Policy maker’s perceptions of the burden of heart disease in rural Australia

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Cardiovascular disease is preventable

• Cardiovascular diseases (CVD) and Ischaemic heart disease (IHD) are the leading causes of death in Australia

• Rural and remote dwelling Australians experience a higher and disproportionate burden of these diseases when compared to their metropolitan based counterparts

• Heart disease is preventable!
If you live here... you are 30% more likely to die from IHD than your friends living in the city....

There are 7 million Australians subject to this inequality
CVD death rates have been declining

There have been declines in IHD mortality over the past 30 years

• Declines are slower in rural Australia

• The biggest declines were observed for major cities between 2001-10:
  • Major cities: -4.1% for males, and -4.3% for females
  • Remote Australia: -2.4% for males and -3.9% for females

Why do these inequalities persist for rural Australians?
Policy not meeting the needs of rural Australia

- Previous public health policies serve metropolitan populations more than rural Australians
- There are international success stories of government policy assisting to eradicate inequalities in heart disease in rural communities
- E.g. The rural ‘North Karelia’ project in Finland-
  - Showed that the potential for the prevention of CVD in disadvantaged rural communities is GREAT.
  - Proof that we can evidence of inequalities to drive the effective use of policy as vehicle to change inequalities in Australian context.
Evidence and policy making

• Health professionals use scientific evidence to justify decisions for patient care

• Much discussion in the literature around the use of scientific evidence in policy decisions- the gold standard for health policy

• It is complex- both internal and external factors (such as the rural context) ultimately influence how and if evidence is used to justify decisions

• The use of evidence in rural health policy and heart disease prevention is not investigated to date in Australia
Aims

The aims of the study were to:

• 1. Describe the perceptions of rural health policy makers and advocates of the evidence* showing the increased IHD disease burden in rural Victoria, and compare these to views to state and federal counterparts, and

• 2. Identify the extent to which there is, and facilitators and barriers to, adoption of evidence* in Australian health policy in the unique rural context.

*evidence= scientific/ research based evidence
Methods

• Qualitative study
• Snowball and purposive sampling methods
• 21 interviews- local level, state and federal government in Australia
• Local level were participants in rural local governments in Victoria
Methods: Interviews

• Roles of participants included health policy makers, politicians, academics and leaders of relevant health advocacy organisations (e.g. NGOs) who worked directly with policy makers (9 at local, 3 state, 9 federal)
• Ranged in time from 20 minutes to 90 minutes
• Semi-structured questions around:
  • perceptions of the IHD burden in rural areas and;
  • scientific evidence use in rural specific policy work or advocacy
Methods: Analysis

• Theoretical thematic analysis (Braun & Clarke, 2013)
• Utilised two frameworks when deriving themes from the data:
  1. Context-based evidence-based decision making framework (Dobrow, 2004) to understand the stages of evidence adoption in policy decisions AND;
  2. Conceptual Framework for Understanding Rural Health (Bourke et al, 2012) to understand the specific influence of the rural context on evidence use
### Methods: Analysis Frameworks

Framework 1: Summary of the three stages of evidence use as outlined by Conceptual Framework for Context-Based Evidence-Based-Policy decision making (Dobrow et al., 2004)

<table>
<thead>
<tr>
<th>Stage of evidence use in decision making</th>
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</thead>
<tbody>
<tr>
<td>Introduction</td>
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<tr>
<td>Interpretation</td>
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<tr>
<td>Application</td>
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Methods: Analysis Frameworks

Framework 2: Summary of the six domains of the conceptual framework for understanding rural and remote health (Bourke et al., 2012)

<table>
<thead>
<tr>
<th>Rural locale</th>
<th>Geographical isolation</th>
<th>Health responses</th>
<th>Broader health systems</th>
<th>Boarder social structures</th>
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Deakin University CRICOS Provider Code: 00113B
Methods: Analysis Frameworks

