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Health literacy of undergraduate health profession students in Australia: A comparison of the island state of Tasmania and other Australian universities

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ABSTRACT

The aim was to explore the health literacy of undergraduate health profession students enrolled at the only university based on the Island of Tasmania and compare this with students enrolled at other universities on the main island of Australia. The data was collected as a part of a larger international survey of tertiary health profession students. Capture of baseline evidence about levels of health literacy was to provide direction for how and when to incorporate core and specialised health literacy content into the health profession curriculum to promote work-readiness.

This study was a cross-sectional descriptive online survey using a previously validated tool known as the Health Literacy Questionnaire. Variables influence health literacy status of students across Australia, including age, course enrolled in, and language spoken at home. In addition, health status, socio-economic status, and level of parental education influenced health literacy amongst students in Tasmania. These findings were relatively consistent with previous findings of other studies in Australia and other countries reporting health literacy status of health profession students.

There is a need to integrate health literacy early in the curriculum of all health courses offered at the University of Tasmania. Medical students consistently demonstrated higher levels of health literacy compared with other health profession students. However, all health students reported health literacy deficiencies. Curriculum design needs to consider the nature of the student cohort with essential foundation modules embedded into the first year of health courses. Specialised modules addressing discipline-specific information also need to be integrated throughout each health profession curriculum.

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Introduction

Health literacy is a global issue [1–4] and, although there is no agreed definition, it is recognised that health literacy is the nexus between health, healthcare and literacy. The relationship between poor literacy skills and health status in clinical environments is recognised as a risk, as low levels of health literacy potentially reduce positive health outcomes [5, 6]. Poor health literacy contributes inequity of access to health services and increased rates of chronic diseases, resulting in higher health costs and lower health outcomes [1, 3]. Additionally, the mismatch of reading skills of intended users and readability of health resources further exacerbates the inability of healthcare recipients to manage or make healthy informed decisions about their own health [2]. In Australia, healthcare consumers and providers face challenges due to the complexity of utilising the healthcare system, leading to unsafe and poor quality care [1, 6]. Sixty percent of Australian adults have low levels of health literacy [6, 7] and Tasmania has the lowest rate (37%) of adequate health literacy compared to the other states in Australia [7].

The level of health literacy of individuals who enrol in tertiary health profession courses is largely unknown [8]. The health literacy of health profession students is of interest because improving health literacy of the general population is integral to being an efficient health professional [8]. Communication with consumers of health, providing health information to healthcare recipients, and delivering quality care are fundamental to students becoming work-ready health professionals by the time of graduation [3, 9–11]. The development of the Health Literacy Questionnaire (HLQ), has been shown to have excellent psychometric properties with high reliability and acceptability and has been used to explore health literacy across a range of populations world-wide [12–14]. The HLQ is designed to cover the extent of an individual's strengths and limitations of health literacy [9, 10, 15], with recent research demonstrating levels are varied [3, 9–11, 16, 17]. Zhang and colleagues [9, 16] and Mullan and co-workers [10] reported that health literacy levels of health profession students is inadequate and requires targeted interventions to ensure they are work-ready at graduation. Development of high levels of health literacy during their undergraduate courses will more readily prepare health profession graduates to be confident and capable of providing high quality care to their patients and consumers of healthcare.

This study was part of an international collaboration to explore the health literacy of tertiary education students [8]. Tasmania is an island south of the main island of Australia. The geographical isolation, rurality and highly dispersed population has contributed to lower socio-economic status (SES) and levels of health and well-being compared to its main island counterparts [18]. Additionally, educational attainment is also lower, with 50.4% of Tasmanians achieving non-school qualifications (including certificates, diplomas and degrees), which is up to 15% lower than residents in other states of Australia [19]. The focus of this paper is to compare the level of health literacy of undergraduate health profession students at a Tasmanian university with the other Australian universities dataset. Comparison will determine the health literacy status of health profession students at this island university. Findings can guide curriculum design of foundation and specialised health literacy modules [11, 20, 21]. This will enable timely delivery of health literacy content to meet competency requirements and preparation of Tasmanian students for work-readiness at graduation.

Materials and methods

This study was conducted at the University of Tasmania, under the auspices of the larger international study, "Exploring Health Literacy in Tertiary Students: An International Study" conducted by the University of Auckland [8]. Recruitment was undertaken within the College of Health and Medicine. Study participants were first year undergraduate students within the disciplines of dementia care, medicine/surgery, health science, nursing, pharmacy, paramedicine and behavioural science.

