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Health literacy

{ A simple concept with a lot of potential



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- ❖ What health literacy is & why it is important
- ❖ Health literacy in Australia
- ❖ Health literacy & health
- ❖ Health literacy & vulnerable populations
- ❖ Enhancing health literacy

Today's webinar

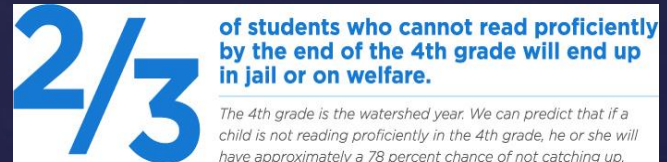


Defining health



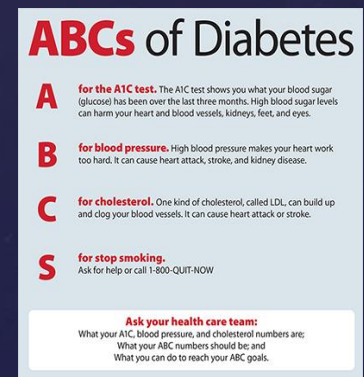
- ❖ Measures a person's ability to read basic text and write simple statements relevant to everyday life
- ❖ Functional literacy enables a higher degree of control over everyday events, better management of complex or challenging situations, and fuller participation
- ❖ Consistently related to both primary health and public health outcomes

Functional literacy



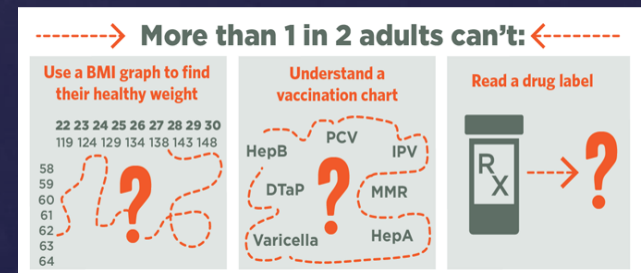
- ❖ Relationship between low literacy and a range of health related outcomes well established
- ❖ Indirect effects: employment, income, etc.
- ❖ Direct effects: engaging in preventive health practices, early detection of disease, access to health care, and management of chronic disease
- ❖ Key messages: literacy is a public health goal, achieving the MDGs in relation to literacy will have major public health benefits

Literacy & health



- ❖ The ability to read, understand and act upon health information
- ❖ Reading, understanding and having the competence to make health decisions
- ❖ Essential for service user engagement – relevant to whole population
- ❖ Important in tackling health inequalities that require targeted approaches
- ❖ Is a social determinant of health: has individual, organisational and structural dimensions and implications

Health literacy



- ❖ **Fundamental literacy:** refers to the ability to read, write, speak, and work with numbers
- ❖ **Scientific literacy:** refers to the skills and abilities to understand and use science and technology
- ❖ **Civil literacy:** refers to skills and abilities that enable citizens to recognise public issues and participate in civil society
- ❖ **Cultural literacy:** refers to the ability to recognise, understand, and use the collective beliefs, customs, and worldview, and social identity of diverse individuals to interpret and act on information

Health literacy



- ❖ The ABS measures health literacy using the Adult Literacy and Life Skills Survey (ALLS), an OECD measure used in over a dozen other countries. The survey was administered most recently in Australia in 2002 and 2006
- ❖ The ALLS contains **191** health-related items across five domains: health promotion (60 items); health protection (64 items); disease prevention (18 items); health care maintenance (16 items); system navigation (32 items)

Health literacy in Australia



- ❖ **Prose literacy:** individuals' ability to understand and use information from various kinds of narrative texts, including texts from newspapers, magazines and brochures
- ❖ **Document literacy:** knowledge and skills individuals require to locate and use information contained in various formats including job applications, payroll forms, transportation schedules, maps, tables and charts
- ❖ **Numeracy:** knowledge and skills individuals use to manage and deal with the mathematical demands of diverse situations
- ❖ **Problem solving:** goal-directed thinking and action in situations for which no routine solution is available

Health literacy in Australia



- ❖ 40% of all Australians have 'adequate' levels of general and health literacy (i.e. level 3 or above), while 60% have less than adequate levels of literacy and health literacy
- ❖ Just 6% of the Australian population have high levels of health literacy
- ❖ Approximately 46% of Australians aged 15 to 74 years achieved less than 'adequate' scores for the prose domain, 47% for the document domain, 53% for the numeracy domain, and 70% for the problem solving domain

Findings



- ❖ Health literacy increased from 15-19 years to the 35-39 years, and then generally decreased for those aged 40+
- ❖ 40% males and 41% females achieved level 3 or above
- ❖ ACT had significantly more at above level 3
- ❖ Higher health literacy was associated with education, higher SES, employment, occupation, health status, social participation, English speaking
- ❖ Australia and Canada had very similar results

