A systematic review of prevention interventions to reduce prenatal alcohol exposure and fetal alcohol spectrum disorder in indigenous communities

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Presenter Disclosure

 All authors and presenters declare that they have no conflicts of interest



Why?

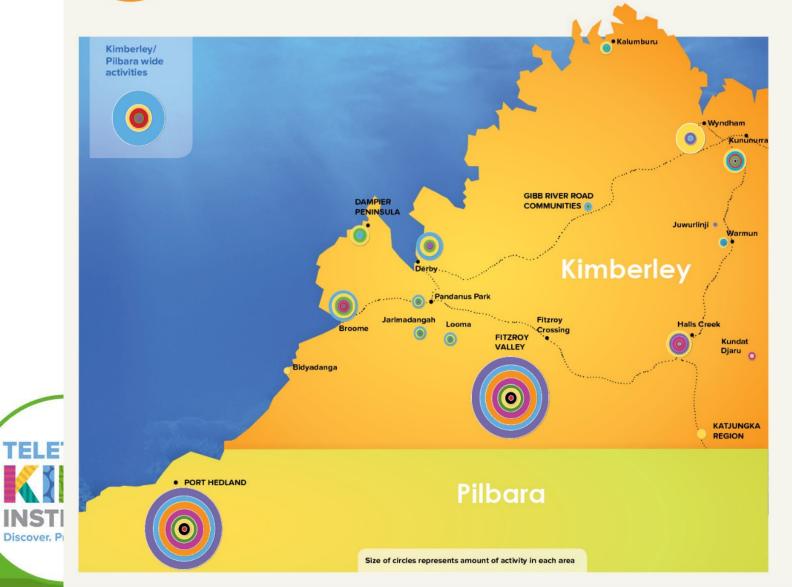
- Working up in Fitzroy Valley
- Aboriginal Community Led FASD Prevention
- Expanding to more sites
- •What else has been shown to work?





Kimberley and Pilbara Regions

Prevention Level Activities



Level Health
1 - Broad awareness and health promotion Pre-cc
Reduccontra
Guide

Community awareness through mass media
Community event
Community support groups
Health education resources
Integrated Education
Girl's Empowerment Groups
Pre-conception care
Reducing unplanned pregnancy-contraception and family planning
Guidelines
Health practitioner training-raising
awareness of FASD

Level 2 -Women of childbearing age and networks Antenatal screening
Brief intervention
Motivational interviewing
Health practioner training- alcohol
use during pregancy

Access to antenatal Care*

Level 3 -Targeted support for pregnant women with alcohol/socia issues Alcohol counselling
Support for women with alcohol problems
Support for women with social problems
Rehabilitation services
Harm minimisation
Access to specialised care
Specialised maternity care
Supporting women affected by

Level 4 Postnatal
support

Parent
Postna
ort Acces

Parenting support
Postnatal care
Access to postnatal alcohol counselling

domestic violence

Supportive alcohol policy Total alcohol bans - supply reduction Localised alcohol restrictions Alcohol restrictions- supply reduction Broad alcohol management strategy

FASD
Diagnosis and
Therapy#

Diagnostic services
Therapeutic services
Health practitioner services

Pro FA

Alcohol Use In Pregnancy and FASD Related Research

Quality improvement and evaluation Epidemiology Intervention studies



FASD strategy coordination^ FASD Strategy Coordinator in local community organisation Engagement of stakeholders in FASD prevention activitites

History

- FASD Prevention Systematic Review (Ospina et al, 2011)
 - 6 Indigenous (1 moderate quality, 5 weak)
- Systematic Review Reduction of Alcohol Consumption in Native Women (Montag, 2012)
- 170 FASD prevention projects in Canada "Virtually none" were evaluated (Salmon and Clarren, 2011)
- Online scan of 60 FASD prevention and health promotion resources for Aboriginal and Torres Strait Islander communities (Williams, 2018)



Search

- Registered with PROSPERO, followed PRISMA guidelines
- MEDLINE, PsycINFO, EMBASE, CINAHL Plus, Web of Science, InformIT and SocINDEX databases
- Any Aboriginal or Indigenous
- Specific populations in North America and New Zealand
- No grey literature



Search

- Primary research
- Any data aiming to evaluate a prevention intervention with the objective of reducing PAE or FASD
- Except for training/education targeted only at the workforce
- Reported separately on any Indigenous or Aboriginal population



Results

- 9 studies in USA and 1 in Australia
- Targeted non-pregnant women of child-bearing age, pregnant women, school children and the general public
- Many different designs
 - One randomised controlled trial
 - Five cohort studies with pre-post design
 - One cross-sectional study with different pre- and post- intervention groups
 - Four studies only post-intervention data



Results

Assessed

- Changes in knowledge
- Changes in risk for prenatal alcohol exposure including self-reported alcohol consumption, birth control or both
- FASD not often assessed

Intervention Level

- Four employed universal level interventions
- Three were *selective* and three *indicated* for women at high risk
- Four of these six were conducted in the wider context of concurrent *universal* prevention activities.



Results

- The methodological quality of all studies was rated as 'Poor'
- Studies were subject to substantial bias:
 - high loss to follow-up
 - lack of control groups
 - reliance on self-report measures
- Not saying that all studies were poor, but level of evidence was restricted
- Summaries of all studies available in paper



Discussion

- Hints of progress but evaluation not adequate
- 10 studies over 28 years in two countries
- Good evaluations in this area are hard
 - Lengthy time for consultation and adaptation
 - Often remote, costly
 - Follow-up
- Reliance on self-reported alcohol consumption, biomarkers?
- Birth control not well assessed
- Change in knowledge might not change practice



Discussion: Promising Aspects

- Most adapted for locals and many worked with locals
- Capacity building mentioned in five studies
- Five studies collected data at multiple time-points
- Multi-pronged approaches were used
- Hints that approaches may be useful



Discussion: Recommendations for Future

- Control group/community
- Randomized assignment wherever possible
- Report results clearly and accurately
- Follow-up longer for FASD diagnoses
- Employ strategies for reducing loss to follow-up
- Seek community guidance to maximise follow-up



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