

# Developing a Community Focused Hepatitis B Nursing Model of Care in Inner West Sydney



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## Background and Aims

Inner West Sydney has an ethnically diverse community. It has a high hepatitis B prevalence and a high liver cancer incidence. To improve health outcomes for people living with hepatitis B and support best practice care we developed a new community focused Hepatitis B Nursing Model of Care. This study evaluates the community based clinic component of the model of care.

## Methods

This study has two parts. The first part was a quantitative study where patients were assessed and educated by a CHB nurse in a community clinic. With supervision from a hepatologist a care plan was developed for every patient. Patients were either triaged into liver clinic, back to a nurse for further follow up or back to GP. Demographic and clinical details were collected from care plans. The second part consisted of a qualitative study where patients were invited to partake in a survey. Data was collected in Excel and SPSS. Analysis was conducted using Excel and SPSS.

## Results

- Between November 2012 and June 2014, 66 people were referred or self presented to the clinic to have their hepatitis B status assessed.
- 40 (70%) were referred from GPs, 12 (18%) were self referrals, 6 (9%) were referred from Non-Government Refugee Services and 2 (3%) from Antenatal services.
- 33 males and 33 females attended
- 24 (36%) of the patients were born in Vietnam; 20 (30%) were born in China and 13 (20%) were born in Korea or other SE Asian country. Of the 4 born in Australia, 1 was Aboriginal. 2 people were from a Pacific Island and 2 from Africa.
- No patients were in immune tolerance phase, 4 (6%) were in immune clearance, 45 (68%) were in the immune control phase of the disease and 7 (11%) patients were in immune escape phase. 9 (15%) did not have CHB but attended for HBV screening and/or education
- 39 (70%) of the 56 patients who were HBsAg positive have had a fibroscan. Scores ranged from 2.9 to 16.9 kPa (median 4.8 kPa). Only 3 patients had scores greater than 7 kPa. One patient had a score of 16.8 kPa.
- 11 (17%) patients needed referral and have attended hospital based liver clinic.
- 6 (9%) patients have commenced treatment (1 PEG-IFN), 1 remains under observation and 1 is pending.
- 24 (36%) met the AASLD criteria for requiring HCC screening.

### Patient Survey

- Eleven (20%) patients returned the survey.
- All reported they had enough time to discuss their hepatitis B with the nurse and were treated with respect.
- 9 (82%) rated their experience at the clinic as very good, 1 as good and 1 was unsure.

- All reported they would recommend the clinic to someone they knew with CHB (7 (64%) extremely likely; 4 likely to recommend).
- All reported if they needed future care they would be willing to attend a hospital based liver clinic as well as a GP for further management.
- When asked to give their opinion on why people with hepatitis B may not have regular blood tests, treatment and regular follow up, all participants chose lack of knowledge as the main reason.
- One participant responded being too busy could also be a reason for not having regular testing. No one identified language/translation difficulties or having other personal problems.

**Table 1:** Demographic Data and Phase of Disease of 66 Patients attending CHB nurse clinic November 2012-May 2014

	HBV Phase or Status**				Totals
	Clearance	Control	Escape	Not CHB*	
Age in years					
<20years	0	1	0	0	1
>21-39	3	18	0	3	24 (36%)
>40-49	1	12	3	2	18 (27%)
>50-69	0	12	4	4	20 (30%)
>70	0	2	0	1	3
<b>Total</b>	<b>4(6%)</b>	<b>45 (68%)</b>	<b>7(11%)</b>	<b>10(15%)</b>	<b>66</b>
Gender					
Male	1	20	6	6	33 (50%)
Female	3	25	1	4	33
<b>Total</b>	<b>4</b>	<b>45</b>	<b>7</b>	<b>10</b>	<b>66</b>
COB or Ethnicity					
Vietnam	2	17	4	1	24 (36%)
China	2	14	2	2	20 (30%)
Korea	0	3	0	4	7 (11%)
other SEA	0	4	1	1	6
Pacific Islander	0	2	0	0	2
African	0	2	0	0	2
Australia***	0	3	0	1	4
Missing	0	0	0	1	1
<b>Total</b>	<b>4</b>	<b>45</b>	<b>7</b>	<b>10</b>	<b>66</b>
Reference source					
Viet GP	2	11	2	1	16 (24%)
Other GP	2	22	5	0	24 (36%)
Refugee NGO#	0	4	0	2	6
Antenatal	0	2	0	0	2
Self	0	6	0	6	12
<b>Total</b>	<b>4 (6%)</b>	<b>45 (68%)</b>	<b>7 (11%)</b>	<b>10 (15%)</b>	<b>66</b>

\*Patients in this group either: previous HBV infection, attended for screening/vaccination or/and education, 1 acute HBV (subsequently cleared HBV).

\*\*based on DHF (GESA Recommendations)

\*\*\*1 Aboriginal

\*\*\*\*Non Government Organisation

## Conclusion

Our results show a CHB community based clinic can be conducted safely and is well supported by the patients, RPAH Hepatologists, Community Health and the Medicare Local. Patients with active disease were identified and referred, 6 have commenced antiviral treatment, and 24 were enrolled in HCC surveillance. The CHB nurse was also able to support GPs in their management of patients. This CHB nurse community clinic aligns with strategies/actions identified in the Second National HBV Strategy and our local Strategies. We plan to do further research on other strategies to increase case identification, improve best practice management, maintain patients in HCC surveillance, and improve the linkages between GPs, tertiary liver clinics and patients.