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# My body's getting healthy and my mind is getting healthy with it. Considering Urban Aboriginal and Torres Strait Islander Conceptions of Health.

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### ABSTRACT

Drawing on the salutogenic, or 'origins of health' framework, this article explores the health and well-being conceptions of urban Aboriginal and Torres Strait Islander people and identifies individual and community health-enabling strategies employed to support their health and well-being. This qualitative study included 12 focus groups with 83 predominantly Indigenous Australian participants of *Work It Out*, a chronic disease self-management and rehabilitation program in South East Queensland. The focus groups explored meanings of health and well-being as well as strategies used to keep healthy and well. The findings indicate that urban Indigenous Australian participants view health as a balance between physical, psychological, socio-emotional and environmental factors and are active engagers in health enhancing behavior. This study provides new insights into the health and well-being conceptions of urban Indigenous Australians at risk of suffering from a chronic disease and reveals a unique view of health and well-being. Understanding how urban Indigenous Australians conceptualize health and well-being will contribute to the evidence base to inform culturally responsive public health programs and policy.

### Keywords

Indigenous Health, Chronic Disease Self-Management, Salutogenesis.

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## Introduction

To date, the majority of Indigenous health research has been grounded in a pathogenic paradigm that focuses on the origins of disease. Regarding chronic disease, researchers have overwhelmingly focused on identifying the risks and vulnerabilities contributing to disease occurrence, for example, tobacco use, substance use, physical inactivity, socioeconomic status and obesity<sup>1-4</sup>. This body of research has contributed to understandings of the inequitable burden of chronic disease on Indigenous people and informed public health policy, which has begun to address risk factors with the aim of improving health outcomes. However, this pathogenically focused research has also resulted in negative consequences such as the deficit positioning of Indigenous people as “at risk” or “lacking”.<sup>5,6</sup> By not taking into account broader aspects of health, a pathogenic focus on illness can limit approaches to prevention and management. Despite calls for a holistic approach to health which considers a balance between mind, body, spirit the natural world, and the health of the whole community,<sup>7-12</sup> current approaches to Indigenous health continue to focus largely on disease processes and pathology.<sup>1,2</sup>

The current focus of health research on illness stems from Western, biomedical, pathogenic and body centred models of health where it has simply been defined as the “absence of illness”<sup>11,p215</sup>. Whilst the biomedical model’s focus on disease has resulted in substantial progress in communicable disease eradication (e.g. small pox, polio),<sup>13</sup> this reductionist model’s main focus on the somatic, or biological nature of disease is criticised for its assumption of a divide between mind and body as well as its lack of consideration of non-biological contributors to ill-health.<sup>13-15</sup> Several attempts have been made to address these shortcomings, including the World Health Organisation’s (WHO) biopsychosocial approach<sup>16</sup> and the Declaration of Alma Ata (1978)<sup>17</sup> definition of health, both of which acknowledge that health includes physical, mental and social well-being and is not merely the absence of disease or infirmity. Furthermore, sociological approaches recognise that health is influenced by complex contexts involving social, cultural, political, economic and historical factors in combination with biological systems.<sup>15</sup> This view is reflected in the

description of health widely accepted by Australian Aboriginal and Torres Strait Islander people (referred to as Indigenous Australians here with) as:

Not just the physical well-being of an individual but...the social, emotional and cultural well-being of the whole community in which each individual is able to achieve their full potential thereby bringing about the total well-being of the whole community. It is a whole-of-life view and includes the cyclical concept of life-death-life. <sup>12,px</sup>

This National Aboriginal Health strategy definition extends on the WHO and Alma Ata definitions of health by placing health within the Indigenous Australians’ historical, political, cultural and social contexts. <sup>18</sup> In contrast to the pathogenic approach to Indigenous Australian health which focuses on biological and personal deficits, risks, and health inequities, the National Aboriginal Health Strategy definition offers a more holistic perspective. The discrepancies in these approaches to health raise questions about what factors contribute to good health according to Indigenous Australians.

