Literacy, health literacy and health promotion

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Staring at the beginning: Defining and measuring literacy

What is literacy?

– Functional literacy is defined as a tangible set of skills in reading, writing (and numeracy) the capacity to apply these skills in everyday situations

Literacy is important?

– Literacy skills enable people to better develop their knowledge and improve their potential to achieve personal goals.
– Individuals are able to participate more fully in society and the economy.
– Literacy is both directly and indirectly related to health status
Literacy and Health

– Relationship between low literacy and a range of health related outcomes well established

– Some indirect effects related to employment and lifetime income

– Some direct effects of low literacy, individuals are*
  – less responsive to health education
  – less likely to use disease prevention services, and
  – less likely to successfully manage chronic disease

Literacy is context and content specific

- More accurate to talk about **literacies** for example:
  - Financial literacy
  - Science literacy
  - Media literacy
  - IT literacy (new literacy) and
  - Health literacy
What is health literacy?

— **Health literacy** can be described as
  — the possession of **literacy skills** (reading and writing) and
  — the ability to perform the **knowledge-based literacy tasks** (acquiring, understanding and using information)
— that are **required to make health related decisions** in a variety of different environments
What is health literacy?

– **Health literacy** describes the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain health.*

– **Health literacy** represents an observable set of cognitive and social skills that will vary from individual to individual.

– These skills enable individuals to obtain, understand and use information to make decisions and take actions that will have an impact on their health status.

Health literacy is also context and content specific - for example influenced age and stage in life

A person with diabetes who is receiving education

A pregnant woman attending ante-natal classes

A young person receiving health education on illicit drugs at school
Health literacy matters

— in a health care system where there is
  — need for more effective prevention,
  — commitment to patient centred care, and
  — greater than ever dependence on patient self-management of chronic conditions.

— There is a strong social gradient in the population, with lower levels of health literacy much more common among the socially and economically disadvantaged.

— Those with greatest need are generally least able to respond to the demands of the health care system.
Low health literacy is more common than you would expect: Health literacy in Australia: ABS Survey 2006

Health literacy skill levels

Skill levels 3, 4 and 5 represent adequate or better health literacy

Australia isn’t alone in this phenomenon: Health literacy in Europe

Health literacy in Europe: comparative results of the European health literacy survey (HLS-EU); Kristine Sørensen et al. European Journal of Public Health 2015
Health literacy shows a socio-economic gradient

Selected occupations:
Proportion with adequate or better health literacy - 2006

Health literacy is higher amongst better educated

Adequate or better health literacy:
Highest level of educational attainment and household income - 2006

Health literacy is poorest amongst older Australians

People with adequate or better health literacy - 2006

Figure 1: Health literacy in health promotion and disease prevention: A logic model for prevention planning - Starting at the end

<table>
<thead>
<tr>
<th>Priority Health Outcomes</th>
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**Figure 1: Health literacy in health promotion and disease prevention: A logic model for prevention planning - What are the determinants we want to change?**

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Logic model for prevention planning: Health literacy in health promotion and disease prevention: What influences the health determinants we want to change?

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Health literacy in health promotion and disease prevention: What can educational programs achieve?

**Health Promotion Actions**
- **With individuals**
  - School education, media communication, patient education
- **With families and communities**
  - Community engagement and mobilisation, family education
- **By National and local government**
  - Policy development, resource allocation

**Health Promotion Outcomes** (intervention impact measures)
- **Health Literacy**
  - Improved health-related knowledge, attitude, motivation, behavioural intentions, personal skills, self-efficacy
- **Social action & influence**
  - Community participation, public opinion

**Intermediate Health Outcomes** (modifiable determinants)
- **Healthy Lifestyles**
  - Non smoking use, physical activity, food choices (salt), alcohol use
- **Effective health services**
  - Universal access to primary health services, preventative screening, access to specialist treatment and rehab.

**Priority Health Outcomes**
- **Healthy Environments**
  - Safe physical environment, nutritious food supply, tobacco control measures.
- **Healthy Public Policy**
  - Public policy, legislation, regulation, organisational practices

**Social Outcomes**
- Quality of life, functional independence, equity
Health literacy in health promotion and disease prevention: What can educational programs achieve – depends on content

Health Promotion Outcomes (intervention impact measures)

Health Literacy
Improved health-related knowledge, attitude, motivation, behavioural intentions, personal skills, self-efficacy

Healthy Lifestyles
Non smoking use, physical activity, food choices (salt) alcohol use

Effective health services
Universal access to primary health services, preventative screening, access to specialist treatment and rehab.

Healthy Environments
Safe physical environment, nutritious food supply tobacco control measures.

