

# Hepatitis B awareness:

Identifying and addressing gaps and barriers  
in a high risk population with a focus on  
antenatal care

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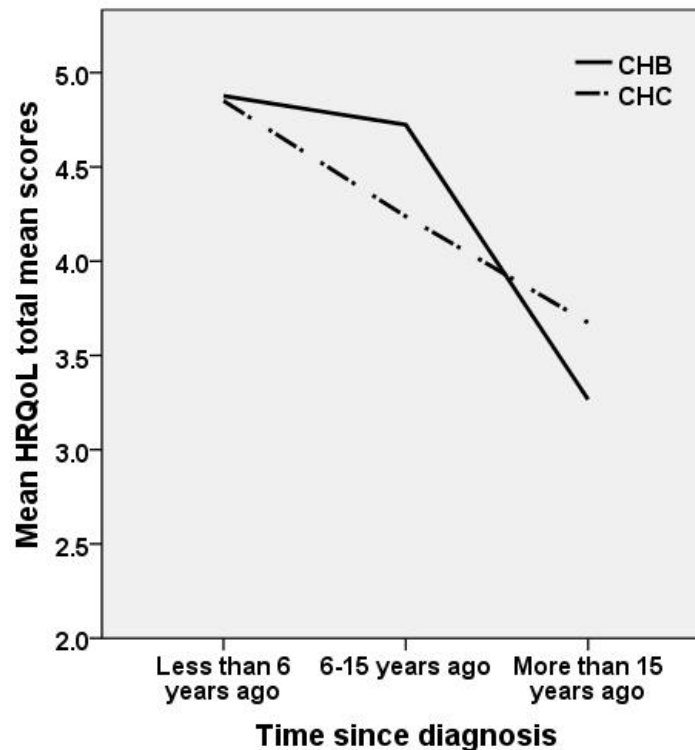
A/Prof Alan R. Clough

# 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)



but...

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

Stigma:

- Negative relationship with HRQoL...

but...

- Impact is greater in CHC

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

# Previous study: Problems with sample

**Table 1**  
*Demographic Characteristics of the HepB and HepC Groups*

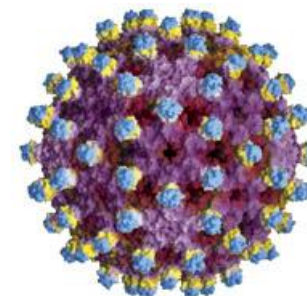
	<b>Chronic HepB (N = 20)</b>	<b>Chronic HepC (N = 57)</b>
<i>Age (years)</i>	<i>M=39.1 (SD=10.41)</i>	<i>M=49.19 (SD=8.65)</i>
Under 40	<b>12 (60%)</b>	8 (14%)
40-54	6 (30%)	<b>36 (63.2%)</b>
55 and over	2 (10%)	13 (22.8%)
<i>Ethnicity</i>		
Asian	<b>10 (50%)</b>	1 (1.7%)
Caucasian	5 (25%)	<b>51 (89.5%)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

