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Rachel Reilly, Kevin Rowley Joanne Luke Joyce Doyle Rebecca Ritte Rebekah O, Shea Alex Brown
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Economic rationalisation of health behaviours: The dangers of attempting policy discussions in a vacuum



Rachel Reilly^{a,*}, Kevin Rowley^b, Joanne Luke^b, Joyce Doyle^b, Rebecca Ritte^c,
Rebekah O'Shea^a, Alex Brown^a

^a Wardliparingga Aboriginal Research Unit, South Australian Health and Medical Research Institute, PO Box 11060, Adelaide, SA 5001, Australia

^b Onemda VicHealth Koori Health Unit, Melbourne School of Population and Global Health, The University of Melbourne, Vic 3010, Australia

^c Centre for Health and Society, Melbourne School of Population and Global Health, The University of Melbourne, Vic 3010, Australia

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ABSTRACT

When analysing the health behaviours of any group of people, understanding the constraints and possibilities for individual agency as shaped by the broader societal context is critical. In recent decades, our understanding of the ways in which physical and social environments influence health and health behaviours has expanded greatly. The authors of a recent analysis of Australian Aboriginal health data using an economic 'rational choice model,' published in this journal, claim to make a useful contribution to policy discussions relating to Aboriginal health, but neglect context. By doing so, they neglect the very factors that determine the success or failure of policy change. Notwithstanding the technical sophistication of the analyses, by ignoring most relevant determinants of health, the conclusions misrepresent the lives of Aboriginal and Torres Strait Islander people and therefore risk perpetuating harm, rather than improving health.

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In a previous issue of this journal (vol. 84, 2013), Whelan and Wright present an analysis of data from the Australian National Health Survey 2003–05 and the Aboriginal and Torres Strait Islander Health Survey (NATSIHS) 2004–05, “to examine whether Indigenous Australians make different lifestyle choices and health services use than non-Indigenous Australians” (Whelan and Wright, 2013, p.1). The authors surmise that the health inequity that exists in Australia between Indigenous and non-Indigenous people may be due to “poor lifestyle choices and a lack of access to health services”. To test this hypothesis, they apply a “two-period constrained optimisation model,” which is based on the premise that “individuals make consumption activities choices (including lifestyle choices such as whether to smoke or not) and health services use choices to maximise expected utility looking forward to the effect these choices have on their future health states” (p.8). On the basis of their analysis they conclude that Indigenous Australians

do make different lifestyle choices and, further, that “a distinguishing characteristic of Indigenous Australians is their poor lifestyle choices” (p.8). On the question of health service usage, they conclude from their analysis that the perception that Indigenous Australians have poorer access to health services than non-Indigenous Australians is incorrect. The authors argue that their findings have implications for policy development: “the pay-off from policies aimed at changing these choices is likely to be large both in term of the efficient use of the health budget and more importantly in terms of health outcomes for Indigenous Australians” (p.8).

We have a number of concerns with the language used in justifying this analysis and interpreting the results, the assumptions upon which the analysis is based, and the important contextual information that is omitted. Like Rogeberg (2004) and Chick (1998) before him, our argument is not with the accuracy or completeness of the dataset used, nor with the use of mathematical models and formal methods to analyse health behaviours, but with their misapplication and misinterpretation.

The concern with language begins with the use of the term ‘choice’ in relation to lifestyle. The original datasets used for analysis did not ask about ‘lifestyle choices’ but rather health

* Corresponding author.

E-mail addresses: rachel.reilly@sahmri.com, rachreilly@hotmail.com (R. Reilly), rowleyk@unimelb.edu.au (K. Rowley), jnluke@unimelb.edu.au (J. Luke), jdoy6@bigpond.com (J. Doyle), rebecca.ritte@unimelb.edu.au (R. Ritte), alex.brown@sahmri.com (A. Brown).

behaviours related to aspects of lifestyle (Australian Bureau of Statistics, 2006b). 'Poor lifestyle choices' reflects a value judgement that Whelan and Wright apply to the narrow selection of variables from the original dataset that they choose to analyse. It is the lens through which they conduct their analysis and which is consequently reflected in their conclusions. Throughout the article, health behaviours such as smoking, drinking alcohol and using health services are seen as the result of free choices made by autonomous, forward-looking agents. At first glance, the framing of lifestyle in this way seems simple and unambiguous, in line with the way 'lifestyle' is depicted in healthcare, where individual lifestyles are often viewed as both a cause of ill-health and a legitimate target for intervention, and in the media, where advertisers encourage us to purchase products on the basis of their health enhancing or protecting properties. It is also superficially consistent with concepts of self-determination and autonomy. The underlying message is that as individual agents, the responsibility for our health or illness is in our own hands and a matter of our own free choice.