Although a well-being approach to health delivery is widely recognised<sup>9,12</sup>, there remains very little theory or research focussed on what makes people well, rather than unwell. Salutogenesis is one theoretical framework which focuses on the origins of health and the process of healing rather than the process of becoming ill.<sup>19,20</sup> The Salutogenic framework suggests that people have biological, material and psychosocial resources that enable them to move towards positive health. It is strengths-based and considers health enabling strategies utilised at the individual and community levels. This approach may be a useful tool for providing a theoretical framework for exploring health and well-being for Indigenous people around the world as it aligns well with Indigenous perspectives on health which consider social and environmental resources which can develop people’s health.<sup>21,22</sup>

From a salutogenic perspective, health is viewed as a continuum of life rather than something a person does or does not have.<sup>21,22</sup> As Antonovsky states<sup>23 p14</sup>, “we are all, always, in the dangerous river of life. The twin question is: How dangerous is our river? How well can we swim?”

Antonovsky's notion of the river provides an opportunity to explore perceptions of health for Indigenous people which recognises there are risks and disease (dangers in the river) but also that the "swimmer" can hold resources which enable him/her achieve health, or "to swim well in the river". This notion is particularly pertinent for Indigenous people who have a chronic condition and therefore already have "dangers in their river". Moving away from a pathogenic perspective, and taking a salutogenic approach, researchers might ask how do Indigenous people conceptualize "swimming well" (health and well-being) and what resources do Indigenous people use in order to "swim well in the river" to achieve health.

The great majority of research regarding Indigenous Australians' conceptions of health has been located in remote or rural areas.<sup>10,23-25</sup> Little is known about how Indigenous Australian's in urban areas conceptualize health, where a variety of views may exist. In addition, there is little research regarding health meanings from the perspective of Indigenous Australians already living with a chronic condition. This paper will explore the perceptions of health and well-being held by Indigenous Australians living in urban areas with chronic diseases and how they view their own individual and collective health. Investigating the health enabling strategies used by Indigenous Australians with chronic diseases will provide further insights into notions of health and well-being and the strategies individuals and communities employ to move along the continuum toward positive health.

This paper has two main aims:

1. To explore the meaning and experiences of "health and well-being" for urban Indigenous Australians with chronic disease.
2. To identify individual and community health enabling strategies utilised by participants to support their health and well-being.

## Methods

The study received ethical clearance through the Behavioural and Social Sciences Ethical Review Committee at The University of Queensland and

by the board at The Institute for Urban Indigenous Health.

## Research context

This study took place within the *Work It Out* program, a chronic disease self-management and rehabilitation program designed specifically for Indigenous Australians and implemented in 9 locations in South East Queensland and 4 locations in central Queensland. The program occurs twice a week and group sizes range from 6-20 attendees per session.

## Participants

All regular clients of the *Work It Out* program who were living with or were at risk of a chronic disease were invited to participate in the study. A total of 83 people (33% male, 67% female) aged between 18 and 80 years old participated. This is reflective the gender and age distributions across all *Work It Out* program locations. Participants had been attending the program for varied lengths of time ranging from 2 days up to 4 years. Seventy six participants were Indigenous Australians, identifying as being Aboriginal (74%), Torres Strait Islander (7%), both Aboriginal and Torres Strait Islander (5%). A small number of participants were non-Indigenous (14%), as the program does not exclude people based on ethnicity. All participants were informed of the research focus group and their options to participate or not one week in advance of the session and provided written informed consent prior to their participation. Chronic diseases affecting participants include, but are not limited to, hyperlipidaemia, asthma, hypertension, obesity/morbid obesity, osteoarthritis, Type 2 Diabetes, ischemic heart disease, chronic lung disease, hypothyroidism, obstructive sleep apnoea, anxiety and depression. The regular Accredited Exercise Physiologist/Physiotherapist and an Aboriginal health worker at each site were also present during some focus groups.

## Data Collection

Prior to data collection, each researcher was immersed in the clinical context (*Work It Out* program) several times per month in order to ensure transparency, build relationships, and contextualize the analysis. These methods are typically embedded in the research program tied to the

ongoing evaluation of the *Work it Out* program.

