then he stops nagging'



Introduction of solid foods

Another major concern expressed by several practitioners was about the introduction of solid foods and cow's milk. In one area, health staff were observing children with gastrointestinal problems as a result of early introduction of solids and inappropriate use of infant formula. Many practitioners raised concerns about the amount of processed foods being given to babies. This included take-away foods being introduced at an early age, and reliance on commercial baby foods as opposed to preparing pureed vegetables.

Another problem arising from use of canned baby food is that the labels often encourage introduction of solids from 4 months of age. Childcare staff reported that they found it difficult to provide healthy meals for children if basic foods such as vegetables, yoghurt and custard had not been previously introduced.

'Some difficulties we have had is some parents wanting to get their young children off formula...and get them on to cow's milk, like (at) 6 months. We've had a few of those'

'We have a few kids on the block that have bowel problems because of constipation and things that they were fed when they were a baby... and formula as well. You say to them "You know you gotta go by the tin" "Oh no but they want more" so they put in more spoons'

'I think the problem's around the misconceptions of food, of what should be offered to children. I know a lot of them first start off with Maccas, potato and gravy, take away'

'There's probably a small portion of mums that actually cook. It's gotta come from a can'

'Then they read the labels...they say 4 months so we start feeding at 4 months' rather than 6 months'

'Some kids haven't seen vegetables let alone eaten them'

Nutrition problems for older children

The primary nutrition issue raised regarding older children was the high intake of energy-dense foods. Practitioners were particularly concerned about high intakes of high fat/high sugar snacks, take-away foods and sweetened drinks, and the fact that these foods are replacing nutritious meals. Those working in rural and regional areas were particularly concerned about the high concentration of take-away food outlets in their towns. Another contributing factor reported was that some parents may lack shopping and cooking skills, and may perceive that it is easier to buy take-away than to prepare a healthy meal.

'The kids are filling up on their snack food from 9 o'clock through to 11 o'clock so by 12 o'clock-- they don't want lunch because they've had a bag of Twisties, packet of lollies, and you know, a bottle full of juice or cordial'

'It's easier for a mum to hand them a packet or something that they can eat on a stick or whatever, rather than they actually feed them'

'There is a lot of that take away and once a Thursday you see them driving in and out of Maccas. And that's fine, it's a family treat but trying to teach them not to do it every day is really quite difficult'

'Every time you say to them "why don't you just cook up this or that" it's like "I don't know how to cook that". And it's just like go and get the packages from Safeway and they say "I don't know how to do that, it's easier just to go to KFC or McDonalds"'

'Cooking is a big issue. A lot of people...don't know how so they think it's better to go get a bucket of chips and feed the kids on that. They just look for the easy way out'

Child weight issues

Childhood overweight and obesity was also a common concern. Although practitioners did not report seeing large numbers of overweight children, most reported that they worked with at least one child who had weight issues. Obesity was attributed to consumption of energy-dense foods and reduced physical activity. Practitioners working with pregnant women observed that maternal obesity was also a problem, and were concerned that the children may also be at risk. Childhood obesity was associated with low birth weight in one area, while in other areas practitioners were concerned about the impact on body image and potential bullying on overweight children.

'We had a little girl recently ...and the little girl she was probably 5, I don't know how much she weighed. She was big, she was really round, I don't know if you've seen the newer scales, but she was category 3, obese at 5 years old'

'One of our children who is overweight, quite severely I would say. She is fed biscuits and Milo and sat in front of the TV or compute'

'A bit of obesity too within our toddlers. There's a few that are, you know, overweight'

'A few of the kids I'm thinking of now, when they were born they were quite low birth weight but now they're humungous'

'There is a few children that have high weight and there is that body image issue'

When discussing child weight issues, all practitioners agreed that it was a highly sensitive issue, and that parents could become very defensive. Many felt uncomfortable discussing weight issues with parents, particularly those practitioners who were themselves overweight. Those who did discuss weight issues were very mindful of parents' feelings and always tried to avoid feelings of blame. Maintaining the trust of parents was the top priority for the majority of practitioners.

Aboriginal workers in particular found it particularly challenging to talk about sensitive issues within close-knit communities where they may be related to many of their clients. For this reason, they often chose to refer clients to other health professionals such as doctors, dietitians or MCH nurses to discuss weight management rather than raising the issue themselves. Many practitioners said that they would like to have training about how to approach difficult topics such as child obesity.

'Parents are ashamed to tell us the truth sometimes. They think they're not doing the right job so I have a lot of troubles with that. You never know the exact truth because you don't know how much of what they're telling you is true'

'That's a big thing for me because I don't want them to take it personally if I'm saying they're fat or something! Because I'm not like, real slim myself, I don't want them to turn around and say, 'you can talk!' Do you know what I mean? You just feel like a big contradictor'

'As a Health Worker, I've just started losing weight but if I was to say "you need to lose weight" and I'm this big they'd be going "you need to practice what you preach" so that's probably why some health workers feel uncomfortable'

'If you're talking about the kids sort of thing, some people will turn around and say "Well they're my kids and who do you think you are?"'

'When you live in a community and you're related to a lot of the people as well, you just don't go there. You know, you lose one girl, we could lose them all. We've taken a long time to build that trust up with these girls. You say one little thing, we could just break that. We leave it up to the professionals within that area to discuss that with them.'

Children's physical activity

When asked about physical activity, most practitioners agreed that, when given the opportunity, Aboriginal children loved to participate and were often very active. Staff who were involved in playgroups and preschools in particular emphasised this point. Physical activity and positive play programs were seen as highly valuable strategies for supporting physical development, social interaction and providing opportunities for children to be active. Types of physical activity programs provided included active play, organised games, traditional games, Aboriginal dance, swimming, kinder-gym, music and movement activities and circus programs. In some areas, after-school and holiday programs linked with local sports clubs were also offered for school-age children. While these activity programs are all very popular with children and families, practitioners emphasised that places were limited due to funding shortfalls.

'They are active and they probably would be far less active if we didn't incorporate those programs. Outside, they're offered the large playground, the staff set up obstacle courses, they might have the bikes out one day with sand pit play so there's certainly a lot'

'We try to have a lot more outdoor play where we are in our centre because the kids are wanting it'

'Most of our children today are that I can see. They're all active, not a lot want to just sit around the computer all day... especially at playgroup, no sooner than we get to playgroup, they're outside. It's very hard to keep them inside'

'We don't get to see what they're like at home; but the activities we do, there's that opportunity. Even in our holiday activities, we're doing something out and about, lots of fun things to do. Very few children will cling and not go participate'

Many practitioners were concerned that physical activity levels were significantly reduced once children entered school. While many children remained active, particularly those who excelled at sport, others may not be active enough. The rising popularity of electronic games was seen as a problem, as many practitioners felt that these games were replacing outdoor play as the main activity for school-age children. Concerns were also raised about the availability of these games systems and other screen-based activities to younger children. Some practitioners observed that concerns about neighbourhood safety may make parents reluctant to allow their children to play outside, preferring them to be in front of the television where they can be supervised. There was a general agreement that, as a result of these issues, children were not spending enough time outdoors.

'I suppose you can go to the park and those sort of things but speaking as a parent, well, my kids are inside all the time. They're probably Vitamin D deficient too. They play video games and that sort of thing. So I don't think we really promote getting out and that sort of thing'

'I don't know with all them game consoles too...they're like baby sitters'

'It's very hard to get them out. Of course it is. You know, the internet, they love it all. Good little baby sitters'

'I think with our mums too if they sit them in front of a DVD, they know where they are. So DVDs are a very common thing. They're on from early morning so they're not out in the yard, you don't have to keep checking them and you can lock that front door and know where they are. That's another thing, I think it's a thought in their heads that they know where they are and keeping them safe. But of course they're not getting that physical exercise, they're just sitting'

'We have a TV... and we have one computer station in our kindergarten which kids would fight over'

'Even thinking back to when they were young I think we're guilty of sometimes just plopping them in front of the TV'

Parents were seen as a major influence on children's physical activity levels. Practitioners highlighted the importance of role modelling, and often encouraged parents to take children to local parks and participate in activities as a family. Parental inactivity was identified as a potential barrier to physical activity among children. Furthermore, some practitioners were concerned that some new parents may not be confident about playing with their children. Playgroups and family activity days were seen as an important strategy for role-modelling positive play and simple activities that families can participate in together.

'The stuff I've picked up on, it's just the home life really affecting them at home. A lot of them are going through a third generation when all they see is Mum, Dad or Nan sit around and that's all they know'

'You'll see some parents walk around with their kids. But then you've got the people that live far back from the park and they can't, they couldn't be bothered walking down there so they don't take their kids down'

'We have the park here but it's not like...On a rare occasion I'll see a family down there playing on the park. It's normally the older kids that'll take the younger ones down there to get them out of the parents' hair. It's not like it's a family thing'

'That's a big thing, the mums tend not to play with the children so the kids are a bit lost. We do go down to the park in our group. They tend to let the children go but the mums don't ever play with them and I think there would be more benefit if the mums would play with their kids. Enjoy the park, get involved that bit more'

'I don't think there's enough opportunities for kids to be active either. And it's hard too, because if parents aren't active, then kids aren't...and it's hard for parents to be a role model especially if they're already obese. It's hard for them to get out and have a go cos you've got your body image. You've got all these other issues which are happening'

Local sports clubs were seen as a valuable source of physical activity for children. However, some practitioners expressed concern that children who were not naturally 'sporty' may not participate in competitive activities, and alternative opportunities are needed. Other barriers to participation in sporting activities included the costs of registration, uniforms and equipment, as well as lack of transport to and from sport and other after-school activities.