External Contextual Factors (e.g. rural specific context- concepts from the Framework for understanding Rural and Remote Health (Bourke et al))

- Introduction of Evidence
- Interpretation of Evidence
- Application of Evidence

Internal Contextual Factors (e.g. Purpose, Process, Participants)
Results

Stages of evidence use (Dobrow et al, 2004)

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<td>Stage 1: Introduction to the evidence (issues related to the identification, access and availability of the scientific evidence)</td>
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<tr>
<td>Current culture within LG is to focus on SDOH as a whole, so not looking at IHD, or accessing evidence.</td>
<td>LG: increased distance from metro areas means less resources and skilled staff in terms of being able to access high quality evidence. As distance increases, there is less access to scientifically skilled staff.</td>
<td>LG: Health services viewed as having the main role in accessing scientific evidence to inform specific policy on health conditions, not the LG. Areas viewed as more likely to have adequate staff and resources to do so.</td>
<td>LG: Overall lower education levels in a rural community, means people in the community may be less concerned with diseases like heart disease, and therefore staff working at LG may feel less pressure to be sourcing high quality scientific evidence to justify actions.</td>
<td>LG: predictable voting patterns in rural areas mean less political pressure and therefore access to the evidence. Communities have power when they use community consultation to create pressure of prioritising issues, not always in favour of IHD related action.</td>
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<td>HL: plenty of access to the evidence at this level, however they acknowledge how the influence of the rural locale can mean that there is reduced pressure for the formulation of evidence-based policy for IHD prevention.</td>
<td>HL: not really influenced as more resources and staff based in bigger centres with more staffing (eg. Canberra), but agree that geography has direct effect on LG's ability to access evidence.</td>
<td>HL: enough resources to access the evidence in terms of policy and funding bodies mean there are not enough resources to be able to afford access to scientific data bases and adequately trained staff.</td>
<td>HL: Higher education levels of personnel working at LG mean evidence is more easily accessible.</td>
<td>HL: evidence is applied but viewed as ‘the norm’ and doesn’t have much persuasive pull as “everyone has evidence” in the political realm for a variety of advocacy or policy proposals- power has a stronger influence.</td>
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<td>Stage 2: Interpretation of the evidence (includes the synthesis, evaluation and assessment of the generalisability of the evidence to policy making/decisions)</td>
<td>LG: research based in metro areas not interpreted to be appropriate as doesn’t account for the impact of physical spatial differences. There is the view that data would need to be small area level from rural communities to be applicable to policy.</td>
<td>LG: Collaboration with local health services is more likely, therefore can change views of scientific evidence and applicability to policy.</td>
<td>As above, access to the evidence, and education levels of rural communities interact with the demand adequate resources and pressure to analyse it’s suitability for policy or action around IHD.</td>
<td>As above, higher level decision makers such as state or federal politicians, like councillors, have the power to interpret even the most rigorous evidence on IHD in rural areas as invalid in the policy space. Rural communities have less power due to smaller population numbers and conservative voting patterns.</td>
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<td>LG: culture/social norms within the community don’t always align with the evidence, therefore evidence is interpreted as less relevant by policy makers who interact with the rural locale.</td>
<td>HL: Conflicted views, some agree with LG view in that geography means less likely to have scientific staff, but other participants feel that data can be generalised at larger levels than the current perception of needing community specific data.</td>
<td>As above, access is affected by inadequate funding, which means there is not sufficient time for policy makers to be able to analyse and take assessments about the evidence and its relevance to policy. Policy makers also reported a confidence in interpreting scientific evidence currently due to a lack of time and professional development funds.</td>
<td>HG: LG views of an issue, such as heart disease can dramatically affect how the interpretation of scientific evidence and therefore they control the power of the influence of evidence over policy.</td>
<td>HG: as above, higher level decision makers such as state or federal politicians, like councillors, have the power to interpret even the most rigorous evidence on IHD in rural areas as invalid in the policy space. Rural communities have less power due to smaller population numbers and conservative voting patterns.</td>
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<td>HL: Culture within advisory team can affect if the evidence is interpreted as relevant to rural areas or not. Agreement with LG that if the local community use’s evidence as irrelevant, then it’s acceptable to disregard its use.</td>
<td>HG: Research based in metro areas not interpreted to be appropriate as doesn’t account for the impact of physical spatial differences. There is the view that data would need to be small area level from rural communities to be applicable to policy.</td>
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<td>Stage 3: Application of the evidence (the evidence is applied and used to justify a policy related action/decision)</td>
<td>LG: Scientific evidence is rarely used to justify policy or programs and especially in terms of the prevention of IHD.</td>
<td>LG: evidence is applied but viewed as ‘the norm’ and doesn’t have much persuasive pull as “everyone has evidence” in the political realm for a variety of advocacy or policy proposals- power has a stronger influence.</td>
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<td>LG: rural locale not mentioned as specifically changing to this stage, depending on influence of the rural locale at stage 1 and 2.</td>
<td>Application is limited due to barriers at access and interpretation stages that are influenced by geographical isolation.</td>
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Conceptual Framework For Understanding issues in Rural and Remote Health (Bourke et al, 2012)

