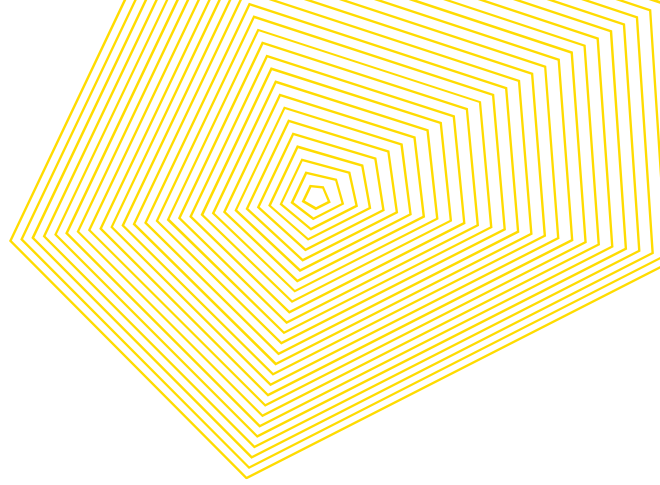




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Stigma Indicators: Vietnamese and Chinese General Community and hepatitis B related knowledge, attitudes and health seeking behaviour.

Prepared for: Australian Government Department of Health

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1. Project background

The main aim of this project was to explore the knowledge, attitudes, and understanding of hepatitis B virus among migrant populations living in Australia. Chinese and Vietnamese migrant communities were chosen because hepatitis B prevalence is high among these groups.

Literature shows that China has the highest number of hepatitis B infections worldwide with 90 million people reported to be living with hepatitis B in 2015 (Cui & Zhuang, 2016). There are approximately 509,555 China-born people in Australia (ABS, 2016). Hence, Chinese-born people living in Australia are a key at-risk group, comprising 2.2% of the total population with over 27% of the group currently living with hepatitis B (MacLachlan & Cowie, 2018). Similarly, liver cancer is the most common type of cancer in Vietnam (14.5%) (Quy, 2021). There are over 250,000 Vietnamese-born people living in Australia placing Vietnamese-born people living in Australia at high risk (ABS, 2019). In Australia, most people diagnosed with hepatitis B are from Vietnam (Cowie, 2011).

Findings of this study will thus assist us in highlighting and understanding factors that could connect hepatitis B prevention, testing, and treatment programs with priority communities in Australia.

The research in this report forms part of a larger research project measuring experiences of stigma among priority groups impacted by blood borne viruses and sexually transmissible infections (Broadly et al., 2018). The broader study aims to develop a suite of measures to monitor stigma among priority populations in Australia, as identified in the five Australian national strategies focussing on HIV, viral hepatitis, and sexually transmissible infections (Australian Government Department of Health, 2018a, 2018b, 2018c, 2018d, 2018e). This is the first survey which targets hepatitis B as part of this broader research.

2. Method

Data was collected using both hard copy and online surveys, the latter of which were administered through Qualtrics. LiverWELL (Victoria), Hepatitis NSW, Hepatitis SA, and the Ethnic Communities Council of QLD (ECCQ) assisted in recruitment in these four states. Hard copies of the surveys were distributed to these four organisations, who facilitated recruitment at community events and subsequently returned the completed surveys. In addition, online recruitment was undertaken nationally via social media. The online survey was advertised via targeted social media sites by researchers of Vietnamese and Chinese background. In both the online and face-to-face recruitment, participants had the choice of completing the survey in traditional or simplified Chinese, Vietnamese, or English. For hard copy surveys, researchers of Chinese/Vietnamese background performed the data entry into Qualtrics, then all data was exported to SPSS and combined into single datasets. The surveys took approximately 15-20 minutes to complete. Participants were reimbursed with an AUD \$15 voucher as a reimbursement for participating in the study. The research had ethics approval from the UNSW Human Research Ethics Committee.