'Just our own sporting clubs that we use like the basketball, the football. So we're all out there with sport'

'We've got a lot of sporting stuff that happens down here, a lot of sporting stuff. Basketball, surfing, netball, footy, swimming, new one, baseball, we've had soccer, we've had tennis'

'I reckon most physical activity is the first thing you think of is sport, like competitive... Not all kids are competitive so maybe there's not that many options for them if it's not to win or lose'

'There's nothing worse if you're kids are not competitive. Against them with the latest clothes and they're good at it'

'With the walking if they're walking along and talking and looking at the river they forget that they're exercising and enjoy the walk and get little things off their minds too'

'It's too expensive to put your kids in sports these days. That's one of the biggest issues'

'(For) a lot of families, transport is a big issue...transport to get kids to after-school programs and afterwards cos there's no transport from the finish of the day'

Food insecurity

Financial and physical access problems were also identified as nutrition issues. Practitioners reported that many Aboriginal families experience food insecurity, and that the affordability of a food was often the primary concern rather than its nutritional value. The rising cost of fruit and vegetables was seen as a major barrier to healthy eating. Lower breastfeeding rates meant that families were also spending significant amounts of money on infant formula. Some services provided breakfast programs, food vouchers or food hampers to families experiencing food insecurity.

'I think a lot of it comes down to the price. You know, everyone's just living week by week and fruit and veg are really expensive and a lot of the long life and tinned fruit's really expensive too'

'One of the biggest issues for us is retraining mums to be able to shop with their budget. Ours is more financial so you figure out after they pay rent, electricity, those things-what's left? You'd be very surprised and if you stick formula on to that at \$22 a can, you don't have a great deal of money left to feed the family'

'Housing as well. I think when people don't have stable housing, I mean we find this in pregnancy, it's all very well to sit there at the appointment and say "these are the foods you should be eating" but if you haven't got access to a fridge or you're moving around or you're staying at someone else's house, it makes it really hard. It just impacts so enormously, I think, the housing on people's ability to provide themselves and their family with healthy food'

'We've got our brekkie program too. You've got kids that don't go to school, still come down and get their brekkie and packed lunch'

'If a woman's got no food we provide food parcels so either way we're still assisting families with food'

'We have to do a lot of food vouchers from here'

In addition, to food access issues, some families may not have the skills necessary to plan and prepare healthy meals. Practitioners reported that lack of budgeting, shopping and cooking skills resulted in some families relying on take-away foods which they perceived to be cheaper. Others had concerns that some parents may have problems caused by addiction, which could result in shopping money being spent on other things rather than food. Food security was a sensitive topic to discuss, as practitioners do not want families to be stigmatized, especially since some are concerned that their children might be removed.

'Most of the girls have financial problems but there'll be the take-away containers. One girl was getting a food package'

'It mainly comes down to the money issue. They'd rather buy the cheap unhealthy stuff to sort of get by'

'Some of my families don't come out of the supermarket with a huge trolley. And why? Cos they don't know what to cook'

'Families have a hard time budgeting money for healthy food and doing that cooking each night'

'On a pay day if you go to town...you will barely see any of them in the supermarket at all and when you do it'll be with the big boxes of Coke and things like that...There's probably about 10 people here who go in and do a shop every week...and that's when I worry about the kids'

Nutrition support provided

Several of the practitioners interviewed provided some kind of nutrition and physical activity information or advice as part of their work role. Those working with pregnant women, such as KMS staff, predominantly provided education about healthy eating during pregnancy and lactation. These practitioners emphasised that while they supported and encouraged breastfeeding, they always respected each woman's choice when deciding how to feed her baby. Some also provided comfortable, private spaces for women to breastfeed. KMS staff often provided information about appropriate physical activity during and after pregnancy.

'I do talk in my role as a midwife just about nutrition in pregnancy and talking to them about why we need to have our red meat'

'We do, as I said, give out a book for pregnancy, eating well in pregnancy and eating well when you're breastfeeding'

'We do classes and we have the breast pumps and we really encourage it as much as we can. But if a mum's going to formula feed we will support her with that too. You're not going to cut off your nose to spite your face. The important thing's the nutrition'

'If a mum comes in and bubs is hungry or something and she's a bit nervous about breastfeeding out there, she'll come in here and breastfeed, so we certainly encourage all of that sort of stuff and give her the support that she needs'

'From our Koori Maternity Women, we're always encouraging them to do gentle exercise and nothing that's too strenuous for them. We encourage them to do swimming. We have swim cards that we have access to, to encourage them to get in the pool. We've done the occasional pram walk'

Other forms of nutrition advice provided included information about introducing solids; food groups and portion sizes; iron-rich foods; the importance of family role-modelling; oral health information; and the importance of regular physical activity. Many also provided healthy and affordable recipes and incorporated cooking into their programs. Education was often provided at group programs such as 'Mums and Bubs' groups or playgroups. Practitioners emphasised the importance of providing a meal to encourage attendance at group programs. Most reported that they tried to model healthy eating with the foods and drinks provided.

'We tell them about the value of play, indoors, outdoors, particularly outdoors. What you can do, send home a sheet of different activities that they could do that doesn't cost anything like take your child to the park if you're close to one or kick a footy. That sort of thing'

'We also give them recipes, like cheap recipes to give to little ones'

'We have the constant discussions about why we have this sort of food and families suggest recipes and sometimes cook as well because we do cooking at playgroup'

'Most of the cooking's all done in front of them. We don't ever go down and prepare a meal and then take the mothers there. It's while the mothers are there so they can watch us prepare a meal and just give them an idea that it's not that hard. Sometimes you need to see things'

'A bit of role modeling with the food that we have at our group. Like we try and- we get off track sometimes because they like a change-but we try and have chicken and salads and dips and biscuits and fruit'

Nutrition and physical activity policies

Two of the ACCHOs and all three of the MACS visited had some form of nutrition policy in place. However, MACS staff reported that their nutrition and physical activity policies needed to be reviewed. Even organisations without policies reported that they usually provided healthy food anyway; however, practitioners reported that there was certainly room for improvement. Most practitioners agreed that policies to ensure that the food provided was consistent with nutrition guidelines were an important strategy for ensuring that Aboriginal organisations lead by example. Some ACCHO staff were concerned that implementing healthy food policies could appear paternalistic, while MACS staff were often confronted with parents wanting to bring in birthday cakes for their children. It was emphasized that the food provided needed to be appealing, so that it was an incentive to attend programs.

'We have a cook at our centre. So we run our meals according to the national standards so that children are fed all fruits, vegetables, cereals...The only drinks we provide are milk and water and all parents are accepting of us doing that. They're not demanding that we give them cordial and the fizzy drinks so that's excellent'

'We have a physical activity policy. But it's not...Probably the nutrition and the physical activity policies need to be looked at a little bit more closely and revised a little bit'

'We don't really have a policy but like I said, most areas try to provide a healthy meal'

'I think it would be good to have a policy for the catering side because I know that they do have the fried food as well as the sandwiches and the fruit'

'The first thing I'd do, I'd implement protocols in all Aboriginal organisations implementing healthy catering food only. No deep-fried crap. Especially if people are trying to change even if it is mundane people go to a meeting and they're a captive audience, if there's only crap it's not really helping the cause so it's the first thing I'd do'

'I've had a conversation with another MACS... cos they put sugar in everything! Sugar in the bottles, sugar when they cook...cook the vegetables, sugar in everything'

'One of our main big drawcards is doing something around a meal. If we say lunch provided or whatever, it really gets people in. Whereas, if they're going to come and not like anything we put there for lunch, then they're not going to come at all. So you've gotta be careful there that you've got a good mix of foods. We always have fruit platters, always have water'



Health information resources

A variety of different nutrition and physical activity information resources was used. Some practitioners used the Aboriginal and Torres Strait Islander Guide to Healthy Eating, while others used various forms of the food pyramid. While some practitioners used mainstream resources such as those produced by the Victorian Government, Playgroup Victoria and programs such as Smiles 4 Miles, most preferred to use resources that were specifically developed for Aboriginal communities. Some ACCHOs developed their own nutrition resources, such as posters, factsheets and recipe books, while others sent out newsletters that included nutrition and activity tips for parents. VACCHO resources such as the *Boorai Bundle* and the *Tucker Talk Tips* resource were extremely popular among the practitioners interviewed. Despite this, many practitioners felt that there were insufficient Aboriginal child nutrition resources developed in Victoria. As a result, they resorted to using resources developed in other states, particularly Northern Territory and Queensland, which were often not relevant for Victorian Communities.

'I have pamphlets and things that we give out. They've come from just from the government when they've been running different nutrition programs'

'There's heaps of resources. Sometimes they're not adequate or right for the person so you might just talk about the information'

'Our dietitian has developed some excellent colourful, printed literature that we generally give to all the pregnant women when they come through'

'I do nutrition sheets for them. I get ideas from, like, Northern Territory's got some, Queensland's got some. I've looked at their ones and I've gone and got all my own information and fixed up my own'

'The resources that come from there assume that most people aren't literate or that English is very much their second language whereas practically everyone we see it's their first language and the terminology in it's a bit condescending for our girls'

'The breastfeeding ones, introducing solids that were developed in Queensland. We've made copies of those and we give those out in baby packs'

'I just think more Indigenous specific stuff is good as well. I had this thing that I brought back from Alice Springs with me when I was working up there....it was a nutrition thing that we used to use and it was great but it hasn't been of any use down here because it was very Northern Territory. It was a flipchart and lot of pictures. I really liked it'



Health professional support

When asked about support from other health professionals, all practitioners had some form of referral system in place. Most commonly, ACCHO staff would refer children with specific health issues to the general practitioner at the service, who would organise specialist appointments. Two services interviewed had visiting paediatricians. MCH Nurses were another common first point of referral. However, while most ACCHOs hosted weekly or fortnightly MCH sessions, some had no visiting nurse at all. For these ACCHOs, MCH was cited as a major gap in their service. Since maternity programs are only funded until 6 weeks after delivery, it is expected that women will then access their local MCH service. However, practitioners were concerned that if women were not accessing the mainstream service, growth and development were not being monitored at all and mothers were missing out on important nutrition information. As a result, some KMS staff felt that incorporating a maternal child health nurse and Aboriginal health worker into their service would improve continuity of care, particularly in relation to growth and nutrition.

