

Recruitment and Retention Practices of Longitudinal Birth Cohorts from Conception Onwards

Early Consultation ...

Participatory Approach ...

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Background

In Australia, growing commitment for methodologically ethical practices in Aboriginal and Torres Strait Islander research has prompted novel application of Indigenous Research Methodologies (IRMs) (1). This systematic review examined intersections of recruitment and retention strategies in Longitudinal Birth Cohorts (LBCs) (2) and IRM application.

Conclusion

Figure 1: Ultimately, the research identified that when IRM are applied to Aboriginal and Torres Strait Islander LBCs, recruitment and retention rates are equivalent to non-Indigenous cohorts. The integrated relationships of multi-generational life courses, recruitment and retention into LBCs, and the application of effective IRM strategies depicted in figure 1 underpin the success of such cohorts. Effective strategies are early and ongoing consultation, which promotes are participatory approach, family involvement, community relationships and employment of Aboriginal RAs.

Results

Study:	2018	2016	2014	2012	2010	2008	2006	2004	2002	2000	1998	1996	1994	1992	1990	<1988
MUSP			n = 2900					n = 3805			n = 5216					1981-1983 n = 7223
Third Gen Recruiting...																
ATP				n = 1701			n = 1580		n = 1580	n = 1650	n = 1666	n = 1661	n = 1743	n = 1799		1983 n = 2443
Third Gen Recruiting...																
ABC*						n = 469			n = 590							1987-1990 n = 686
Raine		n = 1234	n = 1234		n = 1726	n = 1864		n = 2048	n = 2140		n = 2236	n = 2280				1989-1991 n = 2868
BG*																15 months in mid-90's (unspecified date) n = 273
KOMS*							n = 216									1999-2003 n = 280
LSAC			n = 3764	n = 4077	n = 4242	n = 4386	n = 4606	n = 5107								
Gudaga*				n = 117	n = 122		2005-2007 n = 155									
Third generation of VAHCS recruited from 2006 – 2014 n = 1026																
VIHCS																
LSIC*			n = 674			n = 960										
GG*				2010 – ongoing		n = 229 currently										

Figure 2: Timeline and recruitment and retention rates of eleven novel LBCs. LBCs were considered novel if they (i) had a relationship with a third generation birth cohort, (ii) were landmark Australian LBCs, or (iii) had a significant Aboriginal and/or Torres Strait Islander cohort. 'n' = number of babies recruited/retained in the cohort. Recruitment periods indicated at right end of coloured rows.

* Six LBCs had a specific focus on Aboriginal and Torres Strait Islander populations



- GG** ★★★★★
- ✓ Two planning years
 - ✓ Across all levels of community
- LSIC** ★★★★★
- ✓ Only engaged enthusiastic communities



- Gudaga** ★★★★★
- ✓ Maternal and paternal identity of babies recorded
 - ✓ Embraced local cultural constructs of family
- LSIC** ★★★★★
- ✓ Multiple family contacts recorded



- KOMS** ★★★★★
- ✓ Local People Recruited
 - ✓ Invested in Capacity Building
- ABC** ★★★★★
- ✓ Engaged existing health workers
 - ✓ Employed male and female RAs



- GG** ★★★★★
- ✓ Integrated with local art class
 - ✓ Strong links with Elders
- ABC** ★★★★★
- ✓ Attended local events
 - ✓ Built strong relationships

Figure 3: Score Card showing four key themes relating to IRM in Aboriginal and Torres Strait Islander LBCs. High performing studies, their star ranking and specific strategies are listed.

Methods

PubMed and Medline were used to search for Australian LBCs from the 1970's onwards where prospective data collection commenced within first year after birth. Cohorts were excluded if they had non-typical health profiles, studies included an intervention, or primarily evaluated maternal health. PRISMA guidelines were used to critically appraise a total of 44 LBCs identified. STROBE was used to assess reporting quality. Qualitative text analysis provided in-depth insights into recruitment and retention practices. Of the six included Aboriginal and Torres Strait Islander LBCs, four key IRM themes emerged. Each study ranked from 0-5 based on quality of engagement methods according to NHMRC Guidelines (2). The rankings are represented out of five stars in figure 3.

Study Abbreviations:

ABC – Aboriginal Birth Cohort
ATP – Australian Temperament Project
BG – Bibbulbin Gnarnieep
GG – Gomerioi Gaanyggal
Gudaga – Gudaga Birth Cohort
KOMS – Kalgoorlie Otitis Media Study
LSAC – Longitudinal Study of Australian Children

LSIC – Longitudinal Study of Indigenous Children
MUSP – Mater University Study of Pregnancy
Raine – Western Australian Birth Cohort
VAHCS – Victorian Adolescent Health Cohort Study
VIHCS – Victorian Intergenerational Health Cohort Study

References:

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