Findings



- ❖ PIAAC is the third survey of international comparisons of adult literacy skills conducted in Australia
- ❖ PIAAC expands on previous surveys by assessing skills in the domain of 'problem solving in technology-rich environments' and by asking questions specifically about skill use at work
- ❖ The previous literacy and numeracy scores are not comparable with PIAAC data: work is currently underway to affect concordance among collections

Programme for the International Assessment of Adult Competencies (PIAAC)



People with low or marginal health literacy are:

- ❖ More likely to present later with cancer (Donelle, Arocha, & Hoffman-Goetz, 2008; Westin et al., 2008)
- ❖ More likely to engage in unhealthy behaviours (Carmona, 2005; Howard, Sentell, & Gazmararian, 2006; von Wagner, Knight, Steptoe, & Wardle, 2007)
- ❖ Less likely to be effectively engaged by health promotion activities and programs (Gazmararian, Curran, Parker, Bernhardt, & DeBuono, 2005; Parker, & Nurss, 1996)

Health literacy & health



- ❖ Important U.K. study found that poor health literacy was associated with poorer eating and diet-related behaviours
- ❖ Even small increases in health literacy were associated with a significant increase in healthy eating, not-smoking, and exercising once a week (but this last finding was not significant)
- ❖ These outcomes remained over time (von Wagner et al., 2007)

Health literacy & health



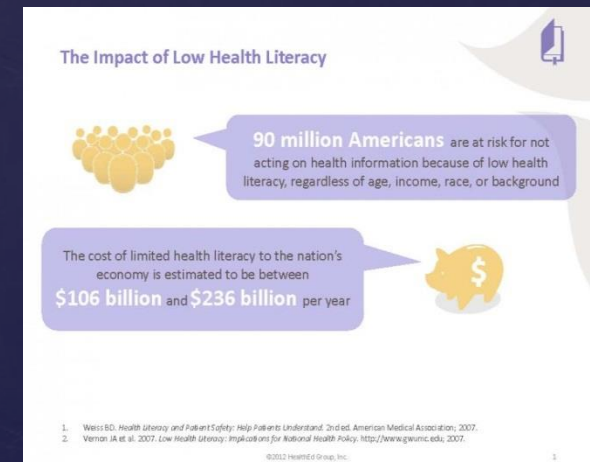
Seven types of outcomes identified in the literature:

1. Decreased knowledge and comprehension
2. Poorer compliance rates
3. Lack of understanding and use of preventive health services
4. Poorer self-reported health
5. Poorer health status
6. Increased hospitalisations
7. Increased health care costs

Inadequate or poor health literacy

- ❖ Older people
- ❖ Low socio-economic status (SES)
- ❖ Migrants, refugees and asylum seekers
- ❖ CALD populations
- ❖ Poor functional literacy (e.g. early school leavers)
- ❖ People falling into more than one of these categories

Vulnerable groups



- ❖ Less likely to use Internet
- ❖ Less access to information
- ❖ Likely to hide lack of understanding of health information
- ❖ Less likely to ask in-depth questions
- ❖ More likely to have poor medication compliance
- ❖ Less likely to have knowledge about self-care
- ❖ At risk of poorer health outcomes

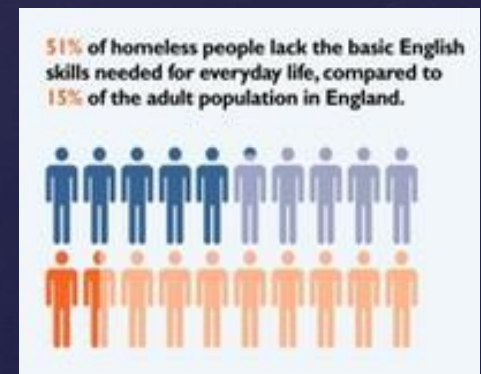
Older People



People 65 and older make nearly twice as many physician office visits per year than adults 45 to 65.