Data were collected via 12 focus groups with *Work it Out* clients at each location over a six month period between November 2015 and April 2016. These discussions were each facilitated by a member of the research team. Focus groups involved participants making a collage by selecting pictures from magazines that represented health and well-being to them. In addition, participants were also given the opportunity to write text and/or draw their own images. The use of collage has been shown to be a useful approach in transferring tacit knowledge in qualitative research.<sup>26-28</sup> Magazines used for collages included a range of images and were broadly selected to comprise of a range of content topics including home and garden, sports, outdoors and recreation, food, craft and entertainment. Additional pictures of Indigenous Australians attending community events, playing sport, attending meetings and other everyday activities were also sourced. Many participants also brought their own pictures to contribute to the collage and discussion. All text written on the collages was recorded and included within each site's transcript for analysis. During and after the collage construction participants engaged in yarning, which involved describing their choice of image and what health and/or well-being meant to them amongst other conversation. Research Yarning has been established as a culturally appropriate methodology for research with Indigenous Australians and has been described as a "conversation with a purpose" that takes place in order to gather information through participants' stories that are related to the research topic.<sup>29</sup> The yarn is still relaxed and interactive but it also has a defined beginning and end. Each site's yarn was recorded and transcribed verbatim.

### **Data analysis**

Data were analyzed thematically<sup>30</sup>, beginning with multiple readings and independent coding of a selection of transcripts by the research team. Consensus was reached and a coding matrix established, enabling a more detailed coding of all data undertaken by two of the researchers. In instances where the initial coding matrix was unable to explain data, additional codes were developed inductively in order to fully explain participants' responses. Researchers provided

feedback regarding the themes drawn from the data to participants during the regular *Work It Out* 'Big Picture' education sessions, which provided an opportunity for member checking. Participants agreed with the findings that were presented and also offered additional perspectives. These perspectives regarding the analysis were recorded and considered by researchers before arriving at a final description of findings.

### **Results**

Data analysis revealed two overarching themes regarding participants' views of health and well-being: (1) Meanings of health, 2) Makings of health. Within these two themes, several sub-themes emerged which will be discussed below.

#### ***Meanings of health***

Participants identified that the meaning of health is complex, multifaceted and slightly different for each person. Health and well-being were described as a culmination of physical well-being, mental health, social and cultural connectedness and environmental factors. Knowledge and understandings of health and well-being arose out of personal experiences, self-perceptions regarding being healthy in the past, public health messages and participation in the *Work It Out* program.

#### ***Physical well-being***

Participants identified that being healthy included physical well-being. This involved being physically active and maintaining one's body, for example, personal hygiene, hair and skin condition, oral health and not being overweight. Physical health meant being able to engage in activities such as running, going to the gym and playing sport. It also extended to being able to participate in work, social activity and community and family events. One participant commented:

*I got an 8 year son and he has lots of energy so I can keep up with him. I have lost 38 kilos in one year [Location 1].*

Participants also noted that physical health and well-being changed with age and that it was important to "work at your own pace" and "know your limitations". One participant acknowledged that the *Work it Out* program assisted with addressing some of these physical changes:

*I am older now so the body is starting to feel it with the old age. My mobility is being a bit of an issue, so it is helping me get motivated and have a commitment and something I can share with others [Location 2].*

Physical symptoms were also seen as signals of deteriorating health and participants described the dangers of not listening to warning signs. In some cases, these were linked to the knowledge they had gained during the education sessions of the *Work It Out* program.

Decreased pain and being pain free were seen as important factors that contributed to health and well-being. Meanings of health did not necessarily mean a complete absence of pain but increased medication use for pain reduction was viewed positively as it enabled participation in everyday life. As one client said:

*Before I started taking my 20 tablets a day I used to have buggar all sleep you know. I used to play musical chairs all day. I couldn't sit down, because under there was so sore you know, and all these nerves in my feet, and all these drugs they put them all to sleep you know. Geez they good hey, whoever invented drugs [Location 3]*

### *Mental health*

Participants' concepts of health and well-being were inextricably linked to one's mental health. When referring to his participation in the *Work It Out* program, one participant made a link between physical and mental health:

*It's helped my mental health, like I have PTSD [Post Traumatic Stress Disorder], I'm starting to be able to talk to people now instead of staying in my shell. I sort of locked myself away for a lot of years but I feel comfortable here. After the first session I was a bit, 'I don't know' sort of thing, but after a week or two I feel comfortable around these people and it makes me open up a bit more and the exercise has helped that too. I go home and I don't think the way I used to cause my body's getting healthy and my mind is getting healthy with it [Location 1]*

This comment also reflects broader findings that socio-emotional factors were a key part of what constituted health and well-being. Many clients suggested that love, appreciation, happiness and laughter contributed to and reflected good health and well-being. Being emotionally strong assisted in maintaining such feelings and dealing with stressors.