'My role as a midwife is through pregnancy to probably the first week after birth and that's where your maternal child health worker takes over. (KMS worker) probably follows up the community kids a bit more than what we as midwives do but that's why we need a maternal child health worker on site'

'The children that I have concerns about, there are scales in my car and I will weigh them but it's not part of the program. Especially the girls who don't engage very well with maternal and child health, at least it's better that I weigh them than they're not weighed but it isn't my role'

'Maternal child health nurse within the co-op. That would be excellent. just once a month isn't enough. Some of these kids are really high risk so once a month is not going to sort that out'

'I think a lot of the ACCHOs really needs to be looking at having our own maternal and child health nurses cos there's just so much conflict with the mainstream ones'

'I can't say often enough or long enough, loud enough the ideal for children 0-8 is to have access to maternal and child health. You might say 'oh yes, they've got access to mainstream and they're culturally going to put up a few Indigenous prints in their rooms' It's not the same. Our families are telling us with their feet it's not the same'

'That's the vision that our maternal and child health nurse actually said when she left, that just like the midwife and the health worker work in KMS, to have a... health worker that has nutrition training and stuff like that working alongside a maternal and child health nurse'

'It could just be part of KMS because can you imagine the dynamic team if you had a midwife, a maternal and child health nurse and a health worker that worked with both of them. The team would be a dynamo!'



The situation was similar for dental and dietitian referrals. Some but not all ACCHOs have visiting dentists, and there are only four dietitians currently working full-time within ACCHOs. Some ACCHOs had a visiting community health dietitian, while others had no dietitian at all. Many of these dietitians are employed in positions focused on chronic disease management rather than child nutrition. Practitioners emphasised the importance of finding culturally sensitive, non-judgmental health professionals to work with Aboriginal families, as many women had had bad experiences in the past. The need for specific Aboriginal nutrition and physical activity positions to work alongside non-Aboriginal health professionals, similar to the KMS model, was also clearly expressed.

'Our dietitian is only 2 days a week. Regardless of anything else she's really only got Tuesday...As soon as she's got a training day, that day's gone. Not saying she's flat out, booked out all the time, but trying to pin her down for an appointment is really hard'

'(The dietitian came) once every 3 months and those were only really targeted at the diabetes people. It probably needs to be targeted more towards parents'

'I'd love a visiting nutritionist to become a familiar face so people can ask those questions whatever they think of; and who backs us up for having healthy food at playgroup'

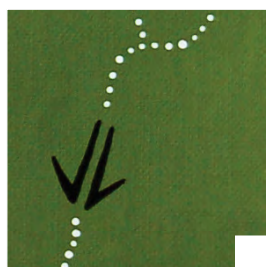
'It would be really good to have a mobile unit that had its own nutritionist and some sort of physical activity expert who had wonderful equipment for setting up obstacle courses and teaching parents'

'I mean the cooking program's really good and it comes down to money and finding the right person to deliver the nutrition information. That's the hard bit. And it would be good to find someone that can do that. That has the Indigenous aspect to their understanding and not be judgmental'

'I think you need an Aboriginal worker because there's not many Aboriginal people that are qualified in those fields...To go alongside the worker'

'I often feel that (ACCHO) lacks a lifestyle worker and that's the next step up, someone to work alongside (the dietitian) to change lifestyles'

'Just focus on nutrition cos really, especially at the ACCHOs ...you have 20 different roles as an Aboriginal Health Worker and then to also say 'ok now I'm going to focus on nutrition' ... You're so busy dealing with the day to day stuff that's coming in...It's just too hard'



Nutrition and physical activity training

Most ACCHO staff interviewed had done some form of basic nutrition training as part of their Aboriginal Health Worker, Nursing, or Midwifery qualifications. Aboriginal Health Workers had completed one day of nutrition training as part of the Certificate III course and three days of nutrition training as part of the Certificate IV qualification at VACCHO. Many KMS Aboriginal Health Workers had also completed the Certificate IV in Indigenous Women's and Babies' Health, which includes a nutrition unit. Some midwives had also completed a lactation consultant qualification, and one was completing a Masters in Human Nutrition. In Home Support and MACS staff were less likely to have completed nutrition training apart from Food Handling certificates. These practitioners, however, were more likely to have done training in physical development and active play for children. Apart from one practitioner who had completed a YMCA course and another who was a kinder-gym instructor, not many had completed specific physical activity training. Almost all practitioners agreed that they would like further training and professional development, particularly in the areas of breastfeeding, child nutrition and parenting skills.

'The nurses all had their lactation training but to also train the health workers so that if the nurses can't go out, well then a health worker can go out. So they've also been trained up'

'I think it'd be great to have AHW breastfeeding courses because through transportation and just through yarning to people and, you know, whatever, we're all saying the same thing, it's a much more powerful thing that everyone's on the same page'

'Over the last few years there's been that whole thing that you should delay introduction of solids until 6 months and now there's been more research that the jury's out again and they're talking about re-introducing at an earlier stage...so an update on all that kind of stuff for us would be really, really good because out in the big wide world mothers are confused and I can't blame them'

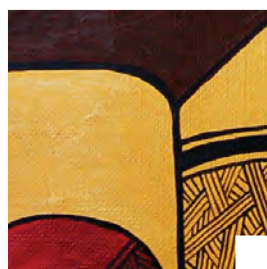
'I'm just new within all this as well so I don't really... I know about iron and all that type of stuff but with babies, children, I really don't know so far so I would like to go to training'

'It'd be good for us to know ourselves. Like, if I went and done training and then went out and knew what I was talking about within those areas'

'I don't know if it's so much the children's nutrition but one of my biggest problems is people don't know how to cook. So I'd like more skills on putting them skills into the home'

'(If I had training) I'd be able to get up and stand up and be confident that I'm giving out the right information. I've got a little bit of an understanding about it but it'd be nice to have clarification'

'My staff will do any form of training. They like training and usually we concentrate on children's development in all different ways so it would be another way to look at children's development because some of the staff do raise concerns about children's health'



What else is needed?

In addition to requesting workforce development, the other most frequent response to the question: 'What else do you think is needed to improve nutrition and physical activity for young children?' was about education and support for parents. Practitioners talked about the need for more education about appropriate introduction of solid foods and the need to avoid giving high sugar foods and drinks to babies and young children. Many also recommended hands-on education strategies such as label-reading, budgeting, shopping and cooking programs. Visits to market gardens and establishment of community gardens were also recommended strategies for engaging families in food preparation and reducing food insecurity.

'I know with Mums and Bubs there's always conversations about introducing solids and stuff like that...we'll sort of say 'oh try them on this' or whatever so there's always some verbal discussion but we don't actually do any education at the mums and bubs group around it'

'The nutrition sort of stuff, the hidden sugars. How to actually read properly the labels on...if the sugar's placed in the first three words, then don't get it'

'A lot of the mums that are in don't have a concept that you don't give your kids excess sugar or like 2-year-olds, 3-year-olds, they're giving them milk with 3 tablespoons of sugar'

'A thing for parents and even hands on like cooking, having a cooking day and showing different foods that they can make that aren't going to cost a fortune but are healthy'

'I think hands on stuff: you're going to the supermarket, you're picking out what you want to cook with, you're all feeding off each other in terms of what's good and what's not, what's healthy and what to put and being creative'

'A community garden somewhere where the community help do it too would be okay because we know our families aren't financially well off so at least if you've got a community garden they're going to get fresh vegies'



To accompany any education strategy, practitioners requested more locally-relevant nutrition information resources. Specifically, there is a need for Koori-specific visual or pictorial resources that do not require high literacy levels. Practitioners reported that they would like resources that show the amount of fat and sugar in different foods and drinks as well as pictorial resources about breastfeeding and introducing solid foods. While VACCHO's *Tucker Talk* tipsheets were a popular resource, several practitioners requested that they be enlarged into posters to display in the ACCHOs. Another recurring theme was the need for local Aboriginal faces that community members will recognise on posters and other campaign materials.

'If they had a short DVD or something like that with nutritional information or showing what is actually in it or getting a hamburger and putting the amount of butter or fat beside it...the visual stuff'

'I think some big charts would be good. I know with that Go For Life, they had big charts with the 10 teaspoons of sugar in one can of Coke...that'd be good to have within the kitchen area.'

'It was a flipchart and lot of pictures. I really liked it... it took all the problems of literacy out because it was such a good pictorial of mum breastfeeding and all that sort of stuff'

'It'd be good to have some breastfeeding posters. Culturally appropriate breastfeeding posters. We discussed developing one to sort of indicate the cost of artificially feeding and just to show all the tins piled up, the bottles, sterilizers, how much it costs'

'I would love to see something developed around first, introduction of solids for babies in that pictorial same kind of a way that would be really good. And then the next stage where the food is mushy that kind of...Something produced, again that's culturally appropriate. We don't have anything like that right now'

'Do they (tipsheets) come in big posters as well because they'd be great in our waiting room...if we had them a little bit bigger they'd look good in the waiting room'

'If you know someone on a poster it actually makes you look and read. There's one at (the hospital) and I sort of know a few people on it and I go 'Ooh!' it makes you want to read it cos you know the person'

A range of proposed strategies to address early childhood nutrition concerns was flagged with practitioners. Strategies which were overwhelmingly positively received included resource development, breastfeeding/parenting mentors, MCH nurse working alongside a child nutrition worker, and more ACCHO child nutrition services. The suggestion to offer health workers visiting families at home was not always well received, as some practitioners thought that mothers might see this as an imposition.

'Are they (MCH nurses) culturally trained? I don't have experience working with them but just hearing about the negativity before...'

'I think it's touchy cos I know... she can be a bit pushy sometimes.. and I know the mothers, they see her walk in and they roll their eyes'

'No, not all the mums are keen on home visits'

'MCH with an Aboriginal health worker... I think that's what's needed'

'Well none of our staff are, like, health promotion in the younger years'

'I like the idea (of having trained mentors), that it shifts from 'my friend said' to people with a bit more education'



Parent Consultations

AIM

The purpose of the parent consultations was to consult with parents and/or carers of young children from Aboriginal communities in one rural and one metropolitan local government area in Victoria. The objective was to assess knowledge, beliefs, sources of information and practices relating to the nutrition and physical activity of infants and young children, and to seek community direction for piloting new evidence-based nutrition initiatives. This participatory research will contribute learnings about how Victorian Aboriginal families understand the issues of breastfeeding, early feeding, toddler eating patterns and physical activity practices.