However, conceptualising lifestyle as simply a matter of 'rational choice' places the blame for 'poor future health outcomes' firmly on the head of the individual, which flies in the face of research evidence and ignores a reality of the lives of Aboriginal people: that all other things are not equal, including the range of possible 'lifestyle choices' available. Furthermore, it disregards competing social imperatives that require a more urgent response from individuals over and above any putative future health outcomes. In short, the analysis places at the periphery all causal pathways and environmental influences on health behaviours, and by implication health outcomes, that fall outside the individual's apparently free and unfettered ability to make choices. Of course we do not suggest that Aboriginal people are incapable of making rational, informed choice – they can, do and always have. Indeed, these apparently 'poor' choices are entirely explicable and rational when viewed through a conventional economic lens. Recently, Campbell (2013) also applied a rational choice model in his analysis of health behaviours of Aboriginal and Torres Strait Islanders living in a remote community. However, unlike Whelan and Wright, in his view 'endogenous choice' is affected by 'exogenous factors' and he incorporates these into the analysis. In other words, the individual and their choices are viewed in context. Not surprisingly, the conclusions drawn are starkly different. When psychosocial determinants (including stress and loss of perceived control), culture and community constraints are taken into account, Campbell concludes that short-term 'bad' health choices in preference to long-term 'good' health choices can be economically rational in certain circumstances. Further, "policies directed at changing the relative advantage of long-term benefits can be achieved by addressing distal psychosocial causative agencies" (p.5981) and are likely to be cost effective. In other words, policy should target the social environment.

Lifestyle has not always been viewed in the narrow construct of Whelan and Wright. As Devisch and Deveugele (2010) point out, lifestyle is not a neutral category to describe an objective reality, and its definition has changed over time. When first coined by sociologist Max Weber in the early 20th century, 'lifestyle' was viewed as the product of choices made by an individual within their social context and limited by 'life chances'. In developing a theory of lifestyle to balance the monopolisation of the individualist paradigm within the socio-medical discourse, Cockerham (2005) argues structural variables (social and material environment) need to be given a role consistent with their influence in the empirical world (p.64). That is, recognising that the thoughts, decisions and actions of individuals are influenced by age, gender, socio-economic position, culture, physical environment and social circumstances.

In recent decades, our understanding of the impact of physical and social environments on health and health behaviours has expanded greatly. Whole bodies of research in social determinants and the development of ecological theories of health and health promotion have led to the understanding that health behaviours and outcomes do not occur in a vacuum but are the result of a complex interplay between people and their social, cultural, historical and physical contexts (Krieger, 2001; Wilkinson and Marmot, 2003). Of relevance to the current discussion is the strong and consistent finding that racial discrimination is linked to smoking and alcohol consumption amongst Indigenous peoples in Australia, New Zealand, the United States and Canada, as well as other ethnic groups (Chae et al., 2008; Dawson et al., 2012; Ziersch et al., 2011). As Michael Marmot wrote: "Differences in access to healthcare matter, as do differences in lifestyle, but the key determinants of social inequalities in health lie in the circumstances in which people are born, grow, live, work and age. These, in turn arise from differential access to power and resources" (Marmot, 2011, p.512). To be effective, health policy and interventions need to be developed that take into account this complexity.

Whelan and Wright are not completely blind to this fact. They acknowledge in their final paragraph that "lifestyle choices are the result of a complex interaction between history and culture which makes changing them difficult from a policy perspective" (p.8). However they maintain that the strength of their analysis and its contribution to policy debate is that it de-contextualises health behaviour, relegating context to the periphery. There is a good reason for Whelan and Wright to adopt a definition of lifestyle as solely a matter of 'choice.' The reason is that in order to make sense, the rational choice model they use in their analysis relies upon the object of analysis being an autonomous, rational, forward thinking individual who is engaged in making detailed, forward-looking plans in isolation to 'maximise utility' at some future time point. Unfortunately this person does not exist in reality.

A second problem with Whelan and Wright's framework is their use of the term 'Indigenous' in a way that implies a homogenous population. Aboriginal Australia comprises more than 200 discrete nations or language groups and within Aboriginal and Torres Strait Islander populations there are people living in a variety of physical and social circumstances. As in the general population, health behaviour varies within these populations according to socio-economic factors, age, location and gender (Australian Bureau of Statistics, 2006a, 2006b; Scollo and Winstanley, 2012). To conclude that 'a distinguishing characteristic of Indigenous Australians is their poor lifestyle decisions' is akin to saying a distinguishing characteristic of the human race is its female gender. Presumably the authors would argue that the statement is meant in relation to non-Indigenous people, but this is equally incorrect. It becomes a matter of interpretation; given more Aboriginal and Torres Strait Islander than non-Aboriginal people choose to abstain from drinking alcohol, and according to their own analysis, Aboriginal and Torres Strait Islanders choose to access healthcare, the opposite interpretation could equally apply. To attribute the causal pathway for any health behaviour to an over-simplified racial category is offensive, stigmatising, and requires that the evidence base for all probable causal pathways relating to disadvantage, colonisation, inequality, racism, disempowerment and psychosocial stress are ignored.