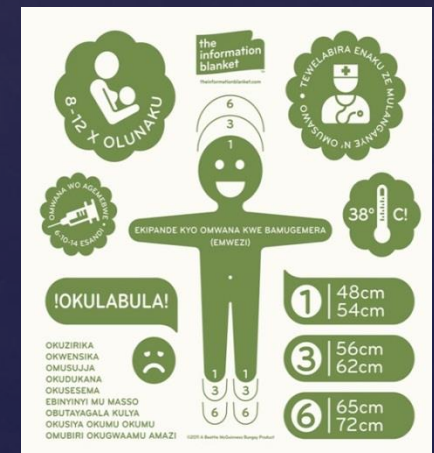
- ❖ Many similar aspects to older people plus
- ❖ Lower literacy skills likely
- ❖ Likely to feel disempowered
- ❖ Even less access to information
- ❖ Less likely to use internet
- ❖ At risk of significantly poorer health outcomes

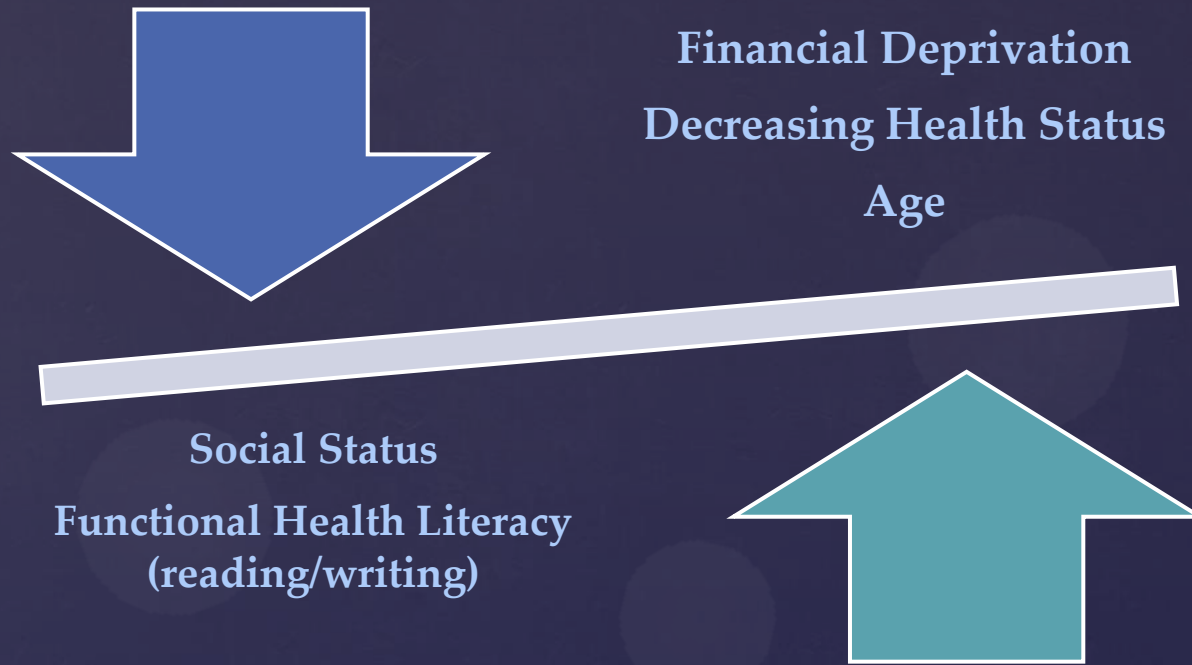
Low SES



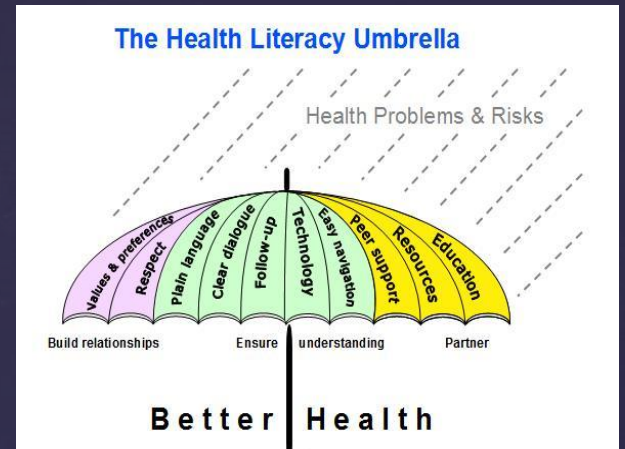
- ❖ Many similar aspects to older and low SES people, plus
- ❖ Poor fundamental reading skills: in own language and/or English
- ❖ Feel disempowered
- ❖ Trust is a significant issue
- ❖ Families/care givers are crucial
- ❖ Cultural values and beliefs
- ❖ Consideration of language barriers is necessary

