Improving health literacy of Australian adults: What do we need to do?

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Health Literacy is...

... the necessary cognitive and social skills required for individuals to access, understand, appraise and apply health information ... (WHO, 2013).
Nutbeam\(^2\) schema

Functional
- Reading
- Writing

Interactive
- Participate
- Understand

Critical
- Analyse
- Apply

What does it mean to us?

**Lower health literacy\(^3\)**
- Poor health
- Poor engagement
- Lack of knowledge
- Lack of uptake of preventive services
- Impaired self-management
- Increased use emergency care
- Increased hospitalisations
- Higher mortality rates

**Higher health literacy**
- Good health\(^4\)
- Comprehension of health messages\(^5,\,6\)
- Good health behaviours\(^7,\,8\)

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Australian perspective\textsuperscript{9,10,11}

Readability of health information in Australia

- 97\% of Australian’s use the internet every day\textsuperscript{12}

- \textasciitilde 80\% consult Dr Google\textsuperscript{13}

- Australian health websites = information at grade 10-12 level (benchmark = grade 8)\textsuperscript{14}

- 99.6\% of online health information is beyond the average comprehension level of most Australians. \textsuperscript{14}
Study aims

1. Examine health literacy of the general Australian adult population using the Health Literacy Questionnaire™;

2. Examine relationships between health literacy domains & socio-economic characteristics.

Methods – study design

- Online survey
- Conducted by the Population Research Laboratory at CQUniversity
- 12th November to 1st December, 2015
- Random sample of adults living in each Australian state and territory (n=3106)
- N= 1270 (41% response rate)
Health Literacy Questionnaire™ (HLQ)\textsuperscript{15}

**Functional**
- 9. Understanding health information well enough to know what to do
- 2. Having sufficient information to manage health
- 8. Ability to find good quality health information

**Interactive**
- 1. Feeling understood & supported by healthcare providers (HCP)
- 3. Actively managing health
- 4. Social Support for health
- 6. Ability to actively engage with HCP
- 7. Navigating the health system
- 8. Ability to find good quality health information

**Critical**
- 3. Actively managing health
- 4. Social Support for health
- 5. Appraisal of health information

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Results – Demographic Characteristics (%)

- Females (n=661)  
- Males (n=618)

Mean Age: 60.9 ±12.0 years
HLQ mean scores

Females (n=661)  Males (n=618)

Functional health literacy

**Both genders:**
- Poor self-rated health associated with low functional health literacy in all domains.

**Males:**
- 15+ yrs education associated with:
  - Greater understanding of health information (OR: 2.44, \( p=0.002 \))
  - Having sufficient information (OR 1.75, \( p=0.04 \))
  - Finding health information (OR 1.79, \( p=0.04 \))
- Employed/retired associated with:
  - Greater ability to find good health information (OR 6.7, \( p=0.01 \))

**Females:**
- Rural/regional living associated with:
  - Lower understanding of health information (OR 0.64, \( p=0.03 \))
- Higher income associated with:
  - Greater ability to find health information (OR 2.22 , \( p=0.002 \))
Discussion – Functional health literacy

Males with less than tertiary education and Females living outside of metropolitan cities are more likely to have:

- Problems understanding written information
- Unable to complete medical forms
- Feel they lack the information they need to manage health.

Males who are unemployed and Females with a household income <$65K:

- Cannot access health information when required
- Dependent on others to provide information.

Critical health literacy

Both genders:
- Poor self-rated health associated with low critical health literacy in all domains,
- Married/living with partner:
  - Greater social support for health (M: OR 3.33, p=0.0001; F: OR 2.15, p=0.001)

Males:
- 45+ yrs of age associated with:
  - Less ability to appraise health information (OR 0.32, p=0.01)
  - Less social support for health (OR 0.27, p=0.003)
- 15+ yrs education associated with:
  - Greater ability to appraise health information (OR 1.69, p=0.01)

Females:
- 45-54 yrs of age associated with:
  - Less ability to appraise health information (OR 0.42, p=0.01)
- 3+ chronic health conditions associated with:
  - Greater ability to appraise health information (OR 2.13, p=0.04)
Discussion – Critical health literacy

Females 45-54 yrs and with <3 chronic conditions and Males 45+ yrs are more likely to:

- Have difficulties understanding most health information
- Be confused when there is conflicting information
- Be completely alone or unsupported for health

Interactive health literacy

Both genders:
- Poor self-rated health associated with low interactive health literacy in all domains.

Males:
- Retired, & Income >$65K pa. associated with:
  - Greater ability to actively engage with HCP (OR: 3.22, \( p=0.04 \)) (OR 1.64, \( p=0.03 \)) respectively
- 3+ health conditions associated with:
  - Greater feeling of being understood and supported by HCP (OR 2.73, \( p=0.006 \))

Females:
- 55+ yrs of age associated with:
  - greater ability to navigate the health system (OR 2.10, \( p=0.03 \))
- 65+ yrs of age associated with:
  - Greater ability to actively engage with HCP (OR 2.88, \( p=0.01 \))
- Living in rural or regional area associated with:
  - Less feeling of being understood and supported by HCP (OR 0.59, \( p=0.009 \))
  - Less ability to navigate the health system (OR 0.57, \( p=0.006 \))
Discussion – Interactive health literacy

Males employed with a household income of <$65K and Females <65 yrs old are more likely to be:
- Passive in their approach to health
- Inactive – do not proactively seek or ask questions to clarify information
- Feel unable to share concerns with HCP

Males with <3 chronic conditions:
- Unable to engage with doctors and other HCP
- Not have a regular HCP or have difficulty trusting their HCP as a source of health information.

Females <55 yrs and living outside of metropolitan cities:
- Unable to engage with doctors and other HCP
- Not have a regular HCP or have difficulty trusting their HCP as a source of health information.
- Unable to advocate on their own behalf
- Unable to find someone who can help them navigate the healthcare system
- Have a limited understanding of what healthcare resources are available.

What about those with low Self Reported health?

Poor Self Reported Health
- All with perceived poor health had low functional, interactive and critical health literacy
- If self reported health is a measure of overall health what can be done to help these individuals?

In our sample poor self reported health was associated with:

Males: anxiety/depression, COPD, CKD, type 2 diabetes
Females: anxiety/depression, COPD, heart disease, living alone
What do we need to do?

• Prevent or delay the onset of chronic diseases
  • Deliver health messages to individuals before they need to access the healthcare system (i.e. men in the workplace)
  • Develop initiatives to help adults navigate the healthcare system early
  • Promote active engagement with healthcare services

• Health promotion messages
  • Present in plain language that allows older adults and those with lower education levels to easily analyse the information provided to them.

• Rural & regional women
  • Develop initiatives to promote both functional and interactive health literacy

Thank you