



Creating environments that support active living in rural Tasmania

Verity Cleland, PhD
NHMRC Postdoctoral Research Fellow



Acknowledgements

Funding

- National Health & Medical Research Council
- University of Tasmania

Co-investigators

- Dr Clarissa Hughes, UDRH, UTAS
- Prof Alison Venn, Menzies, UTAS
- Dr Lukar Thornton, CPAN, Deakin University
- Prof Kylie Ball, CPAN, Deakin



Overview – Rural Areas and Physical Activity Study

- Background
 - Why did we do this?

- Methods
 - What did we do?
 - What did we find?

- Recommendations & Conclusions
 - What does it all mean?



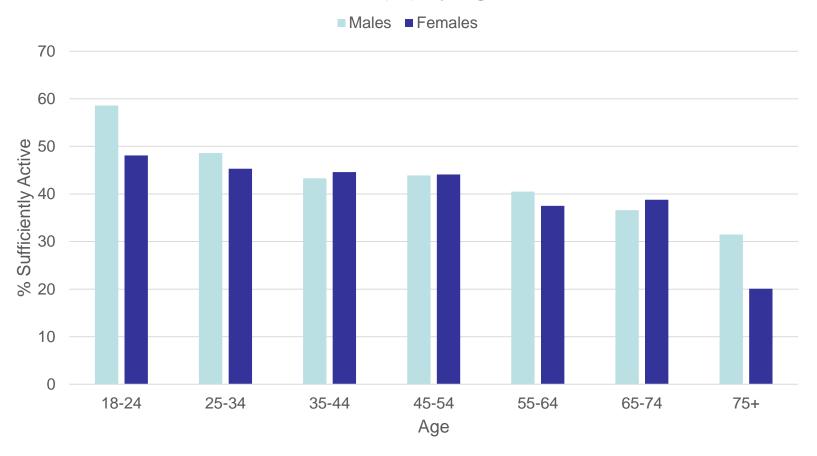
Why should we think about physical activity?

- Physical inactivity directly costs Australians \$1.5 billion/year
- Physical inactivity is the fourth leading contributing factor to death globally
- Physical activity reduces your risk of a range of common & chronic health conditions (CVD, stroke, T2D, hypertension, colon & breast cancers, hip fracture, depression)



Adults' PA in the 2011-12 National Health Survey

Sufficient PA (%) by Age & Sex



43% of adults were 'sufficiently active' (150 mins/week in 5 or more sessions)

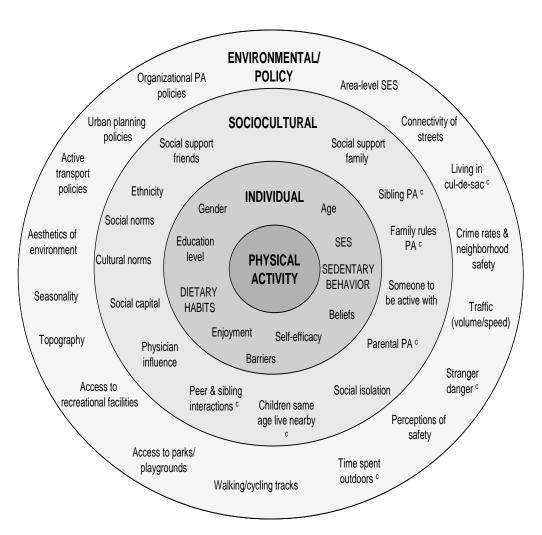


Why are we interested in rural health?

- Physical activity lower in rural areas
- Health generally poorer in rural areas
 - Lower life expectancies
 - Higher rates of heart disease, stroke, T2D, arthritis, high BP, overweight/obesity
- Among other things, lower levels of PA may explain poorer health outcomes



Why are rural adults less active?



- Individual, social & environmental influences
- Research traditionally focused on individual factors
- More recent interest in environments
- But focus largely limited to urban populations



Research & practice gaps

- Which elements of the environment are important for PA in rural settings?
- Do design or planning guidelines need tailoring for rural settings?