METHODS

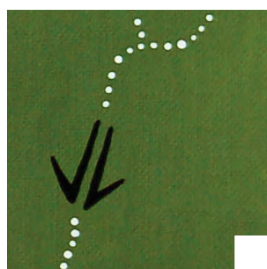
Based on the advice of VACCHO's Nutrition and Physical Activity team, one rural and one metropolitan community group which had previously identified concerns or interest in children's nutrition and physical activity issues were invited to participate in the consultation.

Staff from the VACCHO Nutrition Team approached Aboriginal Community Controlled Health Organisations (ACCHOs) to identify community interest in participating in the child nutrition and physical activity needs assessment. Men's groups and Women's groups functioning both independently and within the ACCHOs were approached separately. In the rural area, both the Men's group and the Women's group ran as programs within the ACCHO, and were organised by Aboriginal Health Workers based at the ACCHO. In the metropolitan community, a Men's group and a Women's group were identified through personal contacts and the community knowledge of the Aboriginal Project Officer. These groups were operating separately from the ACCHOs, with some support from local council services. All groups had ongoing meetings on a weekly to fortnightly basis.

A question guide based on the 2010 mainstream needs assessment [1] was modified and piloted with a group of Aboriginal parents/carers. The questions centred on nutrition and physical activity practices, barriers, sources of information and support, and preferred strategies to address parental concerns. Once the question guide was finalised, groups of 8 to 10 parents / carers were invited to participate in the focus groups.

Participants were parents and/or carers of Aboriginal children aged 0-8 years, attending the local Aboriginal men's or women's groups described above. Groups of mothers and fathers were invited to participate in discussion groups run by local Aboriginal facilitators and the VACCHO nutrition team. Groups of mothers were conducted by a female Aboriginal facilitator, and fathers' groups were conducted by a male Aboriginal facilitator. Location and timing of discussion groups were determined by the local Community. No identifying information of individuals was recorded. The name of each Community participating was recorded for the purposes of collating each focus group's responses. Informed consent was gained, following explanation of the project with families and provision of an information statement by the VACCHO facilitators. Ethics approval for the project was received from the Murdoch Childrens Research Institute.

Discussions in focus groups were recorded by a portable voice-recording device, and the findings transcribed by the VACCHO team after the discussion groups. The findings from focus groups were analysed thematically to ensure the anonymity of participants. A third researcher from RCH listened to the recordings of each group, and identified themes independently. All findings were cross-checked between members of the project team, which was overseen by a reference group and validated by the community members who had participated in the focus groups. VACCHO also provided a feedback meeting with each community to discuss the findings from the focus groups, and to allow opportunity to progress the issues identified by families.



RESULTS

Community consultations were undertaken by the VACCHO nutrition team in 4 groups of up to 15 parents/carers of young children aged 0-8 years from Aboriginal communities in one rural and one metropolitan local government area of Victoria. One group for fathers/male carers participated in each area. Table 1 describes the locations of the parent groups and the number of participants in each group (men and women). There were 2 men's and 2 women's groups, one in each location (rural and metropolitan). There were 22 male and 13 female participants in the 4 groups.

	MEN'S GROUPS	WOMEN'S GROUPS
RURAL		
Mildura	Yes (n=7)	Yes (n=4)
METROPOLITAN		
Banyule	Yes (n=15)	No
Darebin	No	Yes (n=9)
TOTAL		
Groups	2	2
Participants	22	13

Table 1 Location and description of parent focus groups

Discussion with focus groups ranged from 60 – 120 minutes duration, depending on the size of the group. Participants were more than willing to share their insights and personal experiences of raising children. Focus groups were recorded and transcribed by the project team. All findings were grouped into the common themes. Themes were compared for consistency between the VACCHO and RCH team members. Common themes emerging from all groups were combined, and the most frequent responses between and within all groups were identified.

Child nutrition practices and concerns of parents:

The most frequent nutrition issues identified consistently by all parent groups were children's reliance on sweet drinks and bottles, fussy eating and erratic eating patterns, and reliance on 'junk' and/or takeaway foods. Breastfeeding issues emerged as a key concern, and are discussed in a separate section. The nutrition concerns identified were consistent with those arising from the mainstream needs assessment, and are also consistent with findings from the practitioner consultations within the ACCHOs.

Associated issues such as childhood obesity were also identified by some parent groups. Dental concerns were more frequently raised within the consultations with practitioners than among parents. Underlying determinants of nutrition and health such as food access, availability, affordability, transport and housing were also highlighted as concerns within all parent groups.

Bottles and sweet drinks

Reliance on bottles and sweet drinks such as Coca Cola, soft drinks, cordial and fruit juices emerged from discussions in all of the parent groups.

'I try and buy heaps of fruit but it's just that Coke that always ends up at home. I'll get a can and it's still not drunk by me, it's drunk by everyone else. It's the Coke that's a killer in our black kids'

'Especially with the bottle, cordial in the bottle, that's rotting teeth, my kids have got em'

'You're not allowed sweet drinks at school. That's a good rule'

Consumption of sweet drinks in childhood has been associated with weight gain and obesity [43], dental decay [32] and with continued practice of sweet drink consumption into later life [44]. Use of a bottle beyond infancy is associated with iron-deficiency anaemia and associated dietary concerns for children, and possibly to increased risk of overweight and obesity [33,44].

Fussy eating and eating patterns

Another common theme related to the eating patterns of children, particularly grazing, picky eating and fussiness. Conversely, overeating was also identified by some parents. Parents requested further advice about how to address these eating patterns among their children. Peer pressure was also identified by parents, particularly of school-aged children.

'Fussy... grazers.. sometimes it's hard to get 'em to sit down at tea time and eat a meal if they've been grazing all day'

'I reckon my boy doesn't know when he's full. He eats like an adult'

'My little one at the moment, she's really picky and choosy. There's some days when she doesn't eat at all... so yeah, I'd like to know how to work around that'

'They'll come home and they'll just eat anything. Yeah, gorge'

'I got a kid, he's in prep and last week he had a(n) order for his lunch and the only thing he could eat off the whole list because he's really picky, is a bucket of chips and a Zing drink and a cupcake'

These concerns also mirror the concerns identified in the mainstream needs assessment; in which the greatest concerns of some groups of parents were child appetite (54% of playgroup families), child's growth (37%), fruit and vegetable intake (36%) and snacking (24%) [1]. According to another survey, parents of young children only rated financial concerns (54%) and children's illnesses (52%) as being of greater concern than children being fussy about food (41%) or not eating enough food (33%)[46].

'Junk' and takeaway food

Parents also expressed concerns about their children's preferences for 'junk' food and takeaway foods. Parents identified the impact that these foods have on children's appetites and preferences for less healthy foods. Marketing of these foods directed towards children, and peer pressure to consume these foods, was also identified by parents as a concern and/or barrier to children's healthy eating.

'(They) prefer junk food to cooking a healthy meal for 'em'

'Yeah they're not hungry with their tea: "no, I'm not hungry", but then 5 minutes later they want junk'

'My 8 year old, she'll get up during the night when we're in bed and she will sniff the sugary stuff out and I won't know till I clean her room and find, like, wrappers and stuff in there'

'Also for some of the younger kids, it's that peer pressure in the schools. Not having the cool lunch box. If you've got chocolate biscuits in your thing, you're cool for the day'

These findings are consistent particularly with those identified by high-need families within the mainstream needs assessment. Despite higher apparent rates of food insecurity, disadvantaged families appeared to consume higher amounts of takeaway food (14%) compared with other groups in the mainstream needs assessment (average 10%).

Children's eating development

A number of parents expressed their concerns about the expectations of young children's eating; the role of food in behaviour management; parenting issues; and children's development. Several parents reflected on the role that food often plays as a link between children's demands, **tantrums** and their responses to children's demands:

'Grandmother feeds (them) to keep (them) quiet'

'Sugary foods – gives the mother peace'

'If there's something worrying me and she won't eat, I'll go get something else, something that she does like'

'Her main foods that she likes eating is pastas and rice. Yeah but she won't eat the meat that comes with it or the vegies that come with it'

Some comments indicated parent's lack of confidence in making decisions about their children's eating; lack of knowledge about children's eating and a sense of powerlessness to impact on their children's behaviour or eating patterns.

'I love cooking but my kids play up at tea time and then it makes me feel like crap because I've spent all that time making a nice healthy meal ... But then it's like they crave the Maccas and that but when you get it they don't eat it all and you've wasted your money and... I dunno.. sometimes it feels like you can't win with kids'

'I don't have the time to cook tea so then there's take away and then it just, like, it's always slipping away from me. Yeah, I wanna eat healthy, I wanna prepare and I think that's probably a real big issue for me is how do you prepare a nutritious meal, what is a nutritious meal?'

Other comments confirm that many parents' perceptions are that children don't like healthy foods; that this is inevitable and parents are powerless to effect any change:

'Healthy food....It's generally just boring. You know it's not appealing. Kids don't find it appealing, like it hasn't got the marketing behind it'

'Most boorais don't like healthy (food)'

'It's gotta be sugar-coated so to speak, look lovely '

'You always have to con em to have fruit or water'

Evidence suggests that children's food choices and eating behaviours can be positively influenced by their peers and parents [43, 44]. Specific strategies include sitting with children at meal times, eating the same foods, and facilitating social interaction around the table [45]. Furthermore, using food as rewards or for punishment can generate undesirable food behaviours and is not recommended [46]. The recommendation for children to experience meal times in positive, relaxed and socially engaging surroundings is relevant for both child care and family settings.



Child overweight issues

Child weight issues were identified by some but not all parent groups, although perhaps only at the extreme levels. Of the parents who were concerned that their children were overweight, some were not aware of what they could do to help manage these weight issues.

'What can you do for kids that are obese?'

'Yeah overweight does seem to be a major issue with our young girls eh? You know the overweight and yeah so what can you do about that? You know, even though we're doing our home cooked meals and all that, hardly any take-away food but still got that, they're carrying that overweight at that age. What can you do?'