- Broader Health systems
  - Inadequate funding from the higher levels of government and funding bodies mean there are not enough resources to be able to afford access to scientific data bases and adequately trained staff.
  - Enough resources to access the evidence in terms of policy and funding bodies mean there are not enough resources to be able to afford access to scientific data bases and adequately trained staff.
- Broader social structures
  - Overall lower education levels in a rural community, means people in the community may be less concerned with diseases like heart disease, and therefore staff working at LG may feel less pressure to be sourcing high quality scientific evidence to justify actions.
  - Higher education levels of personnel working at LG mean evidence is more easily accessible.

LG increased distance from metro areas means less resources and skilled staff in terms of being able to access high quality evidence. As distance increases, there is less access to scientifically skilled staff.

HL: evidence is applied but viewed as ‘the norm’ and doesn’t have much persuasive pull as “everyone has evidence” in the political realm for a variety of advocacy or policy proposals- power has a stronger influence.

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Results: The Rural locale

Acknowledges the complex interplay between:

• Social relations, social capital, culture and country on influencing health outcomes within a geographical rural area

• For example, strong social norms within a rural community regularly exist and can ultimately influence the health of that community
Results: The Rural locale and access to evidence:

• Cultures within rural areas enabled/constrained policy makers perceptions around the need to access scientific evidence for policy around heart disease
• One community had implemented an evidence-based heart disease awareness prevention program in their rural shire
• However a policy writer from another shire said their policy didn’t have this focus because:

“We know that what we’re doing is to eventually prevent chronic disease, but focusing on the chronic disease itself, we haven’t found it’s particularly effective when it comes to communicating with the community”
Results: The Rural locale and access to evidence:

A national level participant acknowledged the influence of the rural locale over the likelihood of policy maker’s accessing evidence around heart disease prevention.

“So, each of those towns have its own cultural identity and people in those towns, you know, to a greater or lesser extent operate within a unique cultural environment, if you like. So, an environment where it's, you know, if you’re not smoking what's wrong with you?” -Rurally based National policy advisor and data analyst
Results: Rural locale and interpretation of the evidence

The rural locale constrained the favourable interpretation of the evidence, as cultures within the rural locale meant that sometimes Policy makers viewed the scientific evidence as not applicable to the community:

“I would be needing to know that actually that scientific study is going to be relevant for our community.” – Director of Community services with experience in multiple rural local governments in policy formulation

“Sometimes university's produce a fair bit of rubbish”- Senior National policy advisor in rural Health
Results: Rural locale and application of the evidence

• Due to barriers related to the rural locale, such as the lack of pressure to access and use of the evidence in justifying policy around IHD prevention, application of the scientific evidence was viewed as rare, and in some cases had not been used at all at the local level.

