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Inaugural National Research Conference on Violence against Women and their Children

### Welcome to the

# Inaugural National Research Conference on Violence against Women and their Children

### **ANROWS Research to Policy and Practice**



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# National burden of disease study examining the impact of violence against women

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# National burden of disease study examining the impact of violence against women

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- **burden of disease (BoD)** analysis is a rigorous technique used to compare the impact, on a population, of:
  - different diseases or injuries
  - and risk factors
- burden due to premature death (fatal burden) and due to living with the effects of illness or injury (non-fatal burden) are quantified
- also estimates the extent that risk factors contribute to the burden (and the health outcomes that make up this burden), including for intimate partner violence



# Background and context: Australian studies

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- the first study to look at the health burden of intimate partner violence (IPV) was conducted by VicHealth in partnership with the Department of Human Services; published in 2004 using 2001 data
- the most recent estimated national burden due to IPV for 2003
- AIHW is now undertaking the Australian Burden of Disease Study (ABDS) 2011
- this ANROWS-funded research project extends the ABDS 2011 with more detailed analysis of the health impacts of IPV on Australian women
  - state of knowledge report (systematic review)
  - research report
  - research to practice report
  - technical fact sheet



The health costs of violence





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- aims of this project
  - identify the health impacts of IPV
  - quantify the impacts by estimating the disease burden due to IPV
- it will have:
  - strong emphasis on Australian women, and include estimates for Aboriginal and Torres Strait Islander women
  - uses high-quality Australian data sources
- burden of disease studies provide comparable estimates of the impact of diseases and injuries
  - provide rich data for policy formulation and service planning
  - potential to guide decisions about areas of focus
  - a foundation for further research e.g. costs of diseases or risk factors, cost effectiveness analysis
- ANROWS burden of disease project
  - will provide evidence of the size of the health impacts of IPV
  - and how it compares with other health risks
  - impact for various age groups, specific diseases
  - important for disease prevention, both primary and secondary



Australian Burden of Disease Study 2011

Disease burden					
Estimates of burden for 200 diseases Fatal: no. deaths and age at death Non-fatal: no. cases and severity					

No. years lost



Australian Burden of Disease Study 2011



Population Attributable Fraction (PAF)



# What is burden of disease?

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Australian Burden of Disease Study 2011

ANROWS BoD project



Population Attributable Fraction (PAF)

No. years lost



# **Methodological approach**

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#### **1. Selection of disease outcomes**

• Based on evidence of a causal association

#### 2. Estimate of effect of risk factor on disease outcome

• Identify relative risks

#### 3. Estimate population level distribution of exposure

• Estimate exposure to IPV among Australian women

# 4. Define hypothetical distribution of minimum exposure

• For IPV the minimum is no exposure

#### 5. Calculate population attributable fraction (PAF)

• The proportion of burden that could have been avoided if the population had never been exposed to the risk factor



#### Associations between health ANROWS outcomes and IPV Inaugural National Research Conference on Violence against Women and their Children

• There are many health outcomes and behaviours that the literature has shown to be **associated** with exposure to IPV

Health outcome	Examples
injury	brain injury, loss of consciousness, genital trauma, fractures and sprains, lacerations, abrasions and bruising, self-harm, homicide, suicide
mental disorders	depression, anxiety, eating disorders, suicidal ideations
substance use disorders	alcohol use disorder, drug use disorders
chronic disease	cancer, cardiovascular, musculoskeletal
somatoform	chronic fatigue, chronic pain, irritable bowel syndrome
perinatal	prematurity, low birth weight
maternal	antenatal complications, post-natal depression
reproductive	abortion (medical and spontaneous), gynaecological problems
infections	HIV/AIDS, other STIs



# 1. Selection of disease outcomes

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• potential health outcomes were assessed according to rigorous criteria to determine the strength of evidence in the literature, including:

✓ causality

- ✓ appropriateness of IPV and outcome measures
- consistency of findings (across studies)
- ✓ controlling for other factors

✓ relevance to Australian women in 2011



#### 1. Selection of disease outcomes: ANROWS findings from review Inaugural National Research Conference on Violence against Women and their Children

The results of the literature review suggested that there was:

- strong evidence for a causal effect of IPV on:
  - homicide and violence
  - early pregnancy loss
  - depressive disorders
- probable evidence for a causal effect of IPV on:
  - anxiety
  - suicide and self-inflicted injuries
- **possible** evidence for a causal effect of IPV on:
  - alcohol use disorders
  - children born prematurely or with a low birth weight