'And like for her (14 year old daughter) to get a lapband she has to have a chronic illness'

'I think it's in most of our families'

Children's overweight was identified as a concern by fewer than 5% of mainstream needs assessment families, despite a 19% prevalence of childhood overweight or obesity [51]. Findings from both parent group studies may suggest that parents identify extreme cases of obesity, rather than mild – moderate cases. The prevalence of chronic conditions such as diabetes, renal disease and cardiovascular disease is greater among Aboriginal and Torres Strait Islander people than among non-Indigenous Australians [52]; therefore addressing childhood overweight and eating patterns among Aboriginal children should be viewed as a high priority.

Nutrient deficiencies such as iron

No clinical data was obtained during this project; therefore, the prevalence of micronutrient deficiencies among the sample communities remains unknown. However, nutritional deficiencies such as iron-deficiency anaemia were identified by a small number of parents.

'Does the nutrition help with people being, like, anaemic? ...Iron. Yeah'

Iron deficiency is a preventable nutritional disorder which can adversely affect the development of young children, and is a 'marker' for overall poor nutrition. Dietary practices such as early introduction of cow's milk and use of solid foods with low iron content are associated with iron deficiency. The prevalence of iron deficiency varies with ethnicity; Aboriginal, Vietnamese and Arabic children are known to have increased risk [45]. For example, the rates of iron deficiency anaemia in young children have been reported as 6% in a general population of healthy 6 – 24 month old children compared to higher rates (14%) among Asian children [53].

Barriers to healthy eating and physical activity

These issues have been grouped broadly into factors facing individuals, environmental factors, and systems/settings; for example, families unable to access ACCHOs or MCH services who are perceived to 'fall through the cracks'. Environmental barriers include high costs, transport, housing, lack of outdoor play spaces and safety concerns. Individuals face time constraints, peer pressure, lack of information, lack of nutrition skills (budgeting, shopping, and cooking) and parenting issues associated with expectations about children's eating and development.



FACTORS FACING INDIVIDUALS

Time/resources

Lack of time was a frequently cited barrier to healthy eating and physical activity.

'You see families walk around all the time. You know, 4 or 5 kids walking around the street. The last thing they wanna do is go home and cook up a big, healthy meal. That's the last thing you wanna do, take another hour and a half to do all that...'

'There'll be a couple of families that come together and what they'll do is ... they'll nominate one of them out of the group, they'll babysit while the other will actually go off and do the shopping, ... and that's another reason why it's so hard because if there's certain people doing shopping for other people. They're not going to know that they're going to be making the right choices'

Food and nutrition skills

Limited skills in cooking, meal preparation and budgeting were cited as significant issues faced by parents in the community. Some of the women interviewed were particularly concerned that among the younger generation there are significant numbers of new mothers who don't know how to cook a basic meal.

'I think the preparation of it and not having the skills or the knowledge to know what is (healthy), what you can get and how you can make it cost effective'

'Yeah, there's a lot out there. They don't even feel confident cooking spaghetti or something'

'Yeah you gotta understand that there are people, some women don't even know how to boil an egg. And I'm telling you'

'And I've been asked numerous times when I go to someone's place `...make me something out of nothing'. They got no idea. Best meals them ones'

Limited transport was another significant barrier impacting both access to healthy food and children's ability to participate in organised physical activity.

'Mostly the parents have no licence or vehicle to be able to take them to mix and enjoy these sports'.

'Can't get to little athletics or football'

Relevance of health education/information

Lack of consistent or relevant health information was identified as a key barrier for parents. Information gaps ranged from the information on food labels, to specific details about feeding young children. Many parents reported that they found food labels confusing and that there was a paucity of culturally relevant nutrition information for Aboriginal families. Parents also emphasised that health information needs to be in simple English to cater for people with low literacy levels.

'And same in every region with the cultural side of things and that, you know, we do have a great deal of illiterate people within the community. So a lot of them go shopping, can't read what's on labels, let alone anything else'

'It is around that education stuff because a lot of it, our parents that brought us up, they were raised on rations so automatically, you know, they raise us the same. That's why you can't leave the plate unless it's empty'

ENVIRONMENTAL - EXTERNAL BARRIERS

Food access

Consistent with the findings from the practitioner consultations, access to low cost, nutritious food was highlighted as a barrier to families providing their children with healthy food. Both physical and financial access were highlighted as a concern for all parent groups. A unique concern among parents in the rural area was the availability of locally-grown food. Despite the fact that they lived in an agricultural area that grows fruit and vegetables, parents reported that they were not able to access this local fresh produce.

'If you haven't got a car or you haven't got someone in your family with a car, it's really hard to get out to the supermarket. It's easy just to call up for a pizza'

'I went without a car and I felt it so hard. Can't get everything you want'

'My concern is, like, access to healthy fruit and vegetables and especially price of some of these within our regional areas. I find that's concerning to me, being a father, having a young boy myself. It's so easy to access fast food, crap food here and it's a common thing 'cos it's so easy and accessible and especially with our busy lifestyles as parents, sometimes it is easier to grab a fast food takeaway every now and then'

'Living in a rural area, where we've got fresh, you know, it's fruit, vegetables, there's a lot of it, but accessing that is so hard. You know, a lot of the time, the fruit and vegetables in our supermarkets are imported so, you know what I mean?'

'With food and that sometimes you can't even afford to...you leave things out'

Cost

Parents identified cost as a barrier both to children's healthy eating and to participation in physical activity. There was a general perception among parents that nutritious food is more expensive than less healthy options. In addition, when asked about barriers to physical activity, the price of membership fees and equipment was reported as a major impediment for their children's involvement in sporting activities

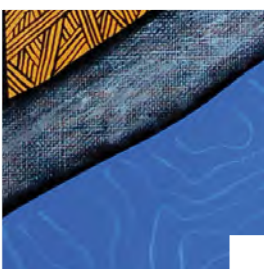
'To be healthy costs an arm and a leg'

'Healthy food's always a bit dearer. Like, white bread's a dollar, multigrain and wholemeal's a dollar seventy-nine. Well that's Home Brand. I wouldn't go... Why isn't wholegrain and multigrain a dollar?'

'Cos you gotta be able to afford to pay for it which is actually why we got this gym in place here cos it doesn't (cost anything)'

'But even the pricing of some of the equipment you know? Just for a football these days. Have you bought a football lately or netball?'

'I had to buy a football for my son, it cost me nearly 100 bucks'



Community environment and safety

Some aspects of the lifestyles of families and the convenience of fast food in local communities were highlighted as barriers to healthy family lifestyles. In addition, for some parents neighbourhood safety was a major concern which impacted on their children's physical activity. Many parents reported that they did not feel comfortable letting their children play outside unsupervised the way they, themselves, did when they were children.

'You don't even have to get out of your car. You get in your car, drive down there, they'll put it in the car for you, they'll actually come out and put it in your car for you, all you gotta do then is just drive home. That's just taken all the physical activity out of everything'

'Everything's drive through'

'The trust factor you know, the way life's come about, there's so many predators out there in the community. We're so scared to let our kids out now because down the street there's a paedophile. You know, that protective stuff again, you don't, as a parent, you don't let your kids out as much. It's not how we used to say "go out and play in the street", You're not doing that as much'

'My kids go out the front and ride their scooters and I'm inside doing tea which isn't exactly safe'

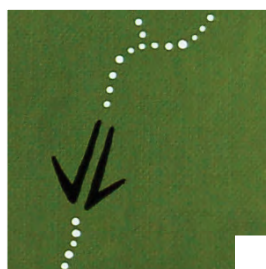
Broader determinants of nutrition and health

Social issues, particularly housing, were frequently reported as a barrier to good nutrition and physical activity. When facing these problems, parents prioritised meeting basic needs such as food and shelter rather than considering the nutritional quality of the food provided.

'Yeah so it's getting very unsafe in this township and the accommodation for single parents and so forth. I'm going through it at the moment with my son - and to find somewhere bloody secure enough to be able to live with a child is getting harder and bloody harder'

'When you've got those issues, physical activity is the last thing you're thinking about'

'They're huge. He's trying to house, put a roof over him and his child's head. You're not going to worry about nutrition. You're going to worry about; OK I'm going to get him a feed tonight - that's a good thing'



BREASTFEEDING

Parents identified breastfeeding as a key concern among families, with the overarching concern about low rates and retention of breastfeeding among Aboriginal women. Rates of breastfeeding among Aboriginal and Torres Strait Islander women are lower than non-Indigenous women in Australia [54]. Breastfeeding rates for Victorian Aboriginal women are less well documented, but are believed to be lower than for non-Aboriginal women.

Attitudes to breastfeeding

Some of the benefits of breastfeeding; for example perceptions that it is best for the baby, increased immunity, cost savings and enhanced bonding were identified by parents. Conversely, broader societal, cultural and family influences were highlighted as possible barriers to breastfeeding. These concerns about inadequate support, a negative 'culture' of breastfeeding in broader society, jealousy from husbands/partners and potential misinformation were also consistently highlighted by practitioners as barriers.

'I think it's great. You can bond with your baby'

'I did it when I had my first I was 19 and living from pay day to pay day fortnightly and thought 'holy crap what if I run out of formula and have got no money?' That's the only reason why I breastfed, I was scared into it and you know, I'm glad I did it in the end but that was my sole reason for doing it at that age'

'I did it cos I heard it's the best thing for the baby. I didn't last long though. My milk dried up and I got mastitis...she wasn't getting enough'

Misinformation

Some parents highlighted some of the myths concerning breastfeeding, such as expressed milk being less nutritious, or maternal diet directly impacting on the nutrient content of breastmilk.

'At the same time, the child's not getting the full nutrition because a great amount of that nutrition does get lost once it leaves the breast so it's better having it straight up on the (breast)'

'Parents aren't eating properly and stuff it could also turn that breast milk sour and then they've got no choice but to wean the child from the breast and onto the tinned milk or some other source'

Society/culture/attitudes

Shame and embarrassment about breastfeeding in public was consistently cited as a barrier, particularly for younger women. There was a perception that broader society was not supportive of breastfeeding, and that breasts were seen more as sexual objects than a source of nutrition.