### *Social and cultural connectedness*

Spending time with family and celebrating milestones were seen as necessary for both enabling good health and also as evidence of good health. Conversely, family was seen as factor that could cause significant stress, and the ability to cope with this stress was perceived as a sign of good health. When asked what health and well-being looks like, a client simply responded: *'having fun, good friends and good company'*.

Many participants spoke about the importance of being a role model for younger generations and ability to pass on knowledge. Health was connected with the ability to provide this knowledge:

*I need to find out where I am at with my physical and mental, although not that much mental, physical well-being you know. I would love to do it you know, I have got, teaching the kids you know, about the bush you know [Location 2]*

### *Environmental factors*

Participants placed great importance on being in or having access to environments that positively influenced their mental and physical health. Both the physical and social environment were identified by participants as either facilitating or impeding health and well-being. It was considered critical to good health and well-being to have access to the outdoors and 'fresh air'. Activities such as camping, fishing, walking and gardening were given as examples. Participant's responses also reflected the importance of connections to country.

*When you go for a walk in a rainforest or one of these little mountain tracks or whatever, how do you feel listening to everything, breathing in the air, your mind, your body just chills out [Location 5]*

*It makes you feel better, like I can go to Straddie and jump in the water and you just feels better, it's just a healing thing really, you feel young [Location 6]*

Being healthy also meant having a clean, comfortable and quiet space to live in, with some participants suggesting that living in urban areas had several restrictions, which were all largely based around having limited access to the natural environment.

Food security, which could be influenced by physical location and socioeconomic status, was seen as an important aspect of health with participants noting that health meant *'food in the house, having enough to eat'*. [Location 7]

Participants' knowledge of health and well-being appeared to be largely based on personal experiences, and if they perceived themselves to have been healthy in the past. Many participants attributed living longer due to healthy choices, for instance: *'like nowadays, people living longer lives, and I think it is due to diet and exercise.'* Additionally, public health messages in the media, healthy living advertisements and the *Work It Out* program were all factors that contributed to clients knowledge of health and well-being, with one client stating: *'it [Work It Out] has given me a completely different outlook.'*

## **Makings of health**

In addition to identifying what health and well-being meant to them, participants' responses also highlighted factors which contributed to their health. These consisted of both individual behaviours and systemic or environmental factors including making your own choices, and making healthy choices, making healthy minds, making social connections.

### *Making your own choices*

The concept of self-management strongly underpinned the makings of health. Participants discussed having agency as integral to engaging in health fostering behaviours and environments. Individuals across the majority of locations thought that self-management was important in being healthy and well. Clients viewed the self-management aspect of *Work It Out* as key in their ability to be agents in their own health. For

instance:

*That's the good part of it, you are not forcing us, we are doing it out of our own choice [Location 2].*

Health related behaviours such as help seeking, attending healthcare check-ups, seeking professional support, adhering to and learning from health professionals' advice, and increasing ownership of your own actions were all themes within the data. For instance, one participant said:

*I reckon see your doctor too, don't leave it. I think the biggest thing, what was said you know is if you are going to the doctor, take your doctor's advice. That is what you have got to be doing [Location 3]*

### *Making healthy choices*

The *Work It Out* program was typically viewed as a catalyst for behavioural change to support health and well-being, with one client saying:

*So without being able to come to this group, I will probably [be] still sitting at home on the lounge you know, or laying on the lounge watching DVD's all day [Location 9]*

Clients mentioned that the *Work It Out* program facilitated their goal setting, motivation, focus, will power and commitment, with rewards and incentives being viewed as positive motivators for achieving goals. For example:

*We've both got chronic diseases so we need to get on top of that before it gets on top of us. We can do that twice a week if we can and that's important to us to keep focused and keep mindful and keep on track. Cause you come in some days and we are feeling a bit flat and you walk away feeling a bit better [Location 5]*

### *Making healthy minds*

Cognition and memory activities were identified as important, with many participants selecting images of crosswords as examples of ways to keep their mind active. Ongoing learning was seen as a contributing factor to health and well-being. For example one participant said:

*... using your brain, learning and that, that keeps you healthy, keep your mind healthy* [Location 8]

Stress management skills were also identified as important for health. Coping strategies and avoidance of stressors were seen as methods to reduce stress. Relaxation was identified as a major coping strategy with examples of sewing, meditating, fishing, bird watching, painting, listening to music and dancing given as examples of ways in which the participants 'de-stress' and experience 'inner peace'. Additionally, 'keeping calm' and 'having a light mind', reflection, minimizing technology overuse (e.g. mobile phone, social media) and taking time for oneself were seen as health facilitators.

Many participants noted the importance of having self-esteem and a positive outlook:

"It's a matter of believing in yourself. If you honestly believe you can do it, you will" [Location 9].

The importance of sleep for body recovery, maintaining a healthy weight range and mental well-being was mentioned across the majority of locations. For instance, one participant said:

*Well if you don't sleep well you not really good the next day and it makes you anxious* [Location 8].

### *Making social connections*

Social connectedness was a major theme that arose from the data. The support offered by one's social network was viewed as a facilitator to health and well-being. The *Work It Out* program was seen as a facilitator of social connectedness. Many participants mentioned how the program had allowed them to meet new people, make friends and keep motivated due to the group classes. Caring for others was seen as a major factor that contributed to health and well-being. However many participants mentioned this could be time consuming which could result in *'letting their own health slide.'*

### **Discussion**

The results indicate that health and well-being is perceived by urban Indigenous Australians in this study as a multidimensional concept that

includes the balance of physical, psychological, social, cultural and environmental factors. Consistent with previous research,<sup>7, 31-34</sup> Indigenous concepts of health and well-being extend beyond the pathogenic notion of being merely pain or disease free.

The study demonstrates that urban Indigenous Australians generally see themselves as active engagers in health enhancing behaviors and use a variety of strategies to achieve health and well-being. This finding is in keeping with Antonovsky's<sup>21</sup> perspective that health should be viewed as a complex relationship between the swimmer and the river of life. It was clear from the analysis that participants placed great importance on health enhancing behaviors. For example, the majority of participants recalled stress-reducing strategies they employed to simultaneously mitigate the "dangers of the river", their lives and their chronic conditions, and aid in their ability to swim the river or achieve health and well-being.

Participants described medical factors such as, being pain free, managing medication, health care checkups, and adhering to health professionals' advice. Although it is important to note that this may be influenced by their participation in the *Work It Out* program, these health enhancing strategies are further examples of how urban Indigenous Australians navigate contemporary health systems. Furthermore, participants emphasized how external factors such as their work life and physical location can negatively impact their health and well-being. It is clear that to be healthy and well means living a life of value whilst actively managing aspects of disease and illness. Participants placed no greater emphasis on one over the other, but seemed to have an innate drive to find a balance between the two so to "support the swimmer's capacity to negotiate the river of life".<sup>35 p8</sup>

This study indicates that urban Indigenous Australians engage with a range of health knowledges and messages from public health. The expressions of health were multi-faceted and reflect a blending, negotiation and contesting of knowledge from different contexts in which Indigenous Australians live, that is, their cultural interface.<sup>37</sup> For instance, compared to previous research conducted with rural and remote Indig-

enous Australians,<sup>10,23-25</sup> the urban participants placed less emphasis on “connection to country”, or articulated this differently. Nevertheless, they constructed contemporary expressions of the importance of being outdoors or engaging in ‘grounding’ activities such as gardening or fishing. Participants emphasized the importance of social connectedness and their social support networks as a major facilitator for their health and well-being. These findings are consistent with previous research<sup>31-34</sup> and reflect the collectivistic cultural values of Indigenous populations.