Data collection

The development and analysis of the HLQ have been previously described and extensively validated in Australia [15] and reported internationally [3, 9–11, 13, 14, 16, 22]. The HLQ consists of 44 items that collate concepts of health literacy across nine scales:

1. Feeling understood and supported by healthcare providers.
2. Having sufficient information to manage my health.
3. Actively managing my health.
4. Social support for health.
5. Appraisal of health information.
6. Ability to actively engage with healthcare providers.
7. Navigating the healthcare system.
8. Ability to find good information.
9. Understand health information enough to know what to do.

The survey also includes a series of demographic questions including age, gender, SES, country of birth, residential location, presence of health issues and parental education.

The online questionnaire was administered using SoGoSurvey to first year undergraduate health profession students enrolled within the College of Health and Medicine in 2015. An invitation to participate in the study and the online survey link was disseminated via email by senior academics within each discipline to their students early in Semester 1. Two additional reminder emails were sent at fortnightly intervals. Study participation was voluntary, and all responses were anonymous. The HLQ was administered in English as this is the language of instruction at the University of Tasmania. Prior to commencement of the study, ethics approval was obtained

from the Tasmanian Social Sciences Human Research Ethics Committee (H0014607).

Data collection

For the purposes of data analysis, HLQ items were scored as a graded response. Items in Scales 1–5 had four possible responses: strongly agree, agree, disagree and strongly disagree. Items in Scales 6–9 had five possible responses: cannot do, very difficult, quite difficult, easy and very easy. Following the procedure described by Beauchamp and colleagues [22], Scale scores were created by summing the item scores and dividing by the number of items in the scale. Students were classified into groups according to their self-reported demographics and course of study. Descriptive statistics were based on frequency distributions and means, and standard deviations for categorical and continuous data. Univariate analysis included χ^2 and Fisher exact tests for categorical comparisons, and independent *t*-tests and one way ANOVAs for continuous outcomes. Data were analysed using IBM SPSS version 24.0 [23]. *p*-Values <0.05 were considered statistically significant. A comparison with the other Australian universities HLQ dataset was undertaken to elicit any differences of health profession students enrolled at this University from the other Australian universities.

Results

A total of 2510 invitations were sent to Tasmanian students enrolled in all health profession courses. There were 886 surveys completed, of which 230 surveys were incomplete and subsequently excluded from analysis. The total pooled sample was 656 responses, providing a response rate of 38.2%.

For comparison purposes the authors requested, from the International project host, the other Australian universities dataset comprised of 1574 undergraduate responses from a total of 2749 Australian health profession student responses. Provision of aggregate data from the hosting organisation meant the total number of invitations sent to health profession students within the participating universities is unknown. Therefore, a comparison response rate is unable to be determined, for the other Australian universities HLQ dataset.

Independent demographic variables influenced HLQ scales with SES significantly affecting all nine HLQ scales and stated health issue significantly affecting 6 HLQ scales in Tasmanian students (as shown in Table 1). In contrast, gender only significantly influenced HLQ (Scale 9).

Table 1 – Differences in scales and Tasmanian undergraduate health profession students

Scale	Gender	Age	Residence	Stated health issue	Speak English at home	Born in Australia	SES	Parents' education level	Course
1			X	X	X	X	X		
2				X	X		X		
3					X		X	X	X
4		X	X	X		X	X	X	X
5		X					X		
6				X			X		
7		X		X	X	X	X	X	X
8				X	X		X		
9	X						X		

X, significantly different in both scales.

Respondents with average or lower than average SES had lower levels of health literacy across all HLQ scales (Scales 1–7 $p < 0.001$; Scale 8: $p = 0.001$, Scale 9: $p = 0.018$) than those who reported higher SES. Similarly, respondents who reported a stated health issue felt unsupported by healthcare providers ($p < 0.001$), were not confident to make their own healthcare decisions ($p = 0.01$), were unable to advocate on their own behalf ($p = 0.027$), were less empowered to be proactive about their health ($p < 0.001$) and could not access information independently ($p = 0.038$).

Higher education level of parents (i.e. tertiary qualifications), enabled respondents to take moew responsibility for their own health, engage in their own care and make decisions about their healthcare compared to respondents with parents who attained an education lower than secondary level ($p = 0.024$). These students felt alone and unsupported ($p < 0.001$) and were unable to advocate on their own behalf or find someone who could help them to address their healthcare needs ($p = 0.001$).