Purpose of this work

Overall project objective:

 To provide guidance for health professionals, planners, urban designers, community health workers, and community development workers in rural areas to create environments that promote and support physical activity (to make 'the healthy choice the easy choice')

Specific aims:

- To identify environmental factors that promote active living among rural adults
- To highlight opportunities to improve infrastructure and facilities that support active living in rural areas



What did we do?

- Identified three distinct rural areas of Tasmania (north, central, south)
- Recruited volunteers via convenience channels (newspaper, radio, flyers etc)
- In-depth qualitative interviews with 49 men & women living in these areas
- Interviews digitally recorded, transcribed verbatim & analysed thematically



Characteristics of study areas

	Area 1	Area 2	Area 3
Town/s	Ulverstone, Penguin	Bothwell, Hamilton, Ouse	Geeveston & surrounds
Region	Northern Tasmania	Central Tasmania	Southern Tasmania
Region type	Coastal	Central highlands/lakes	Forest/channel
Industry	Vegetable production	Mixed agriculture and tourism	Forestry/Apple- & fruit- growing
Remoteness Area	Outer Regional	Outer Regional	Remote
Population	10,323	991	1584
Area (sq km)	131.8	336.3	3578.3
Population/sq km	78.3	2.9	0.4
SEIFA IRSD	942.0	908.8	905.1
Distance from Hobart (km)	312.9	79.5	58.5
Number of Participants (male/female)	25 (10/15)	14 (4/10)	11 (2/9)



Characteristics of participants

	Women	Men
	(n=34)	(n=16)
Age, mean (min, max)	43 (26, 55)	48 (34, 59)
Born in Australia, n (%)	29 (85%)	13 (93%)
Education, n (%)		
Low (Year 10 or less)	3 (9%)	1 (6%)
Medium (Year 12/ trade/	13 (38%)	6 (38%)
appr./cert./dip.)		
High (University)	18 (53%)	9 (56%)
Employment Status, n (%)		
Full-time work	12 (35%)	15 (94%)
Part-time work	12 (35%)	0 (0%)
Unemployed	2 (6%)	0 (0%
Keeping house	6 (18%)	0 (0%)
Full-time study	2 (6%)	0 (0%)
Retired	0 (0%)	1 (6%)

	Women	Men
	(n=34)	(n=16)
Marital Status, n (%)		
Married/Living as married	30 (88%)	12 (80%)
Previously married	4 (12%)	2 (13%)
Never married	0 (0%)	1 (7%)
No children in h/hold, n	21 (62%)	9 (60%) ^b
(%) Age of children (yrs), (range)	0.6, 26	1.5, 22
Motor vehicle, n (%)	34 (100%)	15 (100%)
Injury/illness/disability	1 (3%)	1 (6%)
preventing activity, n(%)		
BMI ≥25kg/m² , n (%)	10 (33%)	11 (69%)



What did we find?

Three key themes emerged:

- 1. Functionality
- 2. Variety & Diversity
- 3. Accessibility



Theme 1: Functionality

- Mentioned by nearly all (n=47) participants
- Irrespective of sex or region
- Nearly all participants from northern region mentioned the cycling & walking network developed through the NW Coastal Pathway Plan
- Key aspects included connectivity with other destinations, flat terrain, distance, & safety





Theme 1: Functionality – Northern Region

'It's a great ride...you can pop your thermos in your bike basket and some morning tea and ride out there...tie your bike up and sit by beach. And then ride back. So we're really grateful to the very kind people that made that track for us, 'cause it's brilliant.' [Female, 50 years, North]

'I can walk all the way out to Turners Beach on the walking track....It gets a lot of use and I think the tracks that are being done more around certainly enhance people's ability to get out there because...if you've got children it's safe, if...there's traffic, it's easy to get to, it's flat and it's well maintained.' [Female, 48 years, North]





Theme 1: Functionality – Central & Southern Regions

'Tassie Trail is Devonport to Dover...and you can walk it, horseback ride or cycle...So a great initiative...' [Female, 43 years, Central]

