Hepatitis B awareness:
Identifying and addressing gaps and barriers in a high risk population with a focus on antenatal care

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Overview of presentation

- Results from previous study
- Current research: Focus on CHB only
- Aims and objectives
- Sample population: The Hmong community in North Queensland
- The role of the GP; HepB in antenatal care
- A theoretical framework
Previous study: Health-related quality of life (HRQoL) in people with CHB and CHC

- No significant difference overall... (Drazic & Caltabiano, 2011)

- CHC: linear decline over time
- CHB: HRQoL better for longer before declining more steeply

Stigma:
- Negative relationship with HRQoL...
- Impact is greater in CHC

*Figure 1. Change in HRQoL over time in people with CHB and CHC*
Table 1

Demographic Characteristics of the HepB and HepC Groups

<table>
<thead>
<tr>
<th></th>
<th>Chronic HepB</th>
<th>Chronic HepC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 20)</td>
<td>(N = 57)</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 40</td>
<td>M=39.1 (SD=10.41)</td>
<td>M=49.19 (SD=8.65)</td>
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<tr>
<td>40-54</td>
<td>12 (60%)</td>
<td>8 (14%)</td>
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<tr>
<td>55 and over</td>
<td>6 (30%)</td>
<td>36 (63.2%)</td>
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<tr>
<td>2 (10%)</td>
<td></td>
<td>13 (22.8%)</td>
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<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
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<tr>
<td>Asian</td>
<td>10 (50%)</td>
<td>1 (1.7%)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>5 (25%)</td>
<td>51 (89.5%)</td>
</tr>
<tr>
<td>Indigenous Australian</td>
<td>1 (5%)</td>
<td>2 (3.5%)</td>
</tr>
<tr>
<td>Other</td>
<td>4 (20%)</td>
<td>3 (5.3%)</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>10 (50%)</td>
<td>52 (91.2%)</td>
</tr>
<tr>
<td>Overseas</td>
<td>10 (50%)</td>
<td>5 (8.8%)</td>
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</tbody>
</table>

Main limitation to study:

Difficulty recruiting people with CHB
- CHB sample size too small, not representative
- Sample not normally distributed

(Drazic & Caltabiano, 2011)
Current study: Community based, HepB only

- Asian migrants and Indigenous Australians worst affected, more barriers
- Between one and two thirds are unaware of their infection (Chao, Chang, & So, 2009; Lin, Chang, & So, 2007)
- Only ~ 2.5% currently on antiviral treatment in Australia (Cowie, personal communication)
- Incidence of HCC rising in Australia (Williams et al., 2011)
- Late presentation, bad prognosis (Gellert et al., 2007)
Existing health promotion programs and initiatives

- **The B Positive Project**, community and health care provider education in NSW (Cancer Council, NSW)
- Many localised projects in U.S., e.g. Jade Ribbon Project; San Francisco Hep B Free; HepBFree Philly (Bailey et al., 2010; Yoo et al, 2011; Chao et al., 2009)
- **What did not work?**
  - Movie advertisement campaign ➔ no effect on awareness in young people (Gonzales et al., 2006)
  - Lay health worker visit initiative ➔ increase in knowledge but not in screening rate (Taylor, Hislop et al., 2009)
Current study: Community based and focus only on HepB

The basic aims are to:

- raise awareness and reduce the number of undetected and untreated cases of CHB in a high risk population;
- increase GP involvement in hepB detection and management; and
- optimize CHB-related ante- and postnatal care
Project overview

Whole project

Participant groups
- GPs
- Hmong community
- Mothers General Population

Phase 1
- Assessment of knowledge and current practice
- Pre-intervention assessment of hepatitis B knowledge, and health seeking behaviour
  → Participants who are not immunized, or diagnosed but not managed, move to Phase 2
- Assessment of hepatitis B-related antenatal experience

Phase 2
- Intervention (only when necessary)
- Interventions to increase intention to act (have a test or be immunized)
- Post-intervention assessment of intention to act
- Community screening program
The Hmong community living in Far North Queensland