Social action & influence
community participation, public opinion

Healthy public policy
Public policy, legislation, regulation, organisational practices

Priority Health Outcomes

Health Outcomes
Reduced avoidable NCD morbidity and mortality, disability

Social Outcomes
quality of life, functional independence, equity

Health Promotion Actions

With individuals
School education, media communication patient education

With families and communities
community engagement and mobilisation, family education

By National and local government
policy development, resource allocation
Health literacy in health promotion and disease prevention: What can educational programs achieve – depends on purpose

Health Promotion Actions

With individuals
School education, media communication, patient education

With families and communities
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By National and local government
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Health Promotion Outcomes (intervention impact measures)

Health Literacy
Improved health-related knowledge, attitude, motivation, behavioural intentions, personal skills, self-efficacy

Social action & influence
Community participation, public opinion

Healthy public policy
Public policy, legislation, regulation, organisational practices

Intermediate Health Outcomes (modifiable determinants)

Healthy Lifestyles
Non smoking use, physical activity, food choices (salt) alcohol use

Effective health services
Universal access to primary health services, preventative screening, access to specialist treatment and rehab.

Healthy Environments
Safe physical environment, nutritious food supply, tobacco control measures.

Priority Health Outcomes

Health Outcomes
Reduced disability, avoidable morbidity and mortality

Social Outcomes
Quality of life, functional independence, equity
Health literacy in health promotion and disease prevention: What can governments do – make healthy choices, easy choices

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Social Outcomes:
- quality of life, functional independence, equity
Relative differences in health literacy*

Functional health literacy

– Basic health literacy skills that are sufficient for individuals to obtain relevant health information and apply that knowledge to a limited range of prescribed activities.

Interactive health literacy

– More advanced literacy skills that enable individuals to extract information and derive meaning from different forms of communication; to apply new information to changing circumstances; and to interact with greater confidence with information providers such as health care professionals.

Critical health literacy

– Most advanced cognitive skills which, together with social skills, can be applied to critically analyze information, and to use this information to exert greater control over life events and situations.

Relative differences in health literacy

Classification of functional, interactive and critical health literacy indicates:

— Different categories of health literacy progressively allow for greater autonomy in decision-making, and personal empowerment.

— Progression between categories is not only dependent upon cognitive development, but also exposure to different forms of information (content and media).

— It is also dependent upon a person’s confidence to respond to health communications – described as self-efficacy.

— It is all about content and method
Improving functional health literacy

– **Health literacy can be improved through education** and is a measurable outcome to health education.

– **Differences in educational methods**, media and content will result in different learning outcomes.

– **Improving functional health literacy** based on relatively limited **communication of factual information** on health risks, and on how to use medications and health care services.
Improving *interactive* and *critical* health literacy

**Interactive health literacy**

- Improving *interactive health literacy* will require the use of more interactive forms of health education directed towards improving self-confidence to act on information and advice received.

- This is best delivered in a more structured educational setting, or through well designed on-line learning programs.

- Good examples can be found in:
  - school health education programs
  - adult education programs, and
  - clinic-based patient education
Improving *interactive* and *critical* health literacy

- Improving *critical health literacy* involves health education that is more interactive and may include the communication of information to support a variety of health actions to address both personal and social determinants of health.

- The *content* of health education should not only be directed at changing personal lifestyle but also at raising awareness of the social determinants of health, and actions which may lead to modification of these determinants.

- This also has implications for the education and *communication methods*, challenging health educators to communicate in ways that draw upon personal experience, invite interaction, participation and critical analysis.
What works? - Adopting and adapting interventions that work in health care settings

- 2011 Review reports on the outcomes of 38 intervention studies (Sheridan et al 2011*).
  - Broadly consistent evidence that comprehension of health information and advice among individuals with low health literacy can be improved
  - Requires modifications to communication, and mixed-strategy interventions (for example combining adapted communications with behavioural skills coaching)
  - an emphasis on skill building, and effective delivery by a health professional.
  - use of simplified text and teach-back methodologies that have been shown to be effective in other literacy interventions
  - Delivers improved health outcomes including reduced reported disease severity, unplanned emergency department visits and hospitalizations.

Conclusions – we should put into practice what we know

- Health literacy fundamentally dependent upon **levels of basic literacy** in the population.
- The impact of low health literacy is socially distributed, **business as usual** will simply exacerbate existing inequalities

**Method**
- **modifications to communication**, to develop transferable skills
- and mixed-strategy interventions (for example combining adapted communications with **skills coaching**)
- use of **simplified text and teach-back methodologies** that have been shown to be effective in other literacy interventions

**Content** – expanding content to include personal, social and environmental determinants of health

**Service organisation and delivery needs change and adaptation** to be sensitive to low health literacy
We should work on the things we know we don’t know

- Definition and measurement of health literacy still evolving and can usefully draw down on existing concepts, definitions and measurements from general literacy
- Intervention development at an early stage, more experimentation and better evaluation is needed.
- Developing interactive and critical health literacy requires fundamentally different education and communication methods, challenging health educators to communicate in ways that draw upon personal experience, invite interaction, participation and critical analysis.
We should explore the “unknown unknowns”

– Seek to understand better the relationships between health literacy, health outcomes and wider social determinants of health

– Explore fundamentally different education and communication methodologies (for example using digital media)
The end

Thank you