'She had a little girl and she was not comfortable breastfeeding at all. Just not comfortable doing breastfeeding...she was very very shamed'

'A lot of women do feel intimidated breastfeeding you know within public or around family members and so forth, thinking that they're more or less flaunting themselves instead of doing something natural'

'I think there's hardly any now, in the whole of Australia. You don't go to many places where you see people breastfeeding. It's not out there enough in the open'

Systems and environment

Broader systems and environments, such as hospitals, and public facilities were also identified as being potentially unsupportive to breastfeeding. Many women did not feel comfortable using public breastfeeding rooms, as they resembled public toilets. Some mothers also reported that the fact that maternity hospitals were no longer supplying formula and baby bottles made them more likely to purchase their own formula and bottles 'just in case', even if they had been planning to breastfeed.

'I feel like those parenting rooms still feel like toilets'

'Cos if they try to breastfeed in a public toilet, they've actually gotta sit on the toilet to breastfeed and that's disgusting'

'I heard the hospital don't supply bottles anymore, like, baby bottles to feed formula. I went to the parenting class with my friend and the midwife said that they don't have them there anymore'

Returning to work

Returning to work is a well-known barrier to women's successful breastfeeding [21]. This was also true for Aboriginal mothers.

'It makes it hard for them, like with some mothers and that, it makes it quite hard for them to breastfeed especially if they are working as such. Some haven't got the time to sit and breastfeed the baby so they'll generally go for the tinned milk'

'Going back to work. The work place is not very supportive'

'They verbally pretend to be supportive, but the environment's just not, you know, you don't really have the time off, the pressure of your workload is still there'

Fathers/men

The specific and important role of fathers in supporting breastfeeding was highlighted by both men's and women's groups, and was confirmed by the practitioner consultations. There is an association between breastfeeding and the support of fathers for breastfeeding. The evidence suggests that mothers who have the support of the infant's father are more likely to initiate breastfeeding and to breastfeed for longer [21].

During focus groups with Aboriginal men, when fathers were asked 'what do you think about breastfeeding?' the response was generally positive.

'I'm all for it!'

'Better for the children than the bottle'

'As long as the mother is able to breastfeed'

'We always promote that breast is best but at the end of the day if the female can't do it well we keep supporting along the way'

Conversely, several men and women reported an overall lack of support from men, particularly younger men in the community. Issues such as jealousy associated with women breastfeeding were frequently raised. It was also noted that breastfeeding is traditionally considered women's business and, in some cases, may not be a topic that is openly discussed.

'We do get that with a great deal of the younger generation in the community and stuff. The child needs feeding. They've got to understand, if that kid needs feeding, well there'll be a bottle or on the mimi'

'The problem with my wife, she was breastfeeding my son at work. It was in the office and she actually had her back turned to the door and my brother walked past and slammed the door and said 'does he know that you're doing that in his office?' ...he's a bit weird about that sort of thing. Public nudity; I mean, I don't have a problem with it'

'I've got a young cousin, he's very jealous of his woman. She just had a baby not too long ago and she was breastfeeding in the back of the car at the supermarket while he was inside and he came out and caught her breastfeeding and went to get stuck into her and I stopped him'

'The only reason the lads will get jealous is you don't want your woman pulling it out in front of, like say the table here....Like, just go out the back or something or sit in the car or something'

'A lot of young fellas think it's just that public nudity and not right, like. My missus she's actually breastfeeding. She's still breastfeeding, now my son's turned one the other month and she does it anywhere. I don't care, it's not anything wrong'

Despite the seemingly positive attitude to breastfeeding among the Aboriginal fathers participating in the focus groups, the majority of women interviewed perceived that men were not supportive of breastfeeding.

'Nup, they've got no idea'

'They still look at boobs as a sexual thing full stop'

'I find younger dads are jealous, territorial. They still are immature enough to look at boobs as nothing else but.'

'It's women's business, not (an) easy subject for men'

Services and sources of information for families

When asked about the current services for young families and/or sources of nutrition and physical activity information for families, parent's responses were varied, but indicative of unclear, inconsistent and inadequate support and information to meet their needs. While some parents felt confident accessing support services from the local ACCHO, others were unaware of where to go for information and support.

'I've got no idea'

'Go to the Aboriginal health service'

'Dietitian...yeah go and sit down and talk with her and that and they'd be able to work out a program for you'

'I go to Google'

Maternal and Child Health services

In the mainstream needs assessment, high rates of access to primary health and support services for young families were reported. For example, there were high rates of access to the Victorian maternal and child health service (97.5% of families of children 0–2 years reported ease of access). The MCH service aims to provide primary health services, including nutrition and physical activity information and anticipatory guidance, for all families of children 0 - 6 years [54]. All but 0.2% of families living in Victoria receive a home visit from the MCH nurse within two weeks of birth. Rates of attendance at twelve months and two years are reported to be 80.3% and 69%, respectively [56]. In contrast, access to MCH services either at the Aboriginal health service or at the mainstream service were inconsistently reported by the parents who participated in these focus groups. Inconsistent access to MCH services was also highlighted as a key concern during practitioner consultations.

'My wife? No she's only used the Aboriginal health service. Cos she didn't actually have too much of an understanding about (mainstream) community services'

'People go: how much does she weigh now? I don't know. I try at the supermarket with the vegies'

'That is a big issue at the hospital though; they don't promote the Aboriginal Health Service. Not just with the children, the whole overall community, just not promoted'

Proposed strategies

Parents identified a number of strategies to address the gaps in child nutrition and physical activity information, services and support. These are broadly grouped according to information sources, settings, and workforce development. Specific strategies to address breastfeeding are discussed separately.

Information and resources

'Definitely need more education about making healthier choices'

'It comes to educating ourselves - a lot of black fellas don't know'

'Anything but something that's easy to read'

'Even the recipes for just a basic meal that can feed 5 or 6 people that's good cost'

'I'd like a sheet, a bit of paper I could just walk around the supermarket with that says 'this is the best one, get it'

'Just more information that's easy to get hold of'

Settings

When asked to identify the source or setting for this information and support, parents generally preferred the Aboriginal health service.

'Best place is the Aboriginal co-op and health service'

'Yeah you'd talk to someone in the health service'

Workforce development

Lack of child nutrition training for Aboriginal Health Workers and/or lack of cultural competence for mainstream early childhood professionals was highlighted in all parent discussion groups, and was a key finding from the practitioner consultations. As highlighted by one parent, the credentials and professionalism of workers is paramount.

'Well the two things I look at as a parent is 1) that they're, that the information that they're trying to give me is current and that they do appear to know what they're on about, so being educated. And 2) knowing whatever I go to them is held in confidence. That's probably my biggest thing. I've gotta know that I can trust them, that whatever I go to them with, that I know that it's not going to be spread around the community'

Other parents reiterated the need for a trained workforce in early childhood nutrition and physical activity. The importance of employing workers with the appropriate cultural background and gender was also raised.

'Trained nutrition workers. That'd be awesome, that'd be really really good'

'Quite a few single male parents and I know with those, they'd feel more comfortable talking with a male. Whereas the females, they would feel more comfortable talking to a female'

'A health worker or some other type of male nutrition worker could talk to the young men about the benefits of breastfeeding.' 'With someone like you to help with nutrition, you can understand all them kinds of foods and you know what's in it, you know stuff like that. Different stuff like that triangle, food group stuff'

Some parents suggested specific examples of role models or 'mentors' who have received child nutrition training for young parents, while others suggested pairing of mainstream and Aboriginal workers such as a MCH nurse working alongside the Aboriginal health worker'

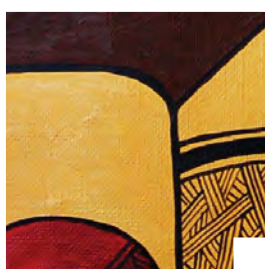
'Mentors; yeah as long as they are continually updated.... sometimes something like that can happen as a one-off'

Community events

Special cultural events such as family focused community sports/physical activity or nutrition days were highlighted by some parents as opportunities for promoting healthy lifestyles and community engagement.

'If we had a community day sort of thing and sports'

'Activity day - printing, organising, running events, sewing uniforms, brings out the best in everyone'



Support for breastfeeding

Parents expressed a need for breastfeeding support in four broad areas: the health care system, information and education, supportive environments, and workforce development and mentoring. The role of men in supporting and encouraging breastfeeding was an important theme in all focus groups. Both men and women felt that culturally-sensitive information and education was needed to empower men to support their partners to breastfeed.

■ Health Care System support

'More support when you have a baby'

'The babies are different. You could have a brilliant feeder the first time and not so good the next'

■ Information and education

'Probably just need to tell them about the nutrition of it. How much better it is than the bottle or whatever'

'That's what the younger generation do need brought to their attention. Just how nutritious that milk is to their babies'

'They gotta be educated on the pros and cons of breastfeeding. That's going to be the only way they're going to listen'

■ Supportive environments

'I suppose if they were more comfortable. If they always had a place where they could actually go and do it. So at the health service, they could go into a quiet area, they could actually do it there. They need more of those kinds of rooms' 'I think there should be more, I think they should make a proper mother's room. Not with toilets in there cos it stinks'

■ Workforce development and mentoring

'More training for staff so then they understand'

'That breastfeeding mentor program, more widely'

'Aunties helping with breastfeeding'

'Aboriginal Health Workers and other members of the community like young mums that they knew were breastfeeding, like they sort of head-hunted people for them giving them a day's education on, you know, the basics of breastfeeding'

■ Role of men

'More emotional support from men'

'Education for men about understanding how long it takes to breastfeed. You know, I remember sitting there with my third, and my husband coming home at the end of the day and going 'God what've you done all day?' "I dunno, fed your kid!" You know so that just starts an argument'

'A pamphlet to explain to young men about the benefits of breastfeeding... with a lot of information about how good it is... and how to support'

'Men can help with the other boorais, shopping, good food'



Discussion

This Aboriginal child nutrition and physical activity project is an adjunct to the 2010 'Filling the Gaps' *Nutrition and Physical Activity Needs Assessment* [1]. 2011) of families of young children and practitioners from the Cities of Brimbank and Greater Shepparton. Early childhood practitioners from MCH, childcare, kindergarten and primary schools were surveyed about their needs for nutrition and physical activity services, resources and information. Researchers had identified that very small numbers of parents/carers from Aboriginal backgrounds participated in the needs assessment surveys, requiring a more sensitive understanding of appropriate approach, delivery and research methodology [7,8].