3. Survey items

The survey included questions that aimed to assess knowledge of hepatitis B and health seeking behaviours around hepatitis B. Participants were asked questions about their feelings, beliefs, and knowledge around hepatitis B as well as information around testing, vaccination status, and health seeking behaviour. Demographic data and connection to their community were also collected.

Connection to community

The survey included two items assessing connection with and feelings towards the Vietnamese or Chinese community: “How much do you interact with the Vietnamese or Chinese community?” and “How much do you feel you have in common with the Chinese or Vietnamese community?”. The response options for these questions were provided on a 4-point scale ranging from not much (1) to quite a lot (4).

Attitudes towards Hepatitis B

Two items assessed experiences of stigma or discrimination in relation to hepatitis B. Participants who were living with hepatitis B responded to an indicator of stigma in relation to their hepatitis B (Broady et al., 2018): “In the last 12 months, to what extent have you experienced any stigma or discrimination (e.g., avoidance, pity, blame, shame, rejection, verbal abuse, bullying) in relation to your hepatitis B?”. Participants who were not living with hepatitis B answered a hypothetical version of the stigma indicator, i.e., “If you had hepatitis B, do you think you would experience stigma or discrimination (e.g., avoidance, pity, blame, shame, rejection, verbal abuse, bullying) in relation to your hepatitis B?”. The response options for these questions were on a 5-point scale ranging from never (1) to always (5).

In addition, eight items were included that measured participants attitudes towards people living with hepatitis B, for example, “People who have hepatitis B should minimise their participation in public activities” or “People who have hepatitis B deserve it”. The response options for these questions were on a 5-point scale ranging from never (1) to always (5)..

Testing for hepatitis B

The survey included an item that asked participants if they had ever been tested for hepatitis B. The response options for this question were “yes”, “no”, or “unsure”.

Trust in Western healthcare

Seven items relating to participants’ trust in Western healthcare were included in the survey. Items included, “I believe that using pharmaceutical medicine to treat hepatitis B has more negative side effects than using traditional Chinese medicine” and “I am suspicious of information about hepatitis B from Western-trained doctors and healthcare workers”. Responses were given on a five-point scale from “strongly disagree” (1) to “strongly agree” (5).

Level of knowledge about hepatitis B

Knowledge of hepatitis B, including transmission routes, was measured using 30 items. For example, “Hepatitis B cannot be transmitted by someone who looks and feels healthy” and “Hepatitis B is caused by contaminated food/water or utensils”. Participants had the option of a “false”, “true” or “unsure” response.

4. Data Analysis

Quantitative analyses were conducted using IBM SPSS version 26. Descriptive data outlining the socio-demographic characteristics of the sample and their beliefs, attitudes, and feelings about hepatitis B are presented. Socio-demographic characteristics are also analysed comparing online survey responses to hard copy survey responses due to the vast number of online surveys in the Vietnamese sample. Valid percentages are reported for all data as some participants chose to skip some questions.

5. Results for the Vietnamese Community

5.1 Demographics

The Vietnamese sample consisted of 966 adults. There were 397 (41.5%) males and 544(56.9%) females. More than three-quarters of the total sample (n=742, 77.0%) were born in Vietnam. Among those who completed the hard copy survey, 272 (90.1%) participants reported being born in Vietnam whereas among those who completed the survey online, 470 (71.0%) participants reported being born in Vietnam. The average age among those participants who completed the online survey was 31 compared to a mean of 50 years of age among those who completed the hard copy survey.

Of the total sample, 88.5% (n=835) identified as heterosexual and more than half reported that they were married (n=533, 55.9%). Participants were recruited primarily from the states of Victoria (n=393, 40.9%), South Australia (n=181, 18.1%), New South Wales (n=169, 17.6%) and Queensland (n=161, 16.8%). With regard to highest level of education attained, over one-third of the sample had an undergraduate degree (n=334, 35.0%), followed by a diploma/trade certificate (n=202, 21.2%). Those who completed the survey online had, on the whole, attained higher levels of education than those who completed the hard copy survey. Just less than half of the total sample reported to be employed in full time work (n=459, 47.2%) with only 3.2% (n=31) being unemployed. Full time work was higher among those who completed the online survey, with government benefits, unemployed, retired and housekeeping higher among those who completed the hard copy survey.