“It hasn’t happened before” - Social planner and health policy writer
Results: Rural locale and application of the evidence

There was disagreement from federal level participants

“Well there is a kind of wishy-washy school of health promotion that thinks we shouldn't mention diseases. It seems to me a bizarre notion.” – Senior National Policy advisor and senior academic medical officer
‘Broader health systems’ refers to how rural health systems are influenced by the actions of funding bodies, health policy, media coverage, non-government organisations and the voice of rural people themselves.
Results: Broader health systems and introduction to the evidence

Policy maker’s working at LG level’s ability to access the evidence in rural areas was limited by a lack of resources and funding specific to reduced/ or no access to scientific databases and therefore the scientific evidence

“Studies are obviously like pay for - like you need to pay to access the article and stuff like that....which is a pretty massive, um, barrier for an organisation that has really low resourcing levels.” Social planner and policy writer for the past 3.5 years.
Results: Broader health systems and introduction to the evidence

At the higher level of government there is enough funding...however politics within the broader health system meant that evidence-based policy was not always viewed favourably...

“Which is just a bigger picture around, you know, addressing the issue of heart disease in rural communities. Because if the political process is what allocates resources for the management, care and prevention of heart disease in rural areas, then you work backwards and think why isn't there more funding?”

National senior policy advisor in heart disease and rural health
Results: Broader health systems and interpretation of the evidence

Local rural health policy makers didn’t feel confident in reading and interpreting the science due to lack of time, training and skilled support staff in their areas:

“I’m inclined to say yes but then I could be left red faced if somebody put a very scientific study in front of me” --Rural health policy writer

Federal participants felt less confident about the evidence swaying political decisions
Results: Broader health systems and applying the evidence

- There was perceived potential for broader health systems to contribute to improving the access to the evidence on IHD in rural areas.
- Evidence that there is a lack of data sharing and an improved system to encourage better data keeping and streamlined data collection between local governments and health services.
- Generation of such evidence would be viewed as more applicable to rural health policy work as it would account for heterogeneity between rural areas.
Results: Summary

• The Australian rural context appears to be a key variable in reducing the likelihood of the development of evidence-based policy to tackle the high burden of IHD experienced by rural communities

• The lack of resources available to rural policy makers preclude any meaningful use of scientific evidence in policy making

• Resources include: lack of access to data relevant to their community, limited funding, training and skilled staff in rural settings has reduced ability to apply scientific evidence to the policy making process
Discussion

• Political economy theory and the use of evidence in rural health policy-
  ‘Health inequalities in affluent societies (such as Australia) may be an
  outcome of ‘the social and politically mediated exclusion from material
  resources’

E.g. reduced political power in rural areas creates an environment that will
foster inequalities in health

• Findings here are similar to the rest of the literature that suggests a low
uptake of evidence in policy decisions
Implications and recommendations

• We found clear evidence that the quality and specificity of the data available to the rural health policy maker was a barrier to the use of evidence in policy making.

• Whether real or perceived, the lack of applicable local and rural data is inhibiting the use of evidence in policy making for rural health.

• To overcome this there is a need for routine, high quality local health data and analysis which are sensitive to the needs of the local community.

• A missed opportunity at the community level: there is a need for stronger legislation at local government level to link in with evidence-based prevention efforts; specific to rural areas with adequate resourcing.
Strengths and weaknesses

• This is the first study to interview rural policy makers with a heart disease focus at all three levels of government.

• The rural informants to this study were Victorian based and this may limit the generalisability of these findings to others States of Australia. The policy context would be different in other states and may be even lower resourced than informants described here.

• Heterogeneity in geographical characteristics of other states is also a limitation in generalising these findings.
Conclusions

The current rural context leads to conditions which constrain the ability of local government to focus on these inequalities and subsequently to apply evidence to their efforts in prevention. Without these contextual inequalities being addressed, the shameful inequalities in morbidity and mortality will remain for rural Australians.
Thank you

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