Nutrition and Health issues

The most frequent nutrition and physical activity concerns observed by practitioners in Aboriginal early childhood services were: breastfeeding, fussy eating, sweet drinks and bottles, dental caries, child overweight, low physical activity. These findings are consistent with those from the mainstream needs assessment, in which needs of new arrivals or families from culturally and linguistically diverse backgrounds emerged as the greatest concern.

The most frequent nutrition issues identified by parents were children's reliance on sweet drinks and bottles, fussy eating and erratic eating patterns, and reliance on 'junk' and/or takeaway foods. Breastfeeding issues emerged as a key concern among men's and women's groups alike. All nutrition concerns raised by parents were consistent with findings from the practitioner consultations. Parents requested further advice about how to address these eating patterns among their children. Peer pressure was also identified by parents as a problem particularly among school-aged children.

VACCHO's Victorian Aboriginal Nutrition and Physical Activity Strategy [6] identified enhancing the nutritional health of Aboriginal mothers, infants and children as a priority area for action. Based on consultations with ACCHO staff, the strategy recommended training and professional development for Aboriginal early years staff, development of culturally appropriate maternal/child nutrition and physical activity education programs and information resources, support for MACS centres with policy implementation, engagement of nutritionists/dietitians to work alongside Aboriginal nutrition workers, and development of an Aboriginal breastfeeding strategy.

The findings of the current practitioner consultation highlight similar needs to those identified in the VACCHO strategy. However, emerging issues that were not previously identified include the need for a greater focus on reducing consumption of sweet drinks, increasing access to MCH services, training around sensitive issues such as childhood obesity, and the need to include fathers in child nutrition strategies.

Physical activity

Practitioners in Aboriginal services have identified that younger children are constantly 'on the go', with the exception of a minority who may lack opportunities to be active due to excessive time spent in prams. Concerns about inactivity only emerge among school-aged children. This is consistent with findings from the mainstream needs assessment, in which families failed to see screen viewing as a problem, and early childhood practitioners believed that parents considered TV to be educational.

Very few children in the mainstream needs assessment met national recommendations for physical activity, and practitioners believed that parents were confused about the perceived beneficial role of television.

Advice by practitioners

Several practitioners in Aboriginal services, most commonly Aboriginal Health Workers and nurses working within medical settings, reported that they advised children and families about nutrition, although practitioners much less frequently advised about physical activity. Practitioners within Aboriginal services are also addressing broader nutrition concerns, such as food insecurity, diabetes, nutrition in pregnancy, and consequently child nutrition issues may appear to be a lower priority in some organisations. Parents confirmed that there was lack of consistency in the information about feeding their children, or were unaware of where to access this information. Parents requested more information about child nutrition and physical activity.

Resources and services

Clear gaps in access to high-quality, locally relevant, evidence-based child nutrition resources emerged from the Aboriginal children's services practitioners. Nutrition resources may be developed 'on site', obtained from interstate, or not specific to child nutrition. In contrast, there are high levels of access to child nutrition information by mainstream practitioners, with approximately 80% accessing resources daily [1]. Furthermore, this project has highlighted that there are inconsistent or low levels of access to MCH services by Aboriginal families. This contrasts to the very high levels of access to MCH services (up to 90%) by non-Aboriginal families.

Child nutrition and physical activity training

Training in child nutrition and physical activity was limited among practitioners from both mainstream and Aboriginal settings. Some early childhood practitioners in Aboriginal services have general nutrition training, but very few are child nutrition-specific, and none had received training in managing child overweight/obesity. Mainstream and Aboriginal service practitioners both identified the need for further training about child overweight, particularly in relation to raising discussions in a sensitive manner with families.



VACCHO is a registered training organisation, and delivers nationally-accredited Aboriginal Health Worker Training at the certificate III and certificate IV levels. In addition, VACCHO has developed a Certificate IV qualification in Indigenous Women and Babies Health. The VACCHO Nutrition and Physical Activity team provides input into all three of these training courses. One day of basic nutrition training is delivered as part of the certificate III qualification. The two certificate IV qualifications include the unit *Provide Nutrition Guidance for Specific Health Care* as a core component. This unit is delivered over three days, and includes specific information on nutritional requirements for pregnant and lactating women; it promotes the dietary guidelines for children and adolescents, including the importance of breastfeeding and appropriate introduction of solid foods. At present, only Aboriginal Health Workers and KMS workers are enrolled in these training courses.

The Nutrition Department at the Royal Children's Hospital (RCH) is the home of the *Filling the Gaps* program, which provided nutrition resourcing and training for early childhood professionals, as well as nutrition and physical activity expertise and knowledge integrity, to the previous Victorian government's *Kids Go for your life* program. There may be an opportunity to adapt and offer this training to Aboriginal early years workers.

Nutrition policy

All mainstream early childhood settings reportedly had food, nutrition and physical activity policies. This is a key difference to most Aboriginal services, in which practitioners reported that there was either no policy or that the policy was in its infancy or in need of review. However, the majority of Aboriginal organisations reported a commitment to providing healthy meals, snacks and drinks to children, and were keen to work with VACCHO to develop and implement nutrition policies.

VACCHO has received funding from VicHealth to facilitate nutrition policy development and implementation in Aboriginal organisations. A project officer has been recruited to support five organisations, either ACCHOs or MACS centres, to develop, implement and evaluate policies that support healthy eating. The practitioner consultations undertaken in this project helped to generate interest in this initiative, particularly in the MACS centres that were visited. Furthermore, The Nutrition Department at RCH is regularly consulted to provide expert child nutrition and physical activity advice to other programs and organisations, including local and state government initiatives such as 'Get up and Grow' guidelines for Children's Services, Better Health Channel, and Raising Children Network.

Policy context and opportunities

The Victorian Government has entered into a series of National Partnership (NP) Agreements with the Federal government concerning key children's priority areas and deliverables. Several of these agendas for reform specifically commit to improving health outcomes for Aboriginal infants and children, and are managed by various Victorian Government Departments. New and existing child nutrition and physical activity guidelines and frameworks are also considered.



Revised 'Infant Feeding Guidelines for Health Workers' and 'Australian Dietary Guidelines'

The revised guidelines will form the basis for evidence-based guidelines within early childhood settings for all child nutrition and physical activity efforts. Practical and cultural interpretation will be necessary to ensure that relevance and applicability to Aboriginal early childhood settings are achieved once the guidelines are released, for example for breastfeeding support, introduction of solids, toddler nutrition and parenting support.

National Partnership Indigenous Early Childhood (DEECD)

MCH services uptake is a key priority of the NP Indigenous early childhood. Findings from practitioner consultations within this project have highlighted inconsistent use of MCH services by many Victorian Aboriginal families. After KMS services cease when infants reach 6 weeks of age, many families may not engage with mainstream MCH services. Those ACCHOs who provide their own MCH service appear more likely to engage with young families.

DEECD is establishing two new Aboriginal **early childhood centres** in Whittlesea and Bairnsdale, with funding under the Indigenous early childhood NP to provide integrated early childhood services. These centres provide a unique opportunity to deliver a comprehensive Aboriginal child nutrition and physical activity strategy, including breastfeeding support, parent education and resources, mentors, staff training, child nutrition and physical activity policy development.

Victorian Breastfeeding Strategy

A Victorian Breastfeeding Action Plan has recently been developed by DEECD. The specific needs of Aboriginal families are noted within the plan; however, details of implementation are not articulated. An adjunct Aboriginal Breastfeeding strategy would align well with the new Victorian Breastfeeding Action Plan, based on specific findings from these consultations.

This needs assessment confirms that practitioners view breastfeeding initiation and particularly its retention by Aboriginal women as a significant issue. The concept of using 'breastfeeding mentors' to actively support Aboriginal women to breastfeed has been viewed favourably by practitioners. A similar program is currently being trialled in Western Australia with the Australian Breastfeeding Association and local Aboriginal organisations.



National Partnership Preventive Health (Department of Health)

'Whole of state' initiatives including a state-wide nutrition advisory and recognition scheme for children's services is funded under the mainstream preventive health National Partnership. The specific needs of Aboriginal services need further consideration. New Aboriginal-specific resources and staff training in child nutrition are required to support this initiative. Furthermore, given the experience of other phone-in services such as the *Quitline*, it is unlikely that Aboriginal people will access the mainstream healthy eating advisory service, and therefore an Aboriginal-specific support service is likely to be more successful.

Mainstream Children's Services Regulations and Guidelines

The National Childcare Accreditation Council (NCAC) outlines national guidelines for child care, covering all areas of long-day care, out of school-hours care, and family day care. These guidelines contain information on all aspects of quality child care, including standards of discipline, hygiene, programming, communication, food and nutrition. Services must demonstrate that they meet several quality standards, including respect for children, have an environment which provides a pleasant, culturally-appropriate atmosphere for children at mealtimes that encourages social interaction and learning, provide culturally-appropriate meals, food and drink for children, promote healthy eating and good food habits, and have staff trained in correct food handling and hygiene.

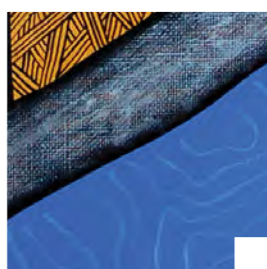
Currently MACS centres and Aboriginal childcare centres are not obliged to follow these guidelines; however, it is believed that this will be mandatory for Aboriginal early childhood services by 2014. One of the Victorian MACS provides an Aboriginal advisory service to other childcare centres; however this service has also requested further child nutrition training and support.

Victorian Children's Services Legislation

The Children's Services Regulations 2009 outline the requirements of childcare centres for licensing purposes. Proprietors of children's services must ensure that food and beverages are nutritionally adequate and prepared safely, and that the environment is satisfactory for children's eating. All MACS centres in Victoria must follow these State regulations.

