

**INDIGENOUS FERTILITY IN THE NORTHERN
TERRITORY OF AUSTRALIA:
STALLED DEMOGRAPHIC TRANSITION?**

A thesis submitted for the Degree of Doctor of Philosophy of
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Except where otherwise indicated, this thesis is my own work

Kim Johnstone

Dedicated to
Lester Graham Robinson
1953 – 2007

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Abstract

This research explores contemporary features of Indigenous fertility in the Northern Territory of Australia, the country's third largest state with the smallest total population, but with the largest proportion comprised of Indigenous peoples. The research exploits births data from a range of sources to investigate whether Indigenous fertility trends in the Northern Territory over the past 20 years are a characteristic of stalled demographic transition. The research rests on three hypotheses: that Indigenous fertility trends in the Northern Territory were themselves an artefact of the data used to calculate the fertility rates; that there has been stalled demographic transition and the fertility declines documented for Northern Territory women during the 1960s and 1970s have not been maintained into the 21st century; and that contemporary Indigenous childbearing is characterised by universal, young mothering but not high parity.

A conceptual framework was developed that captures the myriad factors that affect Indigenous fertility outcomes to provide a context within which the research results can be understood. A three-stage approach was then used to examine Indigenous fertility trends. Firstly, a detailed analysis of the collection processes for the quantitative data available for this research was undertaken, with a particular focus on the two main births data sets, vital registrations and perinatal data. Second, standard demographic techniques were used to identify fertility trends, exploiting the two births data sets, census data and survey data from the DRUID Study, a Darwin-based epidemiological study of Indigenous people. Third, a range of views and experiences of Indigenous individuals were sought through interviews and focus groups.

The research showed that despite Indigenous population data in the Northern Territory being among Australia's most accurate, the use of these is constrained by issues of undercount and geographic coding of usual place of residence. Documentation of the investigation into data sources is an important contribution of this research. The stand out feature of contemporary fertility in the Northern Territory is the young age that Indigenous women have children. Teenage fertility rates are very high and peak childbearing is among women in their early 20s. There have been relatively stable total fertility rates (TFRs) among Indigenous women in the Northern Territory over a 20-year period, indicative of stalled demographic transition, but these belie complex geographic differences. There is evidence of fertility decline at the youngest ages in remote parts of the Northern Territory and indications of a small move to delayed childbearing. The

timing of this fertility decline corresponds to the introduction of Implanon as a reliable form of contraception. Education among women was shown to be associated with slightly delayed entry to childbearing and lower parity, and although the associations were significant the impact they had was not dramatic. Into the future, we can expect to see birth cohorts of increasingly large size even with stable or declining TFRs, a continued young profile for childbearing and different fertility rates between urban and rural-remote communities, all of which have serious implications for the delivery of social services and social policy implementation.

Preface

Ethics approval for access to data held by the Northern Territory Department of Health and Families was received from the Human Research Ethics Committee of the NT Department of Health and Families and Menzies School of Health Research (Reference No. 08/24).

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Two chapters of this thesis are based on work published during my PhD candidature:

- Chapter Three as: Johnstone, K. 2009. Indigenous birth rates – how reliable are they? *People and Place*, 17(4):29-39.
- Chapter Five as: Johnstone, K. 2010. Indigenous fertility in the Northern Territory of Australia – what do we know? (and what can we know?) *Journal of Population Research*, 27(3):169-192.
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Research findings are included in the following book chapter:

- Johnstone, K., Barnes, T. and Peters, P.A. 2011. Indigenous Vitals: Trends and Measurement. In Carson, D., Rasmussen, R., Ensign, S., Taylor, A. and Huskey, L. (eds), *Demography at the edge: Remote human populations in developed nations*. Farnham: Ashgate Publishing, pp. 85-106.

Research findings have been included in the following article, submitted for review:

- Steenkamp, M., Johnstone, K. and Bar-Zeev, S. 2011 (under review). Can we count? Enumerating births in two remote Aboriginal communities in the Northern Territory of Australia. *Australia and New Zealand Journal of Public Health*.

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Acronyms

ABS	Australian Bureau of Statistics
ACCHO	Aboriginal Community Controlled Health Organisation
AIHW	Australian Institute of Health and Welfare
AHW	Aboriginal Health Worker
ALO	Aboriginal Liaison Officer
AMSANT	Aboriginal Medical Services Alliance Northern Territory
ASFR	Age-specific fertility rate
ATSIC	Aboriginal and Torres Strait Islander Commission
CDEP	Community Development Employment Program
CDU	Charles Darwin University
CI	Confidence interval
DHAC	Department of Health and Aged Care
DRUID	Diabetes and related conditions in urban Indigenous people in the Darwin region
ERP	Estimated Resident Population
ETFR	Early force of childbearing, measured by proportion of the TFR contributed to by childbearing under the age of 20 years
FV/SA	Family violence/sexual assault
GFR	General fertility rate
ICD	International Classification of Diseases
IES	Indigenous Enumeration Strategy
IUD	Intrauterine device
LGA	Local Government Area
LNAC	Larrakia Nation Aboriginal Corporation
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NHMRC	National Health and Medical Research Council
NT	Northern Territory
NTER	Northern Territory Emergency Response
OECD	Organisation for Economic Co-operation and Development
O&G	Obstetrics and Gynaecology
OR	Odds ratio
PATS	Patient-assisted travel scheme
PES	Post-enumeration Survey

RSE	Relative standard error
SCRGSP	Steering Committee for the Review of Government Service Provision
STI	Sexually transmitted infection
TFR	Total fertility rate
TOP	Termination of pregnancy
UNFPA	United Nations Population Fund