Considering the components of the International Classification of Functioning and Disability<sup>38,39</sup> in conjunction with the perspectives of the urban Indigenous Australians who participated in this research, health goes beyond body structures and functions to include environmental factors as well as activities and participation. Given these findings, it cannot be assumed that strategies targeted solely at the body functions and structures levels, such as medical interventions in isolation, will have an impact on the overall health of individuals and communities. Health programs should consider participation within a context which comprises both physical and non-physical factors and both individual and community wide aspects.<sup>9</sup> These findings offer insights regarding what individual and community wide aspects of health might be considered when delivering health programs with urban Indigenous Australians.

Indigenous Australians, like all Australians, live in intercultural worlds<sup>40,41</sup> and experience the world as more than simply Indigenous and non-Indigenous.<sup>42,43</sup> This supports the need to shift our understanding from either western or non-western discourse and classification, and recognize these “contested knowledge spaces”<sup>37,p8</sup> as avenues to explore and learn from. Indigenous and non-Indigenous health service providers might consider the insights regarding Indigenous Australians’ complex and multifaceted conceptualizations of health offered in this research to inform their practice when working with Indigenous clients, especially in urban settings.

Health promotion frameworks, which draw on health concepts that are incongruent with its targeted clientele, are most likely to be ineffective and costly. The findings from this study have

shown that urban Indigenous Australians have a unique view of health and well-being. It is crucial that policies regarding urban Indigenous Australians health and the programs delivered with this population are underpinned by their particular views regarding the meanings of health and the makings of health. These findings can contribute to developing an evidence base for understanding health and well-being from the perspectives of urban Indigenous Australians and thus shape policy and health programs.

Findings showed that the *Work It Out* program both supports client self-empowerment and reduces the “dangers in the river”. The results found that urban Indigenous Australians have the knowledge of what resources are available to them, with evidence from the findings suggesting that the *Work It Out* program has facilitated their ability to utilize such resources.

### Limitations

Several limitations of this study were identified. The magazines provided to each site may have biased participants’ views of health and well-being. However, to mitigate this, participants were invited to write on the collage, anything they believed depicted health and well-being if they were not finding the images they required. In addition, participants were notified a week prior to the focus groups so many brought their own images. Because pictures can represent different things to different people, exploring this not only challenged the researchers’ assumptions about health and well-being but also provided further insight into Indigenous Australians views of health and well-being.

A small number of participants were not Indigenous due to the inclusive nature of the *Work It Out* program. Thus the findings should be considered in light of the cultural diversity amongst participants including Aboriginal, Torres Strait Islander and non-Indigenous people. Given that data collection occurred through focus groups and that data was analyzed thematically, the findings represent common themes discussed by many participants and therefore are likely to reflect the perspectives of all or most participants who engaged in the focus groups. Member checking also ensured that all participants agreed with the findings and that the themes were representative of all participants, most of whom were Aboriginal



and/or Torres Strait Islander.

It is important to note that participants were from an ongoing chronic disease self-management program so the results may lack generalizability to the wider urban Indigenous Australian population who are not attending a chronic disease program. Future research should engage urban Indigenous Australians not participating in a self-management program.

## Conclusion

This qualitative study provides an in-depth exploration of an under-researched area. The study has provided insight into how urban Indigenous Australians participating in a chronic disease self-management program conceptualize health and well-being (meanings of health) and employ health-enabling strategies (makings of health). The study builds on past research and shows that despite being in the presence of illness, participants continue to employ strategies that make them feel healthy and well. These findings can, in part, be attributed to the effectiveness of a tailored health program that was developed and administered by local urban Indigenous Australians. Programs which attempt to improve the health of Indigenous Australians need to be based on a detailed understanding of what factors contribute to health from a holistic perspective, rather than focussing solely on the risk-factors of the deficits of ill-health. The value of such a tailored program is that it empowers and facilitates people to move along the continuum towards positive health. Urban Indigenous Australians have a blended view of health and well-being that is the result of ongoing contextual conditioning between Indigenous and non-Indigenous environments. It is essential that health programs targeting this population be designed specifically for this group to improve their reach and effectiveness. Aboriginal and Torres Strait Islander health services are well positioned to implement these programs due to their comprehensive and holistic approach to primary health care, which considers the individual's health within the context of place, family and community.