Only six participants (0.6%) reported that they did not speak Vietnamese, while the majority (n=7674, 70.2%) reported speaking Vietnamese at home with everyone. This figure was higher among those who completed the hard copy survey, with 277 participants (93.0%) reporting to speak Vietnamese most frequently at home. Three-quarters of the total sample (n=718, 75.3%) reported being proficient/very proficient in English, however, among those who completed the hard copy survey, 125 participants (42.8%) reported that they were not proficient or not proficient at all in English as compared to 85 participants (12.9%) who completed the survey online. See Table 1 for more socio-demographic information.

Table 1: Socio-demographic comparisons for online and hard copy surveys for Vietnamese sample (N=966)

	Online surveys n (%) n=663	Hard copy surveys n (%) n=303	Total number of surveys n (%) n=966
Where were you born?			
Vietnam	470 (71.0)	272 (90.1)	742 (77.0)
Australia	190 (28.7)	28 (9.3)	218 (22.6)
Other	2 (0.3)	2 (0.7)	4 (.4)
Current gender identity			
Female	370 (56.0)	174 (59)	544 (56.9)
Male	279 (42.2)	118 (40)	397 (41.5)
Non-binary	1 (0.2)	0 (0)	1 (0.1)
I use a different term	1 (0.2)	0 (0)	1 (0.1)

