An Overview of Aboriginal and Torres Strait Islander Maternal and Child Health Research in Australia

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The Lowitja Institute National Roundtable on Aboriginal and Torres Strait Islander Child and Maternal Health Research: Priorities for Interventions
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Presentation Overview

Reiterate national priority research areas in Maternal and Child Health in relation to:

- The paradigm shift in NHMRC research
- Key issues identified by the National Aboriginal and Torres Strait Islander Health (NATSIHECP)
- COAG Close the Gap Initiatives & Framework
- the Program One Healthy Start, Healthy Life Program
- Scope of work
- Other Current research in Australia
- Barriers, gaps opportunities and future directions
Current Context

There is paradigm shift in NHMRC health research:
- Greater emphasis on community-based participatory action/translational research to effect real change
- Recognition of benefits of incorporating Indigenous knowledge into gaining solutions
- Collection and reporting of data for the Aboriginal and Torres Strait Islander Health Performance Framework, Performance Indicators (COAG)
Current policy context

• The Council of Australian Governments (COAG) Working towards closing the gap in child health is a shared responsibility

• **Focus on Closing the gap of Aboriginal infant and child mortality**

• Almost $1 billion has been allocated in the 2009-10 Budget for health programs specific to Aboriginal and Torres Strait Islander peoples (a 57% increase).

• Funding provided to 255 Aboriginal and Torres Strait Islander health care services including specific programs for mothers and young children such as the ‘Strong Women Strong Babies Strong Culture’ program and ‘Congress Alukura Women’s Health Program.’
NHMRC Priority

The NHMRC's mandate of improving the health of Aboriginal and Torres Strait Islander peoples involves a commitment to:

- supporting health and medical research;
- fostering health and medical research ethics; and,
- fostering the development of consistent health standards.
NHMRC Approach to Indigenous Research

- The NHMRC ethical guidelines on conducting research in Indigenous contexts

- The guidelines focus on engaging communities in all phases of the research – this has important implications for research methods/methodologies

- NHMRC Road Map- outlining indigenous research priorities
NATSIHEC (previously NIHEC) acknowledges improvements in Indigenous child mortality rates and the positive trends in antenatal care however concerned that little improvement around about several key drivers

NIHEC recommends policy attention and intervention to focus on the following key drivers to bridge the gap in Indigenous child health.
What are the key drivers?

NIHEC has identified the following key drivers that need particular policy attention.

**Infant mortality**
- Infant mortality contributes to 83% of child mortality among Aboriginal people; and 3 times the rate of non Indigenous infant mortality (12.3 per 1,000 live births compared with 4.2 per 1,000).

**Child mortality**
The most common causes of death among Indigenous children (0-4 years) are:
- Conditions originating in the perinatal period (38%)
- Symptoms, signs and ill-defined conditions, including Sudden Infant Death Syndrome (SIDS) (20%)
- Congenital malformations (11%)
- Injury and poisoning (11%).
Key drivers (continued)

Low birth weight

- The rate of low birth weight for babies born to Aboriginal and Torres Strait Islander mothers is increasing (16% from 1991-2005) and the gap is widening.

- They are twice as likely to be of low birth weight (< 2500g) than babies born to non Indigenous mothers (13% compared with 6%).

- They are at a greater risk of dying during the first year of life and are prone to ill health during childhood.

- Risk factors include: socio-economic disadvantage;
  - the height, weight and age of the mother;
  - the number of babies previously born to the mother;
  - the mother’s nutritional status;
  - smoking and other risk behaviours;
  - illness during pregnancy;
  - multiple births; and,
  - the duration of pregnancy.
Key drivers (continued)

Socio-economic determinants
A complex range of interrelated social, economic and community factors determine health outcomes for Aboriginal and Torres Strait Islander mothers and children.

- **Education**: Approximately half the proportion of Indigenous women have completed Year 12 as their highest year of schooling (23%) compared with non Indigenous women (47%) and this is associated with poor health literacy.

- **Employment**: Indigenous children are less likely to have a parent in paid employment than non Indigenous children (20% compared with 47%).

