

ORIGINAL RESEARCH

Rural and remote young people's health career decision making within a health workforce development program: a qualitative exploration

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ABSTRACT

Introduction: One strategy aimed at resolving ongoing health workforce shortages in rural and remote settings has been to implement workforce development initiatives involving the early activation and development of health career aspirations and intentions among young people in these settings. This strategy aligns with the considerable evidence showing that rural background is a strong predictor of rural practice intentions and preferences. The Broken Hill Regional Health Career Academy Program (BHRHCAP) is an initiative aimed at addressing local health workforce challenges by helping young people in the region develop and further their health career aspirations and goals. This article reports the factors impacting on rural and remote youths' health career decision-making within the context of a health workforce development program.

Methods: Data were collected using interviews and focus groups with a range of stakeholders involved in the BHRHCAP including local secondary school students, secondary school teachers, career advisors, school principals, parents, and pre-graduate health students undertaking a clinical placement in Broken Hill, and local clinicians. Data interpretation was informed by the theoretical constructs articulated within socio cognitive career theory.

Results: Young people's career decision-making in the context of a local health workforce development program was influenced by a range of personal, contextual and experiential factors. These included personal factors related to young people's career goals and motivations and their confidence to engage in career decision-making, contextual factors related to BHRHCAP program design and structure as well as the visibility and accessibility of health career pathways in a rural setting, and experiential factors related to the interaction and engagement between young people and role models or influential others in the health and education sectors.



Conclusions: This study provided theoretical insight into the broader range of interrelating and complex personal, contextual and experiential factors impacting on rural and remote youths' career decision-making within a health workforce development initiative.

Key words: Australia, health career, qualitative research, rural and remote youth, rural health workforce.

Introduction

It is widely acknowledged that rural and remote communities experience significant challenges in recruiting and retaining health professionals, continuing workforce shortages, and a lack of longevity in health workforce retention^{1,2}. It is becoming increasingly evident that part of the solution may rest with the activation and development of health career aspirations and intentions among young people in rural and remote settings. This strategy aligns with the empirical evidence, which has established that rural origin is a positive predictor of rural practice intentions, with health students from rural and remote backgrounds being more likely to return to their communities of origin or similar settings to practice after graduation³⁻⁸. It also attempts to address some of the cultural and structural barriers faced by young people in rural and remote settings in developing and pursuing career aspirations, including geographical isolation, financial cost, lack of information and lack of visibility of career pathways^{9,10}. This bodes well for rural and remote communities experiencing complex and persistent health workforce challenges.

Reported in the literature is a range of health workforce development initiatives targeting youth in regional, rural and remote settings. Australian examples include three health career development programs in Queensland¹¹⁻¹³ and one in South Australia¹⁴. International examples include a medicine-focused transition program for secondary school leavers in Ireland¹⁵ and an outreach program in Canada¹⁶. Although these programs have varied in format, duration, frequency and in the nature of learning activities utilised, all have been associated with positive outcomes for participants such as enhanced health literacy, increased awareness of health career

choices and intentions to undertake higher and adult education^{11,14-16}. Longitudinal programs in particular were shown to enhance participants' self-esteem and confidence¹³ and were associated with positive long-term impact¹². Although this literature has demonstrated that health career development programs are effective, what has been lacking is a more nuanced and theoretically informed understanding of the complex and interrelating elements that impact on young people's career decision-making in rural and remote communities. The authors aim to theoretically illustrate the factors shaping rural and remote youths' career decision-making in the context of a health workforce development program.

Methods

Context and program

Broken Hill is a mining city in the far west of outback New South Wales with a population of approximately 20 000 people. It is a 13-hour trip by train from the major cities of Sydney and 8.5 hours from Adelaide. Although formally classified as an outer regional centre according to the Australian Standard Geographical Classification (ASGC) Remoteness Areas index¹⁷, Broken Hill is considered to be 'remote' due to its geographical location and distance from other centres. The region is identified as a socioeconomically disadvantaged community according to the Socio-Economic Indexes for Areas (SEIFA) score (SEIFA score 930: 'most disadvantaged' category)¹⁸, with a high burden of chronic disease, and increased prevalence of behavioural risk factors such as smoking in pregnancy, obesity and physical inactivity. These issues are amplified across Indigenous communities in the region. As with other remote centres, the Broken Hill



health workforce is made up of a large fly-in, fly-out workforce, and higher and vocational education and training opportunities available for young people in the region are limited.