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## References

1. Gracey M, King M. Indigenous health part 1: determinants and disease patterns. *The Lancet*. 2009; 374(9683):65-75.
2. Strong K, Mathers C, Epping-Jordan J, Beaglehole R. Preventing chronic disease: a priority for global health. *Int J Epidemiol*. 2006; 35(2): 492-494.
3. Thomas P, Condon J, Anderson I, Li S, Halpin S, Cunningham J, et al. Long-term trends in Indigenous deaths from chronic diseases in the Northern Territory: a foot on the brake, a foot on the accelerator. *Med J Austr*. 2006; 185:145-149.
4. Vos T, Barker B, Begg, S, Stanley, L, Lopez, A. D. Burden of disease and injury in Aboriginal and Torres Strait Islander Peoples: the Indigenous health gap. *Int J Epidemiol*. 2009; 38(2), 470-477.
5. Bond C. J. A culture of ill health: public health or Aboriginality? *Med J Austr*. 2005; 183(1): 39.
6. Nelson A. L, Macdonald D, Abbott R. A. A risky business? Health and physical activity from the perspectives of urban Australian Indigenous young people. *Health, risk & society*, 2012;14(4):325-340.
7. Kingsley J, Townsend M, Henderson-Wilson C, Bolam, B.. Developing an exploratory framework linking Australian Aboriginal peoples' connection to country and concepts of well-being. *Int. J. Environ. Res. Publ. Health*. 2013;10(2):678-698.
8. Nettleton C, Stephens C, Bristow, F, Claro, S, Hart, T, McCausland C, Mijlof I. Utz Wachil: Findings from an international study of indigenous perspectives on health and environment. *EcoHealth*. 2007; 4(4):461-471.
9. Otim M.E, Asante A.D, Kelaher M, Doran C.M. Anderson I.P. What constitutes benefit from health care interventions for Indigenous Australians?. *Australian Aboriginal Studies*, 2015;(1):30.
10. Townsend M, Phillips R, Aldous D. "If the land is healthy... it makes the people healthy": The relationship between caring for Country and health for the Yorta Yorta Nation, Boonwurrung and Bangerang Tribes. *Health & place*, 2009;15(1):291-299.
11. Levesque A, Li H.Z, Bohémier M. Cultural variations in health conceptions: A qualitative approach. *Pimatisiwin*, 2013 ;11(2): 215-229.
12. National Aboriginal Strategy Working Party. 1989. A National Aboriginal Health Strategy. Canberra: Department of Aboriginal Affairs.
13. Engel G.L. The need for a new medical model:

- a challenge for biomedicine. *Holistic Medicine*, 1977; 4(1):37-53.
14. Alonso Y. The biopsychosocial model in medical research: the evolution of the health concept over the last two decades. *Patient education and counseling*, 2004; 53(2):239-244.
  15. Germov J. Imagining Health Problems as Social Issues. In *Second opinion an introduction to health sociology* / edited by John Germov. (Fifth ed.). South Melbourne, Vic.: Oxford University Press. 2014. pp12-18.
  16. World Health Organization. 1948 [cited 2016 Dec 6]. Constitution of the World Health Organization. Available from [http://www.who.int/governance/eb/who\\_constitution\\_en.pdf](http://www.who.int/governance/eb/who_constitution_en.pdf)
  17. World Health Organisation. 1978 [cited 2016 Oct 5]. Declaration of Alma Ata, International Conference on Primary Healthcare, Alma Ata, USSR. Available from [http://www.who.int/hpr/NPH/docs/declaration\\_almaata.pdf](http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf).
  18. Boddington P, Räisänen U. Theoretical and practical issues in the definition of health: Insights from Aboriginal Australia. *J Med Philos*. 2009;34(1): 49-67.
  19. Antonovsky A. The life cycle, mental health and the sense of coherence. *Israel Journal of Psychiatry and Related Sciences*. 1985.
  20. Antonovsky A. *Unraveling the mystery of health: How people manage stress and stay well*. Jossey-Bass. 1987.
  21. Antonovsky A. The salutogenic model as a theory to guide health promotion. *Health Promot. Int*. 1996; 11 (1):11-18.
  22. Quennerstedt M. Exploring the relation between physical activity and health—a salutogenic approach to physical education. *Sport, Education and Society*. 2008; 13(3): 267-283.
  23. Anderson H, Kowal E. Culture, history, and health in an Australian Aboriginal community: The case of Utopia. *Medical Anthropology*. 2012;31(5):438-457.
  24. Maher P. A review of 'traditional' Aboriginal health beliefs. *Australian journal of rural health*. 1999; 7(4):229-236.
  25. Shahid S, Bleam R, Bessarab D, Thompson S.C. "If you don't believe it, it won't help you": Use of bush medicine in treating cancer among Aboriginal people in Western Australia. *J Ethnobiol Ethnomed*. 2010;6(1):1.
  26. Butler-Kisber L, Poldma T. The power of visual approaches in qualitative inquiry: The use of collage making and concept mapping in experiential research. *Journal of Research Practice*. 2011; 6(2):18.
  27. Gerstenblatt P. Collage portraits as a method of analysis in qualitative research. *International Journal of Qualitative Methods*. 2013;12(1):294-309
  28. McKay D, Cunningham S. J, Thomson K. Exploring the user experience through collage. In *Proceedings of the 7th ACM SIGCHI New Zealand chapter's international conference on Computer-human interaction: design centered HCI*. 2006: 109-115.
  29. Besarab D, Ng'andu B. Yarning about yarning as a legitimate method in Indigenous Research. *International Journal of Critical Indigenous Studies*. 2010;3(1): 37-50.
  30. Patton M. *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, Calif.: Sage Publications;2002.
  31. Billan J.L. *Narratives of Aboriginal Grandmothers: Stories of Identity and Health* (Doctoral dissertation, Faculty of Graduate Studies and Research, University of Regina). 2015. Available from: <http://ourspace.uregina.ca/handle/10294/5840>
  32. Ganesharajah C. Indigenous health and well-being: the importance of country. *Native Title Research Unit, Australian Institute for Aboriginal and Torres Strait Islander Studies*;2009.
  33. Levesque A. *Conceptions of Health: A Cross-cultural Comparison* (Doctoral dissertation, University of Northern British Columbia). 2011. Available from: <http://www.collectionscanada.gc.ca/obj/thesescanada/vol2/002/NR87594.PDF>
  34. Panelli R, Tipa G. Placing well-being: A Maori case study of cultural and environmental specificity. *EcoHealth*. 2007;4(4):445-460.
  35. McCuaig L, Quennerstedt, M. Health by stealth—exploring the sociocultural dimensions of salutogenesis for sport, health and physical education research. *Sport, Education and Society*.2016;1-12.
  36. Marmot M. G, Stansfeld S, Patel C, North F, Head J, White I, .. Smith G. D. Health inequalities among British civil servants: the Whitehall II study. *The Lancet*. 1991;337(8754): 1387-1393.
  37. Nakata M. The cultural interface. *The Australian Journal of Indigenous Education*. 2007;36(S1):7-14.
  38. World Health Organisation. International

Classification of Functioning, Disability and Health (ICF);2001. Available from: <http://www.who.int/classifications/icfbrowser>

39. World Health Organisation. International Classification of Functioning, Disability and Health (ICF);2013. Available from: <http://www.who.int/classifications/drafticfpracticalmanual2.pdf?ua=1>
40. Hinkson M, Smith, B. Introduction: conceptual moves towards an intercultural analysis, *Oceania* 2005;75(3): 157-166.
41. Merlan F. *Caging the Rainbow: Places, Politics and Aborigines in a North Australian Town*. Honolulu: University of Hawai'i Press;1998.
42. Cowlishaw G. *Blackfellas, Whitefellas and the Hidden Injuries of Race*. UK: Wiley-Blackwell Publishing;2004.
43. Paradies Y. Beyond Black and White. Essentialism, hybridity and Indigeneity, *Journal of Sociology* 2006;42(4): 355-367.