Demographic questions relating to SES, level of parental education and stated health issue of an individual were only investigated in Tasmanian students and so no comparison could be made to other Australian universities about these independent variables. In Tasmania, a stated health issue which existed in 36% of the respondents, affected a number of scales significantly (as shown in Table 2).

Table 2 – Association between HLQ scores and stated health issue: Tasmanian health profession students

Scale	Stated health issue		
	No *n* = 488 *Mean (SD)*	Yes *n* = 291 *Mean (SD*	*p*
1	3.01 (0.55)	3.17 (0.49)	<0.001
2	3.08 (0.44)	2.99 (0.45)	0.010
3	3.00 (0.46)	2.99 (0.40)	0.779
4	3.10 (0.48)	2.95 (0.57)	<0.001
5	2.96 (0.47)	2.98 (0.43)	0.594
6	3.90 (0.58)	3.73 (0.71)	<0.001
7	3.13 (0.40)	3.07 (0.39)	0.027
8	3.99 (0.51)	3.90 (0.55)	0.038
9	4.15 (0.48)	4.12 (0.56)	0.428

Table 3 – Differences in demographics of Tasmanian and other Australian universities' undergraduate student HLQ data

Scale	Gender	Age	Speak English at home	Born in Australia	Course
1			X	X	
2			X		
3			X		X
4		X		X	X
5		X			
6					
7		X	X	X	X
8			X		
9					

X, significantly different in both scales.

Table 3 shows there were no significant differences in HLQ scales between Tasmanian and other Australian university students with respect to gender. However age, whether or not English was spoken at home, country of birth and course enrolled in all had significant effects across the various scales measured.

Age significantly affected undergraduate students at Tasmanian and other Australian universities regarding Scales 4, 5 and 7. Students older than 29 years felt less socially supported than their younger counterparts at Tasmanian and other Australian universities. At both Tasmanian and other Australian universities, students <20 years old were not confident in identifying good and reliable information, although Tasmanian students (<20 years old) were confident to advocate on their own behalf. Tasmanian undergraduate students indicated no significant effects of age on Scales 2, 3, 8, and 9.

Table 4 – Association between HLQ scores and enrolled undergraduate course: Tasmanian health profession course

Scale	Tasmanian health profession course						*p*
	Medicine *n* = 55 *Mean (SD)*	Nursing *n* = 184 *Mean (SD)*	Paramedicine *n* = 32 *Mean (SD)*	Behavioural science *n* = 43 *Mean (SD)*	Dementia care *n* = 334 *Mean (SD)*	Health sciences other *n* = 98 *Mean (SD)*	
1	3.10 (0.51)	3.10 (0.56)	3.12 (0.57)	3.04 (0.52)	3.08 (0.50)	2.96 (0.62)	0.391
2	3.19 (0.45)	3.08 (0.47)	3.05 (0.49)	2.95 (0.43)	3.02 (0.40)	3.03 (0.52)	0.085
3	3.07 (0.43)	3.05 (0.41)	3.00 (0.55)	2.93 (0.43)	2.94 (0.43)	3.05 (0.48)	0.032
4	3.21 (0.56)	3.10 (0.54)	3.33 (0.46)	3.07 (0.49)	2.94 (0.51)	3.12 (0.50)	<0.001
5	3.00 (0.48)	2.98 (0.48)	2.89 (0.50)	2.81 (0.50)	2.99 (0.42)	2.95 (0.48)	0.212
6	3.93 (0.71)	3.83 (0.66)	3.78 (0.59)	3.78 (0.60)	3.81 (0.64)	3.88 (0.59)	0.730
7	3.22 (0.39)	3.17 (0.39)	3.24 (0.37)	3.06 (0.41)	3.03 (0.38)	3.14 (0.46)	<0.001
8	3.96 (0.67)	3.95 (0.54)	3.87 (0.51)	3.87 (0.55)	3.96 (0.51)	4.03 (0.52)	0.529
9	4.10 (0.53)	4.18 (0.49)	4.08 (0.45)	4.01 (0.52)	4.13 (0.52)	4.20 (0.49)	0.294

The course students were enrolled in at other Australian universities impacted on all HLQ scales except Scale 1 (Table 5). The course in which they are enrolled impacted on health literacy in both Tasmanian students and the students from other Australian universities in Scales 3, 4 and 7 (as shown in Tables 4 and 5). At Tasmanian and other Australian universities, students enrolled in medicine and paramedicine generally showed higher levels of health literacy in Scales 4 and 7. Medical students and other health science students in Tasmania were most confident in Scale 3 compared to paramedicine and other healthcare students at other Australian universities (Tables 4 and 5). Tasmanian students enrolled in dementia care or behavioural science were the least confident across Scales 3, 4 and 7 (Table 4).