The Broken Hill Regional Health Career Academy Program (BHRHCAP) was developed in response to concerns about the barriers faced by local young people in developing and furthering their career aspirations and goals, as well as health workforce challenges faced by the community. It is a partnership between the Broken Hill University Department of Rural Health (BHUDRH) and stakeholders from the local school education system, health service, the city council, various other health and social care providers, and the community. In 2013, a total of 1748 students were enrolled in the region, of whom 170 completed senior secondary school. The BHRHCAP engages secondary school students in years 7–12 in various health career activities, with the healthcare system and professionals within it¹⁹. Each 1-day academy involves experiential small group activities related to health promotion and health literacy, information sharing about health careers, education pathways and options, and visits to various hospital and community-based healthcare sites including Aboriginal health services, the Royal Flying Doctor Service, private practice and aged care. The BHRHCAP was piloted in 2007 and at the time of writing is a firmly established part of the suite of programs offered by the BHUDRH. Multiple academies spanning different health disciplines are offered annually within Broken Hill and outlying communities, providing participants an opportunity to longitudinally sample across a range of health career pathways and professions. Program facilitators include staff from the BHUDRH, local health service staff and university health students on placement in the region.

Data collection and analysis

Thirty-three participants were purposively sampled. Sampling involved recruiting key informants who could help illuminate the phenomenon under study²⁰, in this case, the various factors impacting on youth career decision-making within a health workforce development program. Participants

included current and past secondary school students who had participated in the BHRHCAP, school principals, teachers, career advisors, parents, university health students involved in BHRHCAP facilitation and clinicians from the local health service. Prior to data collection, written consent was obtained from all participants, including parental consent for anyone less than 16 years of age. To preserve the anonymity and privacy of participants drawn from a small rural community, the authors have chosen not to provide detailed participant demographic data in this article.

Data was collected during 12 semi-structured interviews and six focus groups. The first author, who was not involved in the design, delivery, administration or organisation of the BHRHCAP, conducted these. Interview and focus group questions were open ended and designed to draw out issues of significance for participants. All interview and focus group data was transcribed and de-identified prior to analysis by removing participants' names and any other identifying information. Data interpretation utilised the stages articulated in framework analysis²¹. The researchers first familiarised themselves with the data by reading a proportion of transcripts, and then conducted an independent analysis of selected transcripts to identify significant, interesting, contradictory and illuminating elements or codes. Next, all authors discussed and negotiated their interpretations and understandings of the data through a series of meetings and emails. This helped in identifying how codes could be redefined or relabelled, and organised and clustered into main and subthemes. The next step involved a theoretical analysis guided by the constructs articulated within socio cognitive career theory (SCCT)²² resulting in the development of a comprehensive coding framework, which was applied to all the data by the first author.

SCCT outlines how the interrelationships between personal, contextual and experiential factors can shape career decision-making and influence career interests and choice²². Personal factors encompass an individual's career goals, motivations, self-efficacy beliefs and outcome expectations; contextual factors refer to environmental elements; while experiential factors encompass the social interactions and relationships



that can shape career decision-making. This theoretical framework recognises that a number of contextual supports and barriers²³ can function to enable or constrain career decision-making. SCCT has been used as a theoretical lens to illustrate factors influencing career decision-making in a range of settings²⁴⁻²⁷.

Ethics approval

Ethics approval for this study (reference number 14916) was obtained through the University of Sydney Human Research Ethics Committee.

Results

Findings show that personal, contextual and experiential factors impact on rural and remote young people's health career decision-making. Personal factors encompassed young people's personal goals, aspirations and confidence to engage in career decision-making; contextual factors related to the BHRHCAP program structure as well as the geographical, social, cultural and economic landscape in which young people are located and make their career decisions; and experiential factors were related to having access to role models or influential others.

Participants' quotes in this article are labelled according to whether they are sourced from an interview (INT01 to INT012) or a focus group (FG01 to FG06), and whether they represented the views of current or past participants of the BHRHCAP, teachers, principals, health service staff, or university students.

Personal factors

Past and current participants of the BHRHCAP reported it had reinforced their existing interests in and aspirations towards a health career.

Well, I just always had a strong interest in health, the career and stuff. So I've always just wanted to pursue it by going to all the academies. (FG04, current student)

Other participants echoed that the BHRHCAP was most valuable for 'the dedicated students who have that vision to be in health in some way that will come get the forms [to apply]' (INT03, principal). This illustrated that health career development programs like the BHRHCAP, which are optional and based on self-selection, benefited individuals with existing interests in a health career and who were motivated and self-directed in pursuing this pathway.