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

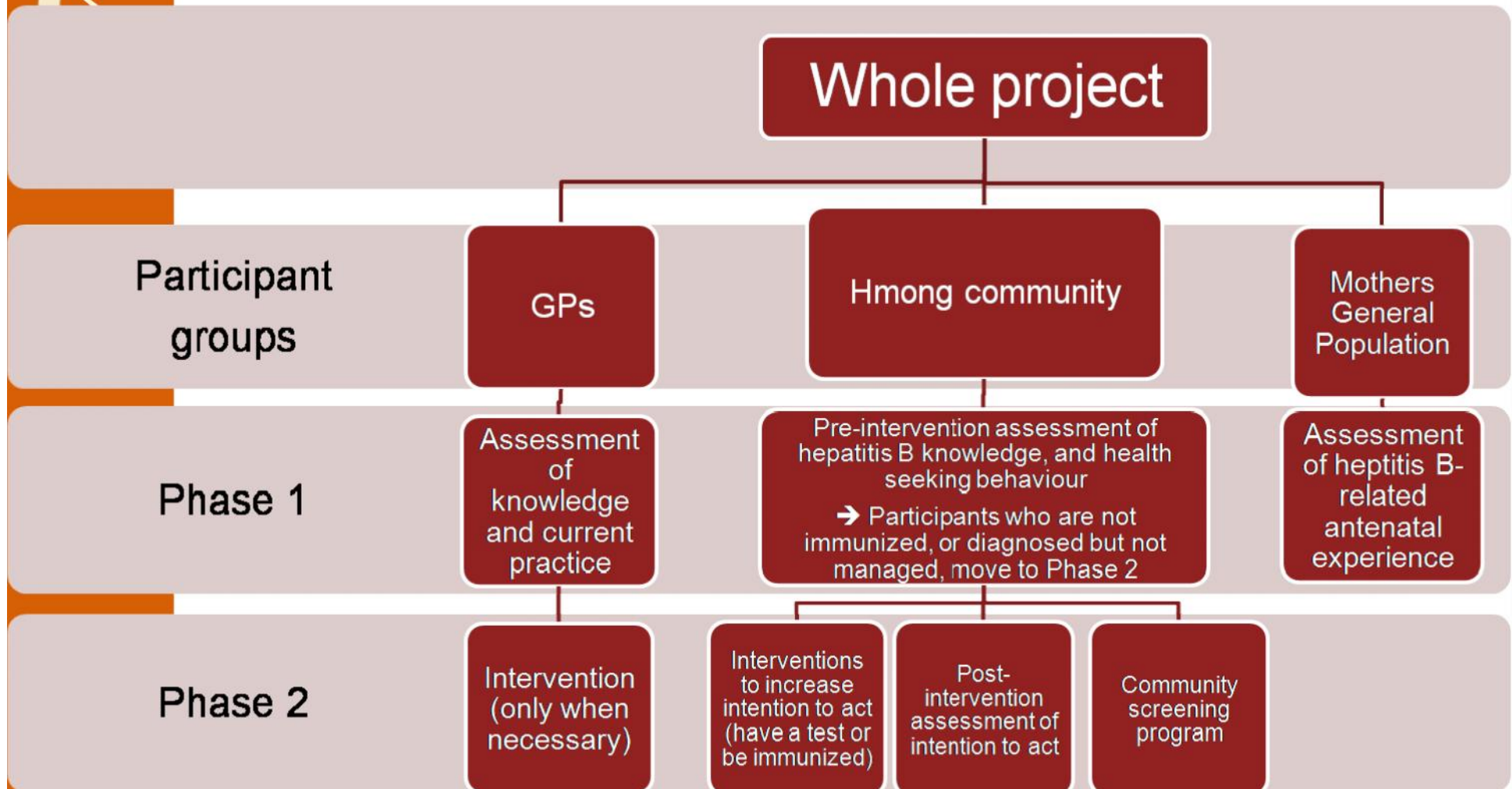


The basic aims are to:

- 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





# 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**

	Never heard of it	Heard of but not consulted	Consulted but found unhelpful	Consulted and found helpful	Consulting regularly
Government guidelines on management of hepatitis B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<a href="http://HepBHelp.org.au">HepBHelp.org.au</a> website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B Positive: All you wanted to know about hepatitis B - a guide for primary care providers (A5 size monologue)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Resources from ASHM (Australasian Society for HIV Medicine) website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Print resources from Hepatitis Queensland	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online resources from Hepatitis Queensland	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other hepatitis council websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National Hepatitis B Alliance website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please list other hepatitis B resources you may have consulted

## 21. Which types of information/education do you generally prefer?

	Hate it, never consult or attend	Can be useful, but rarely consult/attend	Like it, consult or attend when convenient	My favourite, best way to learn what I need to know
Online tutorial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Printed material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Webinar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contact local specialist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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



<http://www.youthincharge.org/2010/12/hepatitis-b-psa-poster-2-hmong/>

# 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

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