CALD populations





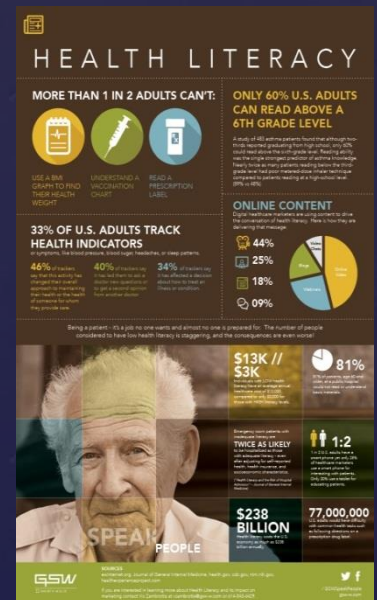
In simple terms



Health literacy, behaviour, coaching & self-management

- ❖ Functional health literacy and reading ability-based measures
 - No association / inconsistent patterns (BMI, alcohol consumption)
 - Frequent negative association (smoking)
 - These measures focus on understanding health information only
- ❖ Some aspects of health literacy are more related to health behaviours than others
 - Disease prevention and self-management
 - Health promotion
- ❖ What matters for behaviour?
 - Accessing, understanding, evaluating, applying

Health literacy & behaviour



- ❖ Medical education historically relied on rational choice model; people choose to pursue behaviours needed for 'good' health
- ❖ Misses key sources and impact of other influencers
- ❖ Behaviour should be understood in the broader context: social class/SES, financial constraint, health beliefs, self-efficacy, stress, social support, etc.
- ❖ Research identifying areas within health literacy which are more associated with behaviour offers greater opportunity to support behavioural change e.g. disease prevention, health coaching, self-management, etc.
- ❖ Skills in the area of evaluating, applying and finding health information

Behaviour change



Critical components	Key differences
<ul style="list-style-type: none"> ▪ Communication ▪ Comprehension ▪ Quantitative/numeracy ▪ Navigation ▪ Health information seeking ▪ Function ▪ Decision making /critical thinking ▪ Self-efficacy ▪ Motivation ▪ Cognitive skills 	<ul style="list-style-type: none"> ▪ Instruments vary from screening items to performance-based measures ▪ Tools vary in their approach to operationalising the concept into a measurable construct ▪ Administration styles vary ▪ Time and resources needed vary ▪ Scoring, ranges and levels vary

- ❖ Various definitions, however most concern : **cognitive capabilities, skills and behaviour**
- ❖ Most reflect an individuals' capacity to function in the role of a patient within the healthcare system (Sørensen et al., 2012)

Assessing health literacy

- ❖ Diabetes Numeracy Test (DNT-15); Literacy Assessment for Diabetes
- ❖ Asthma Numeracy Questionnaire
- ❖ Food Label Literacy for Applied Nutrition Questionnaire (FLLANK)
- ❖ Literacy Measure for Patients with HIV
- ❖ Spanish/Hebrew/Korean Health Literacy Test and Test for Singapore

Condition & population measures



On a scale from very easy to very difficult, how easy would you say it is to:

- ❖ Find information on how your neighbourhood could be more health-friendly? (Instructions: Reducing noise and pollution, creating green spaces, leisure facilities)
- ❖ Understand information on food packaging?
- ❖ Judge how your housing conditions help you to stay healthy?
- ❖ make decisions to improve your health?
- ❖ Take part in activities that improve health and well-being in your community?

Health promotion



On a scale from very easy to very difficult, how easy would you say it is to:

- ❖ Find information about how to manage unhealthy behaviour such as smoking, low physical activity and drinking too much?
- ❖ Understand why you need vaccinations?
- ❖ Judge how reliable health warnings are, such as smoking, low physical activity and drinking too much?
- ❖ Decide how you can protect yourself from illness based on advice from family and friends?

Disease prevention & self-management



On a scale from very easy to very difficult, how easy would you say it is to ...

- ❖ Find information about symptoms of illnesses that concern you?
- ❖ Understand what to do in a medical emergency?
- ❖ Judge the advantages and disadvantages of different treatment options?
- ❖ Use information the doctor gives you to make decisions about your illness?

Healthcare



The mechanism inherent for poorer health in patients with inadequate or poor literacy is multifactorial and includes increased difficulty with:

- ❖ Applying for and navigating the healthcare system
- ❖ Understanding and communicating with providers
- ❖ Understanding management of illness or disease
- ❖ Understanding medication and test instructions
- ❖ Compliance and self-management
- ❖ Perceiving need for illness management and preventive services

Summary



- ❖ **Concept and definition:** cognitive and social skills which determine the motivation and ability of individuals to access, understand and use information in ways which promote and maintain good health
- ❖ **Measures and screening:** increasing number of disease and population-specific measures and screening approaches
- ❖ **Focus and effort:** macro (health system), meso (health conditions) and micro (individual behaviour). Spans multiple disciplines (e.g. public health, health economics, psychology, medicine, education, etc.)
- ❖ **Policy:** strengthen health literacy to empower individuals and communities in reducing the health disparities associated with education and social exclusion

Conclusions



Acknowledgements

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