"...we've got a Platypus Walk and there's good footpaths. Ah, there's a BBQ area in there and it's used fairly heavily...there's actually a good walking track...halfway through Franklin and at Geeveston...it's only about a kilometre through the bush along the waterfront. And it gets used fairly extensively. People park their cars and they walk along it, they walk back, you know. It's only a kilometre but people use it. And it's nice." [Male, 59]

years, South]



Theme 1: Functionality – Opportunities

 Interruptions to the continuity, lack of pathways and/or other infrastructure, & surfacing identified by half the participants

"...there's a couple of bits around between... Sulphur Creek and probably Wivenhoe they are a little bit scary because of like rivers or bridges going over the geographical features, the bridge themselves actually narrow the roads, so you are then forced back into the traffic...cycling to Don a couple of weeks, everything else was OK, the cycle path was good and I got to the bridge over the Forth River at Turner's Beach, then all of a sudden there is basically no um bit on the side of the road. You're on the road. And I nearly got cleaned up by a bus going across the bridge. And I thought that's not right. There should be a rider bit there.' [Male, 50 years, North]



Functionality – Opportunities in the Central Region

"...you can now walk down, across the river, and to the park. There's no seating anywhere in that. And there's no toilets... that's really limiting when our general population's quite elderly in Ouse, and so, that, whilst it's nice, it's only half way there. And then you get to the end of the path, and you've either got to cross over a main highway, it doesn't extend up to a, to a more open, safer area to cross...it's not connected.' [Female, 50 years, Central]

'It is about crossing roads...there is one place where you cross at the roundabout, there's not even any footpaths there. There's cars coming in all different directions and somehow you've got to get across. And it's interesting because the footpath just stops right bang where the roundabout is, where most of the traffic is.' [Male, 56 years, Central]





Functionality – Opportunities for Women



Street lighting a concern for many women:

'Street lighting is an issue. Just about every street that I've walked down in the evening, the lighting is almost always on the other side of the street to the footpath.' [Female, 41 years, North]

'...lighting, like especially now, you're walking in the dark sort of thing. Not that you want huge streetlights, but now with solar stuff surely they could have some proper lighting, you know, a bit better lighting than there is with councils.' [Female, 55 years, North]



Theme 2: Variety & Diversity

- For many, the variety and diversity of opportunities for PA was limited
- BUT one positive aspect commonly noted was the diversity of PA options available in the natural environment
- Noted by men & women in the north, but particularly women in the central and southern regions





Theme 2: Variety & Diversity – Natural Environment

'Just across the river from us there's the big Dial mountain range. There's walking tracks all through there. There's also um mountain bike tracks. People can go on tracks to find fishing spots, um lots of horse riding.' [Male, 56 years North]

'... and where I live in Ulverstone is only 250 metres from the river. So I kayak, so I can just drag it down there and hop on, and off I go, and go and explore...And the beach, you can walk a couple of kilometres on a stretch of beach here, and so ... I take the dogs on a long walk on the beach at least once a week, sometimes twice.' [Female, 51 years, North]







Theme 2: Variety & Diversity – Opportunities

 Most participants listed at least one place to be active, but many suggested additional sporting/recreational infrastructure requirements:

'If we had a tennis court we might be able to hire that...' [Female, 46 years, South]

'...If there was a netball court down the road that did it, two minutes down the road then I would probably play netball one night a week and if there was a tennis club or just people doing social tennis on a Monday night I would block that out in my diary and childcare wouldn't be an issue. I'd be home and it would be two minutes and I'd be back home again.' [Female, 42 years, Central]





Theme 2: Variety & Diversity – Opportunities

- Others made suggestions for structured/organised activities:
 - '...maybe if there was a walking group of like-minded souls perhaps that I thought I could engage with that was at an appropriate time of the day or something...' [Female, 51 years, Central]
 - '... I mean Zumba's really popular these days, if someone did a class every Wednesday night at Ouse at the hall then I would go. But we don't have that at all. And I think a lot of other people would too.' [Female, 43 years, Central]
 - '...if they had badminton or if they had Tai Chi or if they had aerobics or something and it was... I think that would really make it easier for me to access and more likely...So in an ideal world if you have a good sized hall or something and somebody that's taken the initiative or funded to provide you know a couple of different whatever. Then they would all create a meeting place, especially for women. So I think that would have the dual effect of increasing physical activity but also connections amongst people.' [Female, 35 years, North]