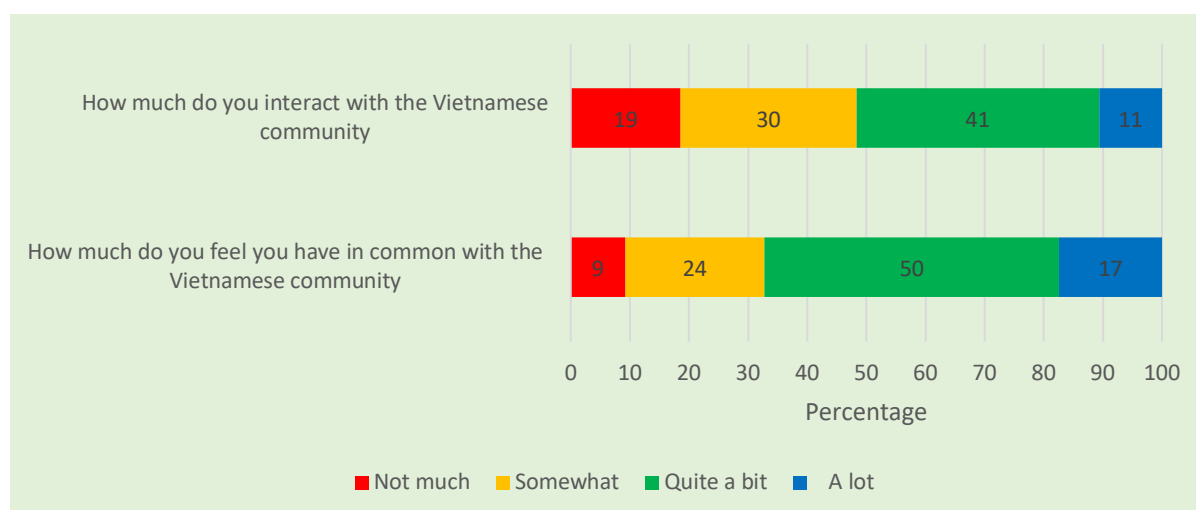
I prefer not to answer	10 (1.5)	3 (1.0)	13 (1.4)
Sex assigned at birth			
Female	373 (56.3)	174 (59.4)	547 (57.5)
Male	278 (42.2)	117 (39.9)	395 (41.5)
Prefer not to answer	8 (1.2)	2 (0.7)	10 (1.1)
Age			
Mean (SD) (Range)	30.7 (6.82) (18-65)	49.5 (14.85) (19-90)	36 (13.2) (18-90)
Sexuality			
Heterosexual	574 (87.0)	261 (91.9)	835 (88.5)
Gay/Lesbian/Queer	43 (6.5)	6 (2.1)	49 (5.2)
Bisexual/pansexual	19 (2.9)	2 (0.7)	21 (2.2)
Prefer not to answer	24 (3.6)	15 (5.3)	39 (4.1)
Variation of sex characteristics at			
No	628 (95.3)	270 (93.1)	898 (94.6)
Yes	3 (0.5)	3 (1.0)	6 (0.6)
Don't know	12 (1.8)	7 (2.4)	19 (2.0)
Prefer not to answer	16 (2.4)	10 (3.4)	26 (2.7)
Highest level of education			
Undergraduate university	264 (39.9)	70 (24.0)	334 (35.0)
Diploma/Trade certificate	134 (20.3)	68 (23.3)	202 (21.2)
Postgraduate university	145 (21.9)	15 (5.1)	160 (16.8)
Years 11-12	103 (15.6)	92 (31.5)	195 (20.5)
Years 7-10	15 (2.3)	36 (12.3)	51 (5.4)
Years 1- 6	0 (0)	11 (3.8)	11 (1.2)
Employee status in past 3 months			
Full time	354 (53.6)	105 (34.7)	459 (47.2)
Part time/casual	130 (19.7)	67 (22.1)	197 (20.3)
Part time/casual and studying	98 (14.8)	13 (4.3)	111 (11.4)
Full time studying	48 (7.3)	6 (2.0)	54 (5.6)
Government benefits	3 (0.5)	39 (12.9)	42 (4.3)
Unemployed	8 (1.2)	23 (7.6)	31 (3.2)
Housekeeping	17 (2.6)	20 (6.6)	37 (3.8)
Retired	3 (0.5)	38 (12.5)	41 (4.2)
Marital status			
Married	343 (51.9)	190 (64.8)	533 (55.9)
No relationship	213 (32.2)	67 (22.9)	280 (29.4)
De facto/steady partner	78 (11.8)	7 (2.4)	85 (8.9)
Separated/divorced	13 (2.0)	15 (5.1)	28 (2.9)
Widowed	1 (0.2)	10 (3.4)	11 (1.2)
Where do you live			
Victoria	293 (44.3)	100 (33.4)	393 (40.9)
South Australia	81 (12.3)	100 (33.4)	181 (18.9)
New South Wales	169 (25.6)	0 (0)	169 (17.6)
Queensland	63 (9.5)	98 (32.8)	161 (16.8)
Tasmania	28 (4.2)	0 (0)	28 (2.9)
Australian Capital Territory	7 (1.1)	1 (0.3)	8 (0.8)
Northern Territory	11 (1.7)	0 (0)	11 (1.1)
Western Australia	9 (1.4)	0 (0)	9 (0.9)
Can you speak Vietnamese?			

Yes	653 (99.1)	302 (100)	955 (99.4)
Language spoken most at home			
English	299 (45.2)	19 (6.5)	318 (33.3)
Vietnamese	357 (54.0)	273 (93.2)	630 (66.0)
Other/ prefer not to answer	5 (0.9)	1 (0.3)	5 (0.5)
Do you speak Vietnamese at home?			
Yes, all the time with everyone	397 (60.0)	277 (93.0)	674 (70.2)
Yes, with my parents only	257 (38.8)	19 (6.4)	276 (28.7)
No	8 (1.2)	2 (0.7)	10 (1.0)
Proficiency in speaking English			
Proficient	413 (62.5)	116 (39.7)	529 (55.5)
Very proficient	150 (22.7)	39 (13.4)	189 (19.8)
Not proficient	72 (10.9)	113 (38.7)	185 (19.4)
Not proficient all	13 (2.0)	12 (4.1)	25 (2.6)
Can't say	0 (0)	5 (1.7)	5 (0.5)
Prefer not to answer	13 (2.0)	7 (2.4)	20 (2.1)

5.2 Community connection

Most of the sample reported feeling some connection with the Vietnamese community, with more than two-thirds (n=637, 67.2%) reporting they have ‘quite a bit’ / ‘a lot’ in common with the Vietnamese community. In addition, 81.4% (n=773) of the sample reported having some interaction with the Vietnamese, however, only 10.6% (n=101) reported that they have a lot of interaction with the Vietnamese community. See Figure 1 more details on community connection.

