Improving Preventive Care for Patients With Low Health Literacy in Australian General Practice
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Aims

- To explore feasibility of enhancing preventive care for patients with low health literacy in Australian general practice.
Definitions

National Library of Medicine:

*The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions*

Nutbeam:

*Basic or functional health literacy* is the basic reading and writing skills needed to be able to function in daily life.

*Communicative or interactive health literacy* describes more advanced cognitive and literacy skills which combine with social skills to enable someone to participate in a range of activities and apply information to changing situations.

*Critical health literacy* describes more advanced cognitive and social skills that a person can use to exert more control over their lives.
Health Literacy in Australia 2006 (ABS)

- **Level 1**: Very poor
- **Level 2**: Insufficient: to manage health
- **Level 3**: Sufficient: to manage health
- **Level 4/5**: Proficient
## Preventive “Health Checks” vs Educational Status (HIPS study 2009)

### Crosstab

<table>
<thead>
<tr>
<th>GP visits for a “health check” in past 3 months</th>
<th>Educational status</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
<td>Total</td>
</tr>
<tr>
<td>Yes</td>
<td>Count</td>
<td>123</td>
<td>146</td>
<td>269</td>
</tr>
<tr>
<td></td>
<td>% within LowEd</td>
<td>49.0%</td>
<td>62.9%</td>
<td>55.7%</td>
</tr>
<tr>
<td>No</td>
<td>Count</td>
<td>120</td>
<td>76</td>
<td>196</td>
</tr>
<tr>
<td></td>
<td>% within LowEd</td>
<td>47.8%</td>
<td>32.8%</td>
<td>40.6%</td>
</tr>
<tr>
<td>Unsure</td>
<td>Count</td>
<td>8</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>% within LowEd</td>
<td>3.2%</td>
<td>4.3%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>251</td>
<td>232</td>
<td>483</td>
</tr>
<tr>
<td></td>
<td>% within LowEd</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 11.3, \ p < 0.01 \]
Disparities in patient-centeredness by health literacy

• Patients with inadequate health literacy were more likely to report worse communication in the domains of:
  – *general clarity* (AOR [Adjusted Odds Ratio] 6.29, P<0.01)
  – explanation of *condition* (AOR 4.85, P=0.03)
  – explanation of *processes of care* (AOR 2.70, p=0.03)
    (Schillinger D et al. 2004)

• Patients with lower health literacy:
  – ask *fewer questions* of physicians in observed medical encounters
    (Katz et al. 2006; Beach et al. 2006)
  – are more likely to be *perceived by physicians* as desiring a *less active role*
    (Beach et al. 2006)
Methods

**Design:** Pre-post exploratory study

**Setting and participants:** 4 general practices in disadvantaged communities

**Intervention:** Patient screening, provider training, clinical record audit and facilitation visits.

**Data collected:** Semi-structured interviews and surveys of general practice physicians and nurses and record audit at baseline and 3 months

**Analysis:** Mixed method and case study analysis.
Health Literacy Screening

A. How often do you have someone help you read health information materials?

B. How often do you have problems learning about your medical condition because of difficulty understanding health information materials?

C. How confident are you filling in medical forms by yourself?
Of patients screened % with low health literacy using three questions and validated single questions
## Audit of medical records: Recording of Risk Factors in 4 practices

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>3 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>95% CI</td>
</tr>
<tr>
<td>Smoke</td>
<td>68.8</td>
<td>66.8-70.7</td>
</tr>
<tr>
<td>Alcohol</td>
<td>40.2</td>
<td>37.5-42.9</td>
</tr>
<tr>
<td>BMI</td>
<td>18.2</td>
<td>15.1-21.4</td>
</tr>
<tr>
<td>Waist</td>
<td>8.1</td>
<td>4.7-11.4</td>
</tr>
<tr>
<td>BP</td>
<td>48.3</td>
<td>45.8-50.8</td>
</tr>
<tr>
<td>Lipids</td>
<td>28.7</td>
<td>25.7-31.6</td>
</tr>
<tr>
<td>CVAR</td>
<td>22.8</td>
<td>19.7-25.8</td>
</tr>
<tr>
<td>Activity</td>
<td>Baseline Mean (95%CI)</td>
<td>After intervention Mean (95%CI)</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Assess patients’ health literacy</td>
<td>3.13 (1.77-4.49)</td>
<td>4.00 (2.66-5.43)</td>
</tr>
<tr>
<td>Tailor advice according to patients’ level of health literacy</td>
<td>4.13 (3.26-5.00)</td>
<td>4.75 (3.94-5.56)</td>
</tr>
<tr>
<td>Use clear communication techniques</td>
<td>4.75 (4.03-5.47)</td>
<td>4.88 (4.10-5.66)</td>
</tr>
<tr>
<td>Ask patients to state key points in their own words to assess their understanding of the care advice given by you</td>
<td>2.75 (1.43-4.07)</td>
<td>3.88 (2.47-5.29)</td>
</tr>
<tr>
<td>Encourage patients to ask questions</td>
<td>2.75 (1.38-4.12)</td>
<td>3.63 (2.20-5.06)</td>
</tr>
<tr>
<td>Assist patients to access community-based lifestyle programs</td>
<td>2.38 (1.10-3.66)</td>
<td>3.25 (1.98-4.52)</td>
</tr>
<tr>
<td>Follow up patients referred to community-based lifestyle programs and preventive services</td>
<td>2.38 (1.10-3.66)</td>
<td>3.25 (1.69-4.81)</td>
</tr>
</tbody>
</table>
Qualitative interviews

After the intervention, both PNs and GPs agreed that patients may feel overwhelmed with preventive education therefore giving patients printed materials to take from the consultation.

*I think this is very important … giving them literacy materials when go back, most importantly ask them to come back to ask questions if they don’t understand (GP)*

They also reported using communicative strategies such as simplifying information into three to five dot points, acquiring materials in languages other than English and asking open ended questions.

*but I think we have to make the time … simplifying it to 5 points 3 points 5 points something like that write it down on a piece of paper… The aim is always to simplify information, ask open ended questions motivate the patient reflect upon so they take away the message a bit more holistically (GP)*
Approach to preventive education

There were three main approaches to providing preventive education:

A **tailored** approach adjusting to the needs and capacity of the patients (although not specifically to health literacy).

A **reinforcement** approach repeat and review preventive messages with the patients. *If you’re talking about people with low literacy you’ve got to do it in a repetitive manner for them to get it and take on that information on board (PN)*

A **compliance** approach tended to focus on importance of checking risk factors and compliance with guideline recommendations. *[To encourage lifestyle change] I check the sugar levels, check the weight, bodies, weight, see if you don’t follow the dietary plan yeah. (PN)*

These basic approaches did not change after the intervention.
Referral

Referral to other services was considered in the context of the GP or PN’s overall approach to preventive care. For example a number of reinforcement clinicians saw referral primarily as an opportunity to repeat messages. *I guess the people that I refer to do speak the languages I guess and um spend more time with them and I guess in a way reinforce what I say in a more specific way and can tell them exactly, and I think they do need that time for the information to sink in, the repetition..*(GP 2)

After the intervention some *tailored* clinicians recognised that those with poor health literacy required assistance in navigating the referral process. *I think if they have low literacy you’ll have to make the appointment for them I think that’s the best to help them, they will get confused, won’t remember, probably wont make the appointment but you make the appointment for them, this is when you got to go, where you got to go. (PN)*
Conclusions

• Clinicians varied in their approach to providing preventive care and this influenced their communication with patients with low health literacy.

• There is a need to recognise and tailor education and referral support to these different approaches.
Thank you

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