- **Income**: Median weekly incomes of households with Indigenous children were 67% those of non Indigenous children.

- **Housing**: Overcrowding affects 14% of Indigenous households and contributes to inadequate access to facilities, including water, sanitation, sewerage and electricity services which increase the risk of infection and injury.
Research Directions

• How do we increase the capacity of health services and community agencies to address the key early life determinants of maternal and child health outcomes.

• Existing research confirms limited progress toward ‘closing the gap’ in Indigenous health and wellbeing

• Need for increased funding for primary health care to Aboriginal people relative to their greater healthcare needs.
Research Directions

Research focused on enhancing Indigenous maternal and child health and wellbeing outcomes includes studies into:

- Developing integrated service delivery and workforce development to better address early determinants of health, education and social and emotional wellbeing.
COAG/NIHEC Indicators

- NIHEC identified key antenatal and early childhood indicators that cover aspects of health status, health-risk behaviour and service usage.

- Programs of research able to identify data from sources and collections to measure these indicators.
Causal pathways approach

Literature regarding causal pathways research provides:

• a sound evidence base of how early life years experiences are the cause of enduring disadvantage and the positive/negative effects of interventions; and,

• a rationale for focusing on improving and integrating service delivery to address the key early life determinants of Aboriginal childhood.
A human capability framework

Looking from childhood onwards across the life course, seeks to understand the ways in which health, wellbeing and capability develop in individuals, generations and populations in different historical, political, cultural, social and economic contexts.
Research opportunities

• Building on successful child and maternal health programs.

• Improving the integration of policies and programs, e.g. linking antenatal care to early maternal practice and parenting to improve child health.

• Strengthening the health workforce, e.g. General Practitioners, obstetricians, midwives and Aboriginal Health Workers.
Opportunities for interventions

NIHEC recommends focusing on the following opportunities for intervention.

**Improved Data Collection**
- Improving Indigenous identification in key administrative data sets (i.e. births, deaths, hospital, perinatal and disease registries).
- Improving data quality in all jurisdictions and raising the priority of Indigenous data collection for jurisdictions which are not currently reporting Indigenous data.
- Improving Indigenous population estimates as these are used in all rate calculations, including mortality rates.

- National level data can sometimes mask local issues.
Opportunities for interventions

Antenatal care

Improving the delivery of antenatal care to better meet the needs of Indigenous women by:

– Promoting antenatal care during the first trimester and a minimum of 5 visits per pregnancy1
– Targeting antenatal care to those most in need, e.g. younger and older mothers with a number of previous pregnancies.
– Focusing on reasons why certain women choose not to attend antenatal care.
Opportunities & Recommendations

• Delivering antenatal care in a range of settings and locations.

• Encouraging antenatal care to focus on key factors affecting Indigenous women before and during pregnancy, including:
  – Smoking cessation
  – Treatment of diseases, e.g. sexually transmissible infections (STI) and asymptomatic bacteriuria
  – Nutrition, e.g. increasing folate.
Addressing barriers to antenatal care

Strategies need to include:

- Setting
- Cultural issues
- Attitude of health staff to e.g. teenage pregnancy
- Location, e.g. in remote areas some mothers do not present until due date due to fear of being evacuated to major centres for birthing.
Program one Scope

Priority areas include:

- Reducing the incidence of chronic illness, e.g. through encouraging better nutrition and greater exercise.
- Lowering the risk associated with tobacco consumption.
- Improving the early detection and effective management of chronic illness.
- Delivering better maternal and child health outcomes.
Healthy Start, Healthy Life program

A major focus is:
- improving the quality of primary health care available to Aboriginal and Torres Strait Islander people, including the use of evidence-based Continuous Quality Improvement (CQI) approaches.