Theme 3: Accessibility

- Importance of shared-use areas (particularly for families & dogowners)
- Important for men & women in all regions

'It's got a nice big park behind it so you do see families with picnics and sporting, so that's always nice to see and people walking their dogs...'
[Female, 52 years, South]

'...if that policy wasn't in place and they said no, there is no dog walking on beaches, I think you would certainly cut back a lot of the, the people that do access a lot of the walking facilities because it's a dog friendly town... I think that's the important one to ah, give them a pat on the back for...it does encourage people to use those facilities.' [Male, 52 years, North]



Theme 3: Accessibility – Opportunities

 Equity concerns related to restricted accessibility for people who are mobility-impaired or have young children in prams/strollers

'I know when my daughter was a big younger, it's a bit tricky; it's a bit hard pushing a pram around. There are spots in town that have footpaths but then there's spots along the way where there's like a flight of ten steps to clunk your pram down or there's a section with no footpath across a bridge or something like that. So there are obstacles, reasonably frequent obstacles along the way...' [Female, 36 years, South]





Theme 3: Accessibility – Opportunities

- Swimming pools mentioned frequently, particularly by men in the northern region
 - Availability not an issue, but largely inaccessible due to limited hours, closures during winter, & lack of heating

'It's only open during summer understandably because it's outdoors and not heated particularly well ...' [Female, 28 years, Central]

'...the thing that would make an enormous difference to me...is if it's possible to swim in the morning. There's a swimming pool locally, and that's the case in most towns, but it really doesn't suit me to be doing it during the day or of an evening. But from sort of 5.30 in the morning until 6.30 I've got an hour that I could go and swim...that would be a wonderful opportunity if that were made available ...' [Male, 55 years, Central]





How do the findings relate to the existing urban literature?

- Some common aspects identified in urban literature
 - Functionality of walk & cycle ways
 - Street lighting
- But some uniquely local & rural elements:
 - Easy & convenient access to natural environment
 - Lack of variety & diversity
 - Accessibility of swimming facilities
- Findings support 2 of 7 planning considerations in the Heart Foundation's Healthy by Design guidelines:
 - Walking & cycling routes
 - Supporting infrastructure



Recommendations



Theme 1: Ensure functionality of infrastructure to support PA

- ☑ Design cycle ways & walking tracks that meet the needs of all users by ensuring they are continuous, connected, accessible and well-maintained
- ☑ Consider retrofitting infrastructure such as cycle ways and footpaths when replacing or upgrading roadways and bridges
- ☑ Position street lighting near footpaths and explore the use of solar power to illuminate cycle ways and walking tracks



Theme 2: Value and promote variety and diversity

- ☑ Promote activities that take advantage of the many natural environmental features that exist in rural areas of Tasmania
- ☑ Promote and resource structured and organised activities (such as walking groups or dance classes) through the use of existing programs and facilities
- ☑ Explore strategies to increase and maximise usage of existing sporting and recreational facilities



Theme 3: Ensure accessibility for all users

- ☑ Ensure shared-use and the promotion of family- and dogfriendly aspects when creating new or modifying existing spaces and places for active recreation
- ☑ Ensure equitable access to cycle ways, walking tracks and footpaths for those with limited mobility

Work with local providers to improve access to local swimming facilities



Conclusion

- This work:
 - has addressed some of the gaps in research & practice knowledge
 - provides insights to inform planning & design of local communities to support active living
 - has enabled the development of recommendations for planners & designers working to create healthy spaces & places in rural Tasmania
- Adoption of these recommendations may help support rural Tasmanians to increase their PA levels, with direct benefits to individuals, communities, & health care systems



Thanks for listening!