Participants also noted that explicit articulation between the BHRHCAP and local community's health concerns and priorities could further increase the relevance of the experience for young people and make it more meaningful.

These things happen in your community, this is a need in this community. I think if people had that knowledge where this is important for the community, they'll want to stick around or go and study. (FG04,; past student)

Early and sustained engagement in the program was identified as necessary for strengthening young people's self-efficacy beliefs and their career decision-making confidence and capacity.

If they're not engaging in, whether it's the Health Academies or other things from Year 7, they're not going to have the confidence to do it the following year or the following year, and so they missed out on that whole option for that pathway. (INT04, teacher)

Several young people who had participated in the BHRHCAP reported they were currently pursuing tertiary studies in health, thus illustrating that the higher education and career options presented within the BHRHCAP were seen as relevant and attainable by rural and remote youth.

So I'm going to TAFE [technical and further education] as a primary healthcare worker, then we can also start learning to be a nurse or dentist. (FG05, past student)

Contextual factors

Participants were overwhelmingly enthusiastic about the BHRHCAP's hands-on approach to learning. Current and



past secondary school students confirmed this experiential approach helped with learning new knowledge and making connections between theory and their lived experience, thus evidencing their increased health literacy.

Like the things with the diabetes, you do feel like you actually start cutting down on the stuff they told you is bad. (FG02, current student)

The longitudinal nature of the BHRHCAP was regarded as facilitating continuity in terms of helping young people develop a progressively specialised plan aimed at addressing specific career goals and aspirations. Some participants perceived that early and longitudinal engagement was necessary to help break down particular social and cultural barriers^{9,10}, which may negatively impact on career decision-making. For example, stakeholders from the school education system reported that 'it's about breaking down those barriers. It's about saying right you have got a future. You're not stupid. You can do this' (FG03, teacher).

The geographical location of Broken Hill and the social, cultural and economic landscape in which young people were located meant that higher education options and pathways were mostly invisible and inaccessible. Site visits to places like the local hospital, Aboriginal health services, Royal Flying Doctor Service, aged care homes and the local pharmacy were well regarded, and functioned to increase the visibility of career pathways, showcase the diversity of healthcare environments and the range of health careers, and help students develop a more holistic view of these working environments. Some participants noted that providing exposure to career opportunities and ancillary roles that were not tertiary-based or vocationally oriented would serve to further widen participation and access.

One of my concerns is ... you actually have to have a minimum education level to go into these [jobs]. I think if there was an opportunity to open it up to a wider range of healthcare that wasn't so tertiary based, that would actually be a really good thing for a lot of our kids. More community based things. (FG03, principal)

Participants noted that having to leave the town, family, local community and other support structures and networks in order to access higher education meant there were significant social costs for the young person, their family and community. As one young person noted:

In a town like this, what you do when you finish school is you either move out of town and go to university or you stay in town and do a trade or a job in town. (FG04, past student)

Stakeholders from the health sector identified that a visible career pipeline was needed to reinforce young people's health career aspirations and their intentions to return to their home community after university study. The authors have previously shown that the lack of a health career pipeline manifesting in the form of a lack of postgraduate medical training opportunities in Broken Hill negatively impacted on medical students' future rural practice intentions¹⁸. A visible career pipeline can be understood as a contextual enabler with the potential to positively influence young people's career decision-making.

They can see that there's a career path in town for them, should they want to come back home once they've gone off to study. (INT08, health service staff)

Experiential factors

Past and current participants of the BHRHCAP reported that their initial interests in a health career had been sparked by having an immediate or close family member already in a health career or through their own or a family member's significant experience with the healthcare system. These interests were reinforced by exposure to and interaction with a range of authentic role models. In particular, local young people regarded university health students who were on clinical placement in the region and who participated as BHRHCAP facilitators as important and authentic sources of information and advice regarding the lived experience of higher education, university life and entering a health career. Participants identified that sustaining these formative relationships and maintaining continuity in interactions between local youth and these role models was important and achievable through the development of a mentoring scheme.



The people who were still studying it ... could tell you a bit about what it's still like to be studying 'cause they do part time work at the pharmacy. So they know a bit of both. (FG02, current student)

Local clinicians who had left the region for study and had come back to practise also self-identified as role models who could demonstrate that a health career was accessible and achievable for rural and remote youth, and challenge cultural stereotypes about the educational potential of rural students and notions of rural disadvantage. Secondary school teachers also confirmed the importance of having access to 'people from here that have actually gone through it themselves as well' (FG03, teacher). In addition, through their roles in a range of healthcare environments, these local clinicians served to increase the visibility of health career pathways and the career pipeline discussed earlier.