At other Australian universities, nursing students were least confident in Scales 3 and 4, and behavioural science students indicated low confidence with respect to Scale 7 (Table 5). At other Australian universities, medical and paramedic students were more confident in Scales 2, 5, 6, 8 and 9. They were more confident than behavioural science students in Scales 3, 5 and 8, and more confident than other health science students in Scales 6 and 9 (Table 5).

Table 5 – Association between HLQ scores and enrolled undergraduate course: Other Australian universities' health profession course

Scale	Other Australian universities health profession course						*p*
	Medicine *n* = 121 *Mean (SD)*	Nursing *n* = 146 *Mean (SD)*	Paramedicine *n* = 2 *Mean (SD)*	Behavioural science *n* = 46 *Mean (SD)*	No comparison data available for dementia care	Health sciences other *n* = 175 *Mean (SD)*	
1	3.06 (0.61)	3.06 (0.58)	3.44 (0.51)	2.98 (0.60)		3.06 (0.53)	0.209
2	3.18 (0.43)	3.04 (0.47)	3.38 (0.55)	2.98 (0.45)		3.08 (0.46)	<0.001
3	3.03 (0.50)	29.7 (0.50)	3.45 (0.57)	3.01 (0.43)		3.13 (0.48)	<0.001
4	3.16 (0.47)	2.98 (0.56)	3.13 (0.54)	3.12 (0.47)		3.18 (0.46)	<0.001
5	2.97 (0.45)	3.03 (0.47)	3.33 (0.40)	2.88 (0.43)		2.89 (0.48)	<0.001
6	4.14 (0.55)	4.03 (0.61)	4.48 (0.54)	3.98 (0.50)		3.97 (0.54)	<0.001
7	3.23 (0.41)	3.10 (0.43)	3.40 (0.48)	3.08 (0.39)		3.19 (0.38)	<0.001
8	4.34 (0.52)	4.21 (0.49)	4.35 (0.51)	4.09 (0.50)		4.12 (0.47)	<0.001
9	4.36 (0.53)	4.28 (0.48)	4.55 (0.45)	4.18 (0.47)		4.16 (0.44)	<0.001

Table 6 – Association between HLQ scores and whether or not English is spoken at home: Tasmanian students

Scale	Tasmanian students: Speak English at home		*p*
	No *n* = 48 *Mean (SD)*	Yes *n* = 731 *Mean (SD)*	
1	2.80 (0.56)	3.09 (0.53)	<0.001
2	2.86 (0.47)	3.06 (0.44)	0.002
3	2.85 (0.48)	3.01 (0.43)	0.017
4	2.90 (0.58)	3.05 (0.52)	0.053
5	2.92 (0.42)	2.97 (0.46)	0.427
6	3.78 (0.51)	3.84 (0.64)	0.520
7	2.96 (0.40)	3.12 (0.40)	0.009
8	3.75 (0.52)	3.97 (0.53)	0.006
9	4.02 (0.45)	4.15 (0.51)	0.094

Table 7 – Association between HLQ scores and whether or not English is spoken at home: Other Australian universities' students

Scale	Other Australian universities: speak English at home		*p*
	No *n* = 143 *Mean (SD)*	Yes *n* = 1214 *Mean (SD)*	
1	2.80 (0.61)	3.08 (0.58)	<0.001
2	2.96 (0.42)	3.12 (0.47)	<0.001
3	2.81 (0.48)	3.05 (0.49)	<0.001
4	2.96 (0.52)	3.13 (0.50)	<0.001
5	2.09 (0.44)	2.99 (0.47)	0.029
6	3.93 (0.57)	4.05 (0.58)	0.022
7	3.00 (0.40)	3.20 (0.41)	<0.001
8	4.14 (0.54)	4.25 (0.51)	0.010
9	4.20 (0.49)	4.30 (0.50)	0.020

Undergraduate students at other Australian universities who do not speak English at home expressed low confidence in health literacy in all 9 HLQ scales (as shown in Table 6). At both Tasmanian and other Australian universities these students reported low confidence in Scales 1, 2, 3, 8 and 7.