CQI activities include:
- working with One21seventy, to support 180 primary health care centres;
- Holding CQI conference in Alice Springs in 2012;
- Establishing a national research network; and
- Facilitating an independent appraisal of quality improvement initiatives currently used in Aboriginal and Torres Strait Islander primary health care.
Healthy for Life

*Healthy for Life* is an Australian Government program that aims to:

- improve the health of Aboriginal and Torres Strait Islander mothers, babies and children;
- improve the quality of life for people with a chronic condition; and,
- over time, reduce the incidence of adult chronic disease.
Healthy for Life

• The Australian government’s program supports capacity development in Indigenous primary care using continuous quality improvement (CQI) techniques.

• The ABCD approach to CQI involves a partnership with health services to implement a cyclical process of audit of services, systems and supports against evidence-based protocols guided by principles participatory community based action research adhering to ethics and values of Indigenous research and service delivery.
Continuous Quality Improvement

The program has three key objectives:

• promoting continuous improvement in standards and quality of delivery of evidence based services;

• developing practice-based evidence based on measured outcomes of service provision; dissemination of innovation through implementation and measurement of uptake of evidence-based protocols and practices.

• The use of evidence-based practice guidelines within a Continuous Quality Improvement Framework can support the development of practice-based evidence around effective implementation and integration of child and family services.
Life Course Studies

- Aboriginal Birth Cohort (ABC) study - One of the longest and largest Indigenous cohorts, helping to explain the life course of chronic adult diseases in Indigenous Australians.
- Top End Cohort study - Examining the current and future health of adolescents within the Darwin area.
- The Remote Aboriginal Communities’ Children’s Environment Health Indicator Project.
- The Healthy Community Assessment Tool for Small Rural Towns and Remote Communities
- The Better Environmental Health, Housing and Child Health Study (BEHHCH)
Aboriginal Birth Cohort (ABC)

- Aboriginal Birth Cohort (ABC) undertakes research which starts in utero and continues over the life course.
- one of the longest and largest Indigenous cohorts in the world providing detailed maternal, perinatal, childhood, and adolescent data
- This information will help explain the life course of chronic adult diseases in Indigenous Australians and identify critical intervention points to prevent the development of these diseases in this population.
Figure 15 Early Childhood Development Data Linkage Demonstration Project

- Demographic characteristics
- School readiness AEDI
- High security data linkage unit
- Hospital, ED admission, Health service use
- Birth, death, marriage register
- Perinatal data
  - Birth, health characteristics

Lynch:
One21seventy workforce development

• The Brisbane-based One21seventy National Centre for Quality Improvement in Indigenous Primary Health Care supports the uptake of innovations into practice.
Sudden Infant Death Syndrome (SIDS)

- Targeting risk factors:
  - Poor health literacy
  - Poor socio-economic status, including housing
  - Substance use, including tobacco smoking, by the mother and other household members.

- Focusing on effectively communicating key messages to encourage behaviours to prevent SIDS, including:
  - Sleeping baby on the back, not the tummy or side
  - Ensuring baby sleeps with face uncovered
  - Avoiding exposure to tobacco smoke before and after birth
  - Providing a safe sleeping environment
Australian Nurse-Family Partnership Program

- Collaboration with Professor David Olds, to undertake a small-scale implementation of the US Nurse-Family Partnership model of home visiting in Australia.

- $37.4m over four years was provided in the 2007-08 Budget to adapt and implement the Australian Nurse-Family Partnership Program.

- The Program to be implemented in up to seven sites in Australia by 2011.

- To date, five sites selected and three have commenced home-visiting, the remaining two are being established.
Research gaps

• Further research into Indigenous parenting and child development and specific impacts of trauma and multiple sources of disadvantage within a wider child development research agenda.

• The implementation of childhood services according to clear outcomes needs to be supported by research-based evidence of effectiveness across universal, targeted and indicated services, with quality assurance provided by evidence-based feedback systems.

• A comprehensive approach to workforce development needs to be backed by research into effective practices and the outcomes of training.
How do we move forward?

- Partner with the Lowitja Institute to promote the uptake of research into practice.
- Undertake research projects that focus on producing knowledge and tools for the Aboriginal and Torres Strait Islander health sector.
- Undertake research to overcome challenges to implementing these tools and knowledge.
- Undertake research to further explore this critical phase of research uptake.