I think it's important that at least some of the people talking are actually from here, because it's about being a role model for the kids as well. And obviously, I did my schooling here, like they can say, 'Oh, that's that person who went to our school,' and yeah, so I like the idea of that whole, 'I'm just an ordinary person like them.' (INT08, health service staff)

Some participants noted a broader social shift in the community's enthusiasm and passion for learning and education, reflecting growing community capacity to further enable and support young people's career decision-making.

I think it lifts expectations, and I'm not saying getting better marks, just that passion for learning and passion for wanting to be involved and seeing – there was a real buzz, and I just think that sort of infectious thing, getting into the kids and people in town – that's the sort of benefits that I can see. (INT06, principal)

Discussion

This study identifies the complex and interrelated personal, contextual and experiential factors that shape rural and

remote young people's career decision-making within the context of a local health career development initiative. By using SCCT as a theoretical framework, this study illustrated how programs like the BHRHCAP can reinforce and extend young people's existing career goals, motivations and interests, and how early and sustained engagement can help to develop their confidence and capacity to engage in career decision-making. From this perspective, early engagement and continuity can be understood as two important characteristics of health career development initiatives.

This study's findings also showed that using an experiential approach to learning helped young people to make links between theory and their own lived experience, which could be further reinforced by links to community health needs and priorities. By making visible a range of realistic and achievable health career options and higher education pathways, the BHRHCAP provided a foundation for young people to consider the gamut of health careers and helped inform future career intentions. The complex physical and social barriers faced by rural and remote youth in pursuing or achieving their higher education and career goals are in line with previous research^{9,10}. The present study illustrated that geographic isolation and the various social costs can function as contextual barriers²³ to rural and remote young people realising their higher education and career aspirations. Having a visible health career pipeline was identified as a vital contextual support or enabler in attracting rural and remote youth back to their communities of origin.

A key finding of this study was the importance of the interaction and active engagement between young people and authentic role models in the health and higher education sectors, including university students and local clinicians. These role models are critical for providing insight to the lived experience of higher education and undertaking a health career, reinforcing that a health career is an accessible and achievable goal and challenging stereotypes associated with rurality. The shift in community and cultural perceptions regarding higher education can be considered an important enabler positively influencing young people's career decision-making in rural and remote settings.



A particular strength of this study is the triangulation of data across data collection methods (ie interviews and focus groups) and key informants (ie past and current participants of the BHRHCAP, stakeholders from the school education system, the health service and the university sector). In interpreting these findings, it is worth noting that this study represents the views of stakeholders in one particular community and involved in one health career development program. These are not intended to be reflective of the other diverse communities and collaborations. To illustrate the links between career intentions and actual uptake, longitudinal tracking is required of BHRHCAP participants' actual career choices and location of practice.

Implications

There are a number of implications arising from this study. To counteract the consistent self-selection of a particular cohort of young people into career development programs such as the BHRHCAP, additional strategies, support or resources may be required to engage students with less well articulated and undifferentiated career interests, or those facing complex social or economic barriers in relation to engagement and educational attainment. Furthermore, increasing the breadth of exposure to a range of careers allied to health (such as healthcare assistants, healthcare administrators) would serve to engage the subset of rural and remote youth who may not be vocationally oriented and further widen participation. Given that early and sustained engagement (ie continuity) was identified as important in developing young people's confidence to engage in career decision-making, a longitudinal approach incorporating options for developing an individualised career plan, or opportunities for continued interaction between local youth and influential others, may benefit a subset of rural and remote youth with strongly articulated interests and motivations. Explicit alignment between the BHRHCAP and community healthcare needs and priorities may also more meaningfully engage youth and allow them to realise the relevance and potential significance of their decisions to choose a career in health. The complex geographical and social barriers faced by rural and remote youth in pursuing or

achieving their higher education and career goals point to the contextual supports or enablers that are required to engage youth and sustain their involvement in health career development programs.

Conclusions

The value of health career development initiatives aimed at young people from a rural and remote background cannot be underestimated in providing a solution for persistent workforce challenges experienced in these settings. This study provided theoretical insight into the broader range of interrelating and complex personal, contextual and experiential factors impacting on rural and remote youths' career decision-making within a health workforce development initiative.

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