Whether or not a student (enrolled in a course at either Tasmanian or at other Australian universities) is born in Australia had significant effects on Scales 1, 4 and 7. However, undergraduate students at other Australian universities were also significantly affected by this variable with respect to Scale 3.

Gender affected health literacy status or undergraduate students enrolled in health courses at The University of Tasmania differently to other Australian universities. Gender influenced confidence to access information to make decisions about their own health (Scale 2) in students at other Australian universities, with males showing more confidence than females. However, in Tasmania, gender affected the ability to understand health information well enough to know what to do (Scale 9), with females expressing higher levels of confidence than males.

Discussion

The health literacy status of Tasmanian and the main island of Australia university students is impacted by a number of independent variables. In Tasmania, it was determined that health status, SES and parental education influenced health literacy. Age, language, course enrolled in and gender had comparable and different effects on health literacy status in Tasmanian students compared to their main island counterparts.

Tasmanian health profession students

State of health context and need to previously engage in healthcare

Students with a stated health issue reported low levels of health literacy compared to healthy individuals. This

difference could be attributed to ignorance on the part of healthy individuals because they have not had to access health information or services and as a result report higher levels of health literacy. Those participants with a stated health issue indicated they felt unsupported by healthcare providers, could not confidently make health decisions and were unable to confidently access health information and advocate for their own healthcare. It is apparent from this finding that within the Tasmanian population there is a lack of ability to engage effectively in healthcare when required. This highlights the importance for Tasmanian students to have health literacy embedded into the education curriculum to enhance confidence in health literacy.

From the findings of previous HLQ studies [3, 9–11, 16] it could be assumed that this deficiency in health literacy is evident across university student cohorts, irrespective of their experience in healthcare. As a result, foundation studies incorporating health literacy need to be embedded into the high school curriculum in Australia (including Tasmania) to facilitate knowledge of basic principles of health literacy. This will enable individuals to effectively advocate on their own behalf, and on the behalf of others. Health literacy then needs to be further expanded and developed within the curriculum of tertiary health profession courses to empower health graduates.

Uniqueness of Tasmanian context

Personal circumstances impact on health literacy status [9–11, 16]. Tasmanian students show strong effects on all HLQ scales due to SES status and effects on three HLQ scales in relation to level of parental education. Students from a lower SES report lower levels of health literacy and students whose parents had a lower level of education feel alone, unsupported, unable to engage in and make decisions about healthcare and take general responsibility for their own heath. Educational level of parents has also been reported in Danish students to influence social support and understanding from health providers [11]. In the Tasmanian study, rural students with less access and exposure to healthcare report lower levels of health literacy than students in more affluent regions of the island. The unique Tasmanian education system [24, 25] in which high school is completed at grade 10 with college (grade 11 and 12) education traditionally available only in urban regions is likely to contribute to this lower health literacy status. This highlights the potential benefit of embedding health literacy into secondary and tertiary health curriculums to enhance Tasmanian health literacy. These findings are similar to a Chinese study where significant differences in health care navigation and social support between urban medical students and rural students was reported [9].

Tasmanian health profession students compared with other Australian universities

Gender effects on health literacy have been reported in previous studies [3, 9, 11] with conflicting results with respect to health literacy confidence in men and women. Our study shows that Australian mainland men are more confident in accessing health information, yet Tasmanian women are more confident in understanding health information. As stated by Elsborg and colleagues [11], different gender findings in this study and the literature may be reflected by different educational systems and cultural differences amongst cohorts surveyed.

Older Tasmanian students generally lacked confidence in accessing healthcare and felt socially unsupported in their health compared to their main island counterparts, possibly due to the lower SES status and rurality of Tasmanian students, which results in a reduced access to healthcare facilities. A lack of experience in accessing healthcare information due to their own health status (i.e. normal health) may manifest as lack of confidence. Conversely, younger Tasmanian students have confidence in advocating for their own healthcare, possibly due to their higher levels of digital literacy or general confidence as a younger individual. Younger students, however, reported they were not confident in identifying reliable healthcare information, similar to their Australian main island counterparts. Compared to students from other Australian universities, Tasmanian students lacked understanding in accessing and understanding healthcare information, highlighting the need to educate Tasmanians more effectively in health literacy. This has also been reported in studies of health literacy among students in Texas, USA [3] and in Denmark [11].