A third problem with the analysis as presented is that Aboriginal world-views are apparently excluded. We observe that 'health' in the context of this paper refers to illness rather than a holistic, Aboriginal concept of wellness (National Aboriginal Health Strategy Working Party, 1989). Access to services is framed exclusively in terms of treating illness, ignoring any role for those services in health promotion and community development. The demographic

and socio-economic variables adjusted for in the analysis are conventional factors including income and time spent in western education. These factors may not have the same meaning or the same impact in Aboriginal and Torres Strait Islander populations. Time spent in western education can have both positive and negative impacts in terms of health, and those with higher incomes often carry a greater burden of stress and resultant poor health (Australian Bureau of Statistics, 2013; McKendrick and Charles, 2001). While we appreciate that the authors had no obligation to obtain ethics approval, the purpose of the National Health and Medical Research Council's ethical guidelines for Aboriginal and Torres Strait Islander Health Research (2003) to which researchers engaged in research with Aboriginal and Torres Strait Islander people are bound, is in large part to ensure that Aboriginal perspectives are incorporated into the interpretation of any such research findings. Exclusion of Aboriginal and Torres Strait Islander voices in this space can have damaging effects.

In providing background information to the reader relating to the Australian health system, the authors note that the mixed public/private health insurance system is available to both Indigenous and non-Indigenous peoples. 'Nevertheless specific programs and institutions are in place to serve the needs of Indigenous individuals, especially when they live in rural and remote areas.' (p.3). The authors state that 'moreover, if lifestyle choices and health service use do not differ, then an argument can be made that health resources should be targeted to all disadvantaged Australians and not specifically targeted to Indigenous Australians.' Combined with the conclusion that 'there should be no general presumption that Indigenous people have less access to health services than non-Indigenous people especially after controlling for socio-economic variables' (p.8), the implicit message plays down the importance of the Aboriginal Community Controlled Healthcare sector, and suggests that the mainstream health system is catering for the needs of Aboriginal and Torres Strait Islander people. This would be encouraging if it told the whole story. Sadly, the available evidence indicates that health expenditure is not equitable when calculated on the basis of need (Australian Health Ministers' Advisory Council, 2011), and that in addition, Aboriginal people continue to receive differential treatment in the mainstream health system. The existence of Aboriginal Community Controlled Health Organisations (ACCHOs) is not simply a bonus for Aboriginal people even though they can access the mainstream system. ACCHOs are a product of Aboriginal resistance to a healthcare (and broader social) system that does not cater adequately to their needs. They continue to serve an important role in urban, regional and remote Aboriginal communities, not simply as providers of healthcare but as socio-cultural spaces of connection, health promotion and community development (Fredericks and Legge, 2011). It is therefore not a question of funding either health services or prevention programs, but rather of understanding the critical role of ACCHOs in delivering both.

Evidence of differential treatment in the mainstream healthcare system is beginning to be captured in published reports. The Federal Government's Health Performance Framework for Aboriginal and Torres Strait Islander people (Australian Health Ministers' Advisory Council, 2011) shows that in all states and territories, Aboriginal people were less likely to receive procedures during hospital admissions than non-Indigenous people for the same diagnosis. Aboriginal people also have less access to specialist treatment, shorter survival rates after a diagnosis of lung cancer (Coory et al., 2008) and receive different rates of procedures for cardiovascular conditions (Mathur et al., 2006) and renal failure (Anderson et al., 2012). On that basis it is easy to see why the mainstream health system is not considered a safe place for Aboriginal and Torres Strait Islander people.

1. Conclusion

Whelan and Wright argue that conducting their analysis of 'lifestyle choices' *ceteris paribus* ('all other things being equal': p.5) is a strength of the paper, and an argument for its usefulness to policy discussions. The authors view 'lifestyle choice' as a legitimate unit of analysis in isolation for all other contextual factors, and conclude on the basis of their analysis that 'a distinguishing characteristic of Indigenous Australians is their poor lifestyle choices' (p.8). A key assumption of the theoretical model driving their analysis is that 'individuals make consumption activities choices (including lifestyle choices such as whether to smoke or not) and health services use choices to maximise expected utility...' (p.2). While all theories are limited in their ability to fully explain human behaviour, this economic model appears particularly limited in its usefulness to understand the prevalence of smoking or any other health behaviour in the context of Aboriginal and Torres Strait Islander Australians.

By neglecting context, the authors neglect the very factors that determine the success or failure of policy change. As such, while apparently well-intentioned, we refute this paper's contribution to policy discourse, or the evidence base for Aboriginal health in Australia. We already know that the rate of smoking in Aboriginal and Torres Strait Islander communities is disproportionately high, presenting a big challenge that communities need to be resourced to tackle. This is not because non-Indigenous Australians make superior choices, which is the implicit message of this paper, but because whether you are Indigenous or not, 'choice' is a relative term dependent on circumstance and the resources available to you.

In short, and notwithstanding the technical sophistication of the analyses, the conclusions ignore most of the determinants of health for Aboriginal People and Torres Strait Islanders, and are therefore of limited utility. The language chosen to justify and interpret the statistical analysis further stigmatises Aboriginal and Torres Strait Islander people. Rather than focussing primarily on individual 'choice' by prescribing better knowledge, self-esteem, self-control or decision-making, which to date amounts to maintaining the (only marginally successful) status quo, focus would more productively be turned to reducing inequity in life chances, promoting opportunities for participation, improving environmental living conditions and safety and tackling racism.

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