All photos used with permission from V. Y. Chang, Hmong community, North Queensland
The Hmong community living in Far North Queensland

- Large community of 700-800 people in Cairns and Innisfail
- Studies in U.S. show that the Hmong are worst affected by CHB:
  - Highest incidence of HCC (Mills et al., 2005) and shortest survival time (Kwong et al. 2010)
  - 16.7% HBsAg positive and only 37.5% of these have a primary care physician (Sheikh et al., 2011)
- However, Hmong in Sydney have adapted well to Western health care; provider variables are most predictive (Wang, 2005)
The role of the primary health care provider

- “A first step to reducing the burden of hepatitis B is to improve the level of awareness among primary care doctors...” (First National Hepatitis B Strategy, 2010, p. 25)

- GPs can play a major role in early detection and management of CHB

- Low hepatitis B knowledge and awareness in GPs (Ferrante et al., 2008; Hutton et al., 2011; Hwang et al., 2010; Khaliki et al., 2011)

- Similar findings in Australia (Dev et al., 2011; Williams et al., 2011)

- Online and print resources are available:
  - B Positive Monograph (Matthews & Robotin, 2008; Tipper & Penman, 2009)
  - HepBHelp.org.au website
20. Please indicate your level of awareness of the following types of educational material and resources about hepatitis B

- Government guidelines on management of hepatitis B
- [HepBHelp.org.au](http://HepBHelp.org.au) website
- B Positive: All you wanted to know about hepatitis B - a guide for primary care providers (A5 size monologue)
- Resources from ASHM (Australasian Society for HIV Medicine) website
- Print resources from Hepatitis Queensland
- Online resources from Hepatitis Queensland
- Other hepatitis council websites
- National Hepatitis B Alliance website

Please list other hepatitis B resources you may have consulted
21. Which types of information/education do you generally prefer?

<table>
<thead>
<tr>
<th>Options</th>
<th>Hate it, never consult or attend</th>
<th>Can be useful, but rarely consult/attend</th>
<th>Like it, consult or attend when convenient</th>
<th>My favourite, best way to learn what I need to know</th>
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<tbody>
<tr>
<td>Online tutorial</td>
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<td>Printed material</td>
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<td>Quality website</td>
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<td>Workshop</td>
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<td>Conference</td>
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<tr>
<td>Contact local specialist</td>
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Is there another way you would like to learn about hepatitis B?
Taking advantage of the antenatal context

- High HBsAg prevalence in women of reproductive age (Gambarin-Gelwan, 2007)
- Women get little information about hepB when screened
- Mother tests positive for HBsAg: focus is on protecting the baby, whereas ongoing care for the mother is often neglected (Guirgis et al., 2009)
- Missed opportunities for initiating discussion/including family members/ensuring follow-up

Based on behavioural theory: The Health Behaviour Framework (HBF) (Bastani et al., 2007)

- Theoretical/conceptual framework is important
- The HBF is a synthesis of traditional health promotion models:
  - the health belief model
  - theory of reasoned action and planned behaviour
  - social cognitive theory, and
  - social influence theory
Health Behaviour Framework (HBF): Constructs adapted for Hepatitis B
(Bastani et al., 2005; Maxwell et al, 2010)

- Knowledge
- Communication with health care provider
- Communication with others
- Health beliefs (based on health belief model)
- Social norms
- Social support
- Family history
- Cultural factors
- Barriers
- Intentions
Medical-Social Self-Efficacy

- Additional construct neglected in HBF
- Scale to assess self-efficacy (confidence) in dealing with health care professionals, particularly GPs (Caltabiano, unpublished)
- Developed for CALD populations
- Additional questions specific to CHB
Phase 2

- Educational intervention based on results from Phase 1 (likely involving narrative communication)
- Post-intervention assessment of knowledge, self-efficacy, intention to take action etc.
- Community screening program
References


References