National Nutrition and Physical Activity Guidelines for Early Childhood Services

'Get up and Grow', the national nutrition and physical activity guidelines for early childhood services, were released in 2010. While some early childhood practitioners consulted in this project had heard of Get up and Grow, the majority were unfamiliar with these guidelines. Adaptation of the Get up and Grow resources as well as staff training and support may be required for implementation of these guidelines in Aboriginal services.



Strengths and limitations of methodology

The major strength of this project was the strong engagement with Aboriginal organisations. This was facilitated by VACCHO leading the consultation process, as the majority of services visited were VACCHO members. Practitioners appreciated being visited, and having the opportunity to discuss their main issues and concerns. Parents were also willing to discuss their concerns openly, which has greatly enriched the qualitative discussions. The consultations were led by VACCHO's Aboriginal Nutrition Officer who is well known and respected within the Victorian Aboriginal Community. This was a key factor in the success of the project.

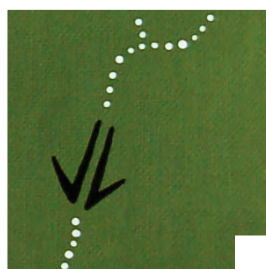
Another strength is that a variety of different organisations and programs were consulted with strong Aboriginal representation. The majority of participants were themselves, Aboriginal community members and mothers so therefore, were able to speak from personal experience with raising children. The partnership with RCH nutrition provided valuable child nutrition expertise and opportunities for future collaborative work. The timing of the project is also a strength, given the current policy environment. There was a high level of consistency of findings between parent men's and women's groups, and between rural and metropolitan groups.

One limitation of the project was that not all ACCHOs and MACS centres were visited. However, towards the end of the consultation process, no new themes were arising. Because the project was led by VACCHO, the consultation tended to include more health service staff than other early years practitioners e.g. IHS/Best Start/MACS, even though these programs were represented. Aboriginal workers from mainstream organisations such as Community Health, RCH, Mercy and other maternity hospitals were not included in this consultation which may be a limitation. All but one of the practitioners were female, although this is representative of early years workforce.

Parent groups included parents of children from mixed age groups, resulting in 'mixed' discussions about school-aged children's nutrition issues compared with breastfeeding and early infant feeding. At times the distinctions between nutrition practices and concerns were difficult to identify, and for some groups there was a tendency to discuss problems of all age groups, including chronic diseases in adults (e.g. diabetes) rather than to focus on child nutrition.

Finally, it must be noted that this project presents only the qualitative perceptions of early years practitioners. There is insufficient quantitative data available to support all of the issues identified; however, this may be an area for further research.

Despite the small numbers of parents overall, the themes emerging were consistent across all discussion groups and confirmed by the practitioner consultations, which were conducted separately.





Key Findings

Key Findings (Practitioner Consultations)

1. The most frequent nutrition issues identified by practitioners working in Aboriginal early childhood settings were low levels of breastfeeding, inappropriate introduction of solids, reliance on sweet drinks and bottles and high consumption of takeaway and snack foods. These findings are consistent with findings in the mainstream needs assessment (Myers & Gibbons 2011), particularly for high need families. Frequently reported health concerns included iron deficiency (which may be a marker for overall poor nutrition), poor oral health, overweight, and speech delays.
2. Physical activity concerns were not identified by practitioners working in Aboriginal early childhood settings for younger children, but reliance on screen-based activities (e.g. electronic games, television etc.) was noted for older children.
3. Practitioners requested strategies to more effectively empower parents, particularly around sensitive issues such as breastfeeding support, child feeding and child overweight.
4. The workforce within Aboriginal early childhood services lacks training and suitable educational resources in child nutrition and physical activity.
5. There are significant policy opportunities currently available, both state and federally-based, for improving nutrition and physical activity within Aboriginal early childhood settings.
6. There are significant gaps in service delivery for early childhood nutrition support, particularly through the universal MCH service.
7. Practitioners from Aboriginal early childhood settings have greater training and resource needs than practitioners from mainstream settings.
8. Food insecurity and other, broader social determinants of health, such as transport and housing, were frequently-reported barriers to good nutrition and physical activity.



Key Findings (Parent Consultations)

1. Parents in all groups identified sweet drinks, fussy eating and 'junk' food as the most common nutrition concerns. Children's overweight and iron deficiency were mentioned by some parents.
2. Breastfeeding emerged as a dominant issue in both men's and women's groups and in both locations. Issues included low rates of breastfeeding, barriers to breastfeeding, attitudes of fathers and an overall lack of 'culture' of breastfeeding.
3. Barriers to good nutrition identified were lack of appropriate information, lack of nutrition skills, parenting issues, and high food costs.
4. Barriers to physical activity identified were high costs, lack of outdoor play opportunities and reliance on screen-based activities.
5. The most frequently reported systemic issue was lack of continuity of care in early childhood, for example access to MCH services.
6. Aboriginal parents were more likely to experience difficulties accessing nutrition and physical activity information and support than non-Aboriginal parents.
7. Food insecurity and other, broader social determinants of health were frequently reported.

Key findings overall – practitioners and parents combined

1. Concerns associated with the initiation and retention of breastfeeding by Aboriginal women were a key finding of this project.
2. Reliance on sweet drinks and bottles which resulted in oral health problems was the most frequently-reported nutrition concern raised by both parents and early childhood practitioners alike.
3. Poor uptake of Maternal and Child Health services by Aboriginal families was a key finding of this project and a priority area within the Indigenous Early Childhood National Partnership Agreement.
4. There is a lack of child nutrition and physical activity training and resources for Aboriginal early childhood practitioners, and inconsistent access to information and support for parents
5. There is a lack of availability of culturally-relevant child nutrition and physical activity guidelines and resources for Aboriginal early childhood services. Evidence-based guidelines and resources require cultural adaptation, staff training and support to implement these guidelines within Aboriginal services.
6. Food insecurity and other, broader social determinants of health, such as transport and housing, were frequently reported barriers to good nutrition and physical activity.





Recommendations

Based on the key findings of this needs assessment, a comprehensive program of work is required to improve nutrition and physical activity outcomes for Aboriginal children and families. This should begin with appropriate scoping in order to explore and develop opportunities for partnership work between the VACCHO Nutrition and Physical Activity team and other key Early Years stakeholders.

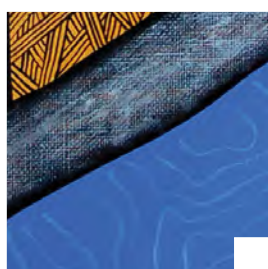
It is recommended that multiple health promotion and capacity building strategies are planned, implemented and evaluated in order to deliver the following outcomes for Victorian Aboriginal communities:

1. Improving breastfeeding rates and fostering a culture that supports breastfeeding
2. Improving infant feeding practices including appropriate introduction of solids
3. Improving oral health, particularly through reduced consumption of sweet drinks and prolonged bottle-feeding
4. Reducing consumption of energy-dense takeaway and snack foods
5. Identifying and treating deficiencies in micronutrients such as iron, which may be a marker for overall poor nutrition
6. Improving the capacity of the Aboriginal early childhood workforce to identify and address child overweight issues through appropriate health promotion and early intervention initiatives
7. Increasing physical activity and active play and reducing reliance on sedentary, screen-based activities
8. Improving food security for families with young children

Further to this needs assessment, VACCHO will endeavour to develop an evidence-based, culturally-relevant child nutrition program which should include the following key components:

1. Targeted social marketing campaigns involving local Aboriginal people
2. Nutrition education and support programs for Aboriginal parents, carers and children, which include:
 - Breastfeeding, introduction of solids, sweet drinks and infant feeding education
 - Healthy living skills such as budgeting, shopping, label-reading, cooking and parenting skills, such as dealing with fussy eating and encouraging active play
3. Locally relevant child nutrition and physical activity information and education resources utilising local Aboriginal faces to deliver evidence-based messages. These should include resources that specifically target Aboriginal men.

4. Regular training and up-skilling of the Aboriginal early years workforce to facilitate implementation of family-focused Child Nutrition and Physical Activity Programs within Aboriginal settings, especially in PCM sites. Essential elements include:
 - evidence-based nutrition and physical activity guidelines,
 - culturally-relevant resources,
 - workforce development
 - programs to empower parents, for example 'MEND' or 'INFANT' with cultural adaptation, using a solution-focused empowerment parenting model, such as the World Health Organisation's 'Infant and Young Child Feeding' project
5. Centralised support for Aboriginal organisations interested in developing and implementing programs and policies that support breastfeeding, child nutrition and physical activity
6. An **Aboriginal breastfeeding strategy** in consultation with the VACCHO membership, to complement the Victorian Breastfeeding Action plan (DEECD) to increase breastfeeding rates among Aboriginal women, which may include key components such as:
 - organisational breastfeeding policies,
 - breastfeeding education and information for both mothers and fathers,
 - mentoring and peer support programs,
 - breastfeeding/lactation consultant training for the early years workforce,
 - further research and evaluation.
7. An **Aboriginal Maternal and Child Health strategy** to improve access to services and presentation of Aboriginal and Torres Strait Islander children at key MCH visits. This strategy may include such key components as:
 - Employing an MCH nurse at VACCHO to provide peer-to-peer advocacy and capacity building
 - Providing cultural awareness training specifically targeting MCH nurses and midwives working in both Aboriginal and mainstream services
 - Increasing the number of MCH nurses employed within ACCHOs
 - Employing Aboriginal child nutrition workers employed within ACCHOs to work in partnership with mainstream MCH services to improve access for Aboriginal families.
8. A research and evaluation framework which supports opportunities to:
 - Assist ACCHOs to identify information sources and collect relevant child nutrition and physical activity data
 - Use data to measure program effectiveness and inform development and/or expansion of new programs.
 - Develop a funding proposal to investigate new models of service delivery for infant and child nutrition by maternal and child health nurses working in partnership with AHWs within ACCHOs, using solution-focused counselling and infant and young child nutrition indicators as the outcome measures.





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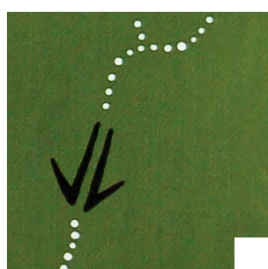
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