# How does this compare?

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ANROWS (planned)	ABDS 2011	ABDS 2003	GBD 2010/2013	Victorian BOD
homicide and violence	homicide and violence	homicide and violence	interpersonal violence	femicide, physical injuries
early pregnancy loss	early pregnancy loss		abortion	
depressive disorders	depressive disorders	depression and anxiety	unipolar depressive disorders	depression
anxiety		depression and anxiety		anxiety
suicide and self-harm	suicide and self-harm	suicide and self-inflicted injuries	intentional self harm	suicide
alcohol use disorders				alcohol harm
premature birth and low birth weight				
		COPD, lung cancer	HIV (GBD 2013 only)	STIs, illicit drug use, eating disorders, cervical cancer, tobacco



# 2. Estimates of effect

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All IPV	Effect size (95% CI)	Direct evidence	Study/Source
		Fatal estimates: 46%	NHMP 2010-12
Homicide and violence		Non-fatal: proportion of hospitalisations for assault associated with IPV	NMHD 2011-12
Early pregnancy loss	3.75 (2.78-5.05)		Taft & Watson 2007
Depressive disorders	1.89 (1.43-2.42)		GBD 2010
Anxiety disorders	1.83 (1.36-2.47)		Vos et al. 2006
Suicide and self- inflicted injuries	5.06 (1.72-11.40)		GBD 2010
Alcohol use disorders	1.25 (1.02-1.52)		Devries et al. 2014
Preterm and low birth weight	1.72 (1.32-2.23)		Pavey et al. 2014
Psychological IPV only			
Depressive disorders	1.8 (1.43-2.42)		Coker et al. 2002





- prevalence data on exposure to IPV will be sourced from the ABS Personal Safety Survey (PSS) 2012
- 17,050 persons aged 18 years and over participated nationally; Indigenous status was not recorded in this survey
- **partner:** described a person that the respondent currently or previously lived with, in a married or de facto relationship
- partner violence refers to any incident of sexual or physical assault or threat by a current/previous partner
- the survey also included items related to psychological/emotional abuse; assessed for two time points: lifetime (from 15+ years) and previous 12 months





- a PAF is the proportion of burden that could have been avoided if the population had never been exposed to the risk factor; or the proportion of the disease or injury due to the risk factor
- PAFs can vary by age (and sex)
- influenced by the prevalence of the health exposure and the size of the relative risk; higher values for either → higher PAFs
- currently being calculated



#### **ANROWS** Inaugural National Research Conference on Violence against Women and their Children

- multiply PAF by burden estimate for linked condition; added together to get total number of years of life lost to IPV
- known as attributable burden: influenced by size of burden for the disease/injury AND size of PAF
- for example non-fatal burden of depression in the population is greater than that for self-inflicted injuries; but the relative risk of a self-inflicted injury (RR= 5.06) is much higher than that for depression (RR=1.89)



# **Strengths and limitations**

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- Strengths
  - Rigorous, internationally accepted and credible.
  - Takes into account the impact of premature death as well as the health loss due to illness and disability.
  - Standard method applied across all diseases and risk factors, allowing comparisons.
  - Demonstrates how IPV contributes to burden and what burden could be hypothetically avoided. This can inform policy and prevention strategies.
  - Inclusion of Indigenous estimates and health impacts of emotional abuse for the first time.



# **Strengths and limitations**

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### Limitations

- Does not include the burden from all possible conditions to which IPV may contribute.
- Data required for estimating burden is limited for other population groups (e.g. women with disabilities).
- Impacts of dating violence and to children witnessing partner violence not included specifically.
- Possible under-estimation of victimisation in surveys.

### Caveats

• Important that messages are framed in the terms of what is measured in BoD analysis.



## Application to policy and practice

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### Communications/awareness raising

- Prevalence
- Particular health consequences
- Population level health impacts

### Setting priorities

- Jurisdictional
- Local
- Organisational

### Basis for assessing the economic costs of IPV

- Evaluation/health monitoring studies
- Building the case for intervention



## Implications for policy and practice

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- The first results from this research project show that IPV has serious health consequences for Australian women.
- Evidence that IPV can be prevented.
- A consensus of the need for a multi-setting, multi-strategy and mutually reinforcing approach (UN 2015; OurWatch 2015).
- Suggests the importance of supporting a continuum of actions including (a) responding to IPV, (b) identifying/responding to the early signs and (c) preventing 'new cases' (primary prevention) through the:
  - National Plan to Reduce Violence Against Women and Their Children
  - Change the Story: A shared framework for the primary prevention of violence against women and children in Australia (OurWatch).



# What is next?



- ANROWS state of knowledge report publication forthcoming
- (Release of national burden of disease estimates in May 2016 and Indigenous release is expected July 2016)
- ANROWS research report, research to practice report and technical fact sheet due to be completed in mid-2016

For more information on ABDS 2011 see <u>http://www.aihw.gov.au/burden-of-disease/</u> or email: burdenofdisease@aihw.gov.au