The course in which students are enrolled impacted on health literacy on both the main island of Australia and Tasmania. Students enrolled in medicine and paramedicine reported higher levels of health literacy with respect to navigation of the healthcare system and social support. Tasmanian health science students also indicated that they could manage their health as effectively as students enrolled in medicine. Conversely, students enrolled in dementia care and behavioural science courses reported the lowest levels of health literacy in social support, navigation and management of health. Participants studying dementia care were typically mature-age students who were already personal care or support workers. These students often enter university through a pathway program undertaking a reputable massive open online course that this University offers [26, 27], rather than achieving university entry scores through successful college completion.

Students enrolled in Tasmanian nursing courses felt slightly more socially supported, able to actively manage their own health and navigate the healthcare system more confidently than their mainland counterparts. However, they were not as confident to find good health information or actively engage with healthcare providers. Similarly, Chinese nursing students generally reported lower health literacy than medical students [9, 10, 16], with the authors attributing this finding to entry scores for enrolment in medicine and the age of students. As nurses work closely with patients and need to understand, access and advocate healthcare for themselves and their patients, this finding highlights the need to ensure that knowledge of the organisation of the healthcare system and health information is embedded into nursing curriculum.

Language can be a barrier to contributing in society and the results from this study indicate that English as a second language impacts on health literacy across all HLQ scales in other Australian universities. In both Tasmania and other Australian universities, students who do not speak

English at home felt unsupported and misunderstood by healthcare providers, had difficulty actively managing their health and could not easily find and understand healthcare information. However, Tasmanian students who did not speak English at home felt that they were able to appraise healthcare information and actively engage with healthcare providers. Within Tasmania, non-English speakers reported living in similar regions of the community and so it may be possible that these regions have healthcare providers who are actively engaged with non-English speakers.

Socio-demographic across health literacy scales in Tasmanian students

Socioeconomic status was significant in this study, with a positive correlation across all scales. This is consistent with other research studies regarding health literacy using the HLQ [3, 9–11, 16]. Similar to this study, Texan, Chinese and Danish studies found strong association between socio-economic status and ability to actively manage health. The Texan study [3] also found weak associations between socio-economic status and ability to actively engage with health professionals and understand health information. Socio-economic status can impact on access to education, digital information and services resulting in health literacy deficiencies in certain cohorts of the population.

Higher level of parental educational attainment is positively associated with higher scores in health literacy in this study. This was also previously found with other university studies investigating health literacy [3, 9–11, 16]. This is not a surprising outcome as significant learning occurs within the home environment and so higher levels of education enable opportunity to access knowledge, including promoting higher levels of health literacy [25].

Limitations

Generalisation of the findings of this study may be limited as it analyses data from a self-selection of Australian universities. A total response rate for all Australian universities that participated was unable to be determined, decreasing the generalizability of the findings. Respondent bias inherent in this type of survey may also have occurred within cohorts of students at these universities.

Future directions

Once health literacy content is enhanced within the existing Tasmanian curriculum, evaluation of health literacy will need to occur. Repeat administration of the HLQ after implementation of the health literacy module(s) within health profession courses will provide further information about what needs to be reviewed, and updated as part of a quality assurance cycle [20]. The HLQ survey is being culturally adapted and validated within European countries [13, 14], enabling comparison of the health literacy of health profession students across continents. This will provide opportunities for international collaboration in the development of health literacy resources [21, 28]. Additionally, longitudinal studies will provide valuable information regarding the health literacy of beginning practitioners within various health disciplines, and the impact on health literacy levels of healthcare recipients over time. This strategy will support work readiness of undergraduate students who, at graduation, will be educationally prepared to understand, assess and assist with guiding health literacy within the community.

Conclusion

The main findings of the study indicated that a number of variables influence health literacy status of health profession students across Australia, including age, course enrolled in, and language spoken at home. In addition, health status, SES and level of parental education impact on health literacy amongst students in Tasmania. These findings are relatively consistent with other global cohorts of health profession students studied. This study highlights the urgent need to embed health literacy within the secondary and tertiary curriculum in Tasmania to promote health literacy within the general population and, most importantly among future healthcare providers.

Conflict of interests

The authors have no conflict of interests to declare.

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