Figure 1: Connection with Vietnamese community



5.3 Knowing someone living with hepatitis B and receiving information

More than 90% (n=872) of the sample had received some form of information on hepatitis B. The most common source was via the internet (n=567, 58.7%), followed by friends/colleagues (n=364,

37.7%), and newspapers/magazines (n=329, 34.1%). More than one-third of the sample (n=347, 36.4%) reported personally knowing someone who has hepatitis B (see Table 2 for more details). Of the 742 participants who were born in Vietnam, 258 (35.2%) reported to personally know someone with hepatitis B and a further 135 participants (18.4%) were not sure if they knew someone with hepatitis B. This can be compared with the 218 participants who were born in Australia, of which 87 (40.3%) reported to personally know someone with hepatitis B and a further 21 (9.7%) were unsure.

Table 2: Knowing someone with hepatitis B and receiving information for Vietnamese sample (N=966)

Received information about hepatitis B from the following sources *	Total sample n (%) n=966
Internet	567 (58.7)
Friends/colleagues	364 (37.7)
Newspapers/magazines	329 (34.1)
Community organisations	312 (32.3)
Family	301 (31.2)
TV/radio	273 (28.3)
GP	251 (26.0)
Specialists	175 (18.1)
Hepatitis information line	210 (21.7)
Never received information	94 (9.7)
Do you personally know anyone with hepatitis B	
No	432 (45.3)
Yes	347 (36.4)
Not sure	157 (16.5)
Prefer not to answer	17 (1.8)

* Items were not mutually exclusive

5.4 Testing for hepatitis B

Just under two-thirds (n=614, 64.3%) of the sample reporting ever being tested for hepatitis B. Testing was higher among those participants who completed the survey online with 483 participants (73.1%) reporting having ever been tested, compared with 131 participants (44.6%) of those who completed the hard copy survey. Of the 742 participants who were born in Vietnam, 454 (61.7%) reported to have tested for hepatitis B as compared with 158 participants (73.8%) of those born in Australia. The main reason given for testing was that it was part of regular health check (n=259, 42.2%), with the most commonly reported location for testing being at a clinic or hospital (n=249, 40.8%). Just under three-quarters of the sample (n=446, 73.2%) reported being either satisfied or very satisfied with the information they were given about hepatitis B at the time of testing. Among the 203 participants (21.3%) who reported not having ever been tested for hepatitis B, the main reason given was they were feeling quite well and did not think testing to be necessary. Of those who were unsure if they had tested (n=138, 14.5%), the main reason given for not testing was again the same response. See Table 3 for more information on testing for hepatitis B.

Table 3: Information on testing for hepatitis B for Vietnamese sample (N=966)

Do you recall having ever been tested for Hepatitis B	Total sample n(%) n=966
Yes	614 (64.3)
No	203 (21.3)
Not sure	138 (14.5)
What made you decide to get tested for hepatitis B	n=614
Part of regular health check	259 (42.2)
Travel or immigration purposes	191 (31.1)
Doctor recommended	185(30.1)
I learned about hepatitis B on the Internet/social media	180 (29.3)
I learned about hepatitis B in newspaper/TV/radio/printed ad	148 (24.1)
Work requirement	142 (23.1)
School/university requirement	142 (23.1)
Family member/friend suggested	136(22.1)
I know someone who has hepatitis B	131 (21.3)
Part of pregnancy screening	99(16.1)
Last place of testing for hepatitis B	n=614
Clinic or hospital	249 (40.8)
Health check centre	146 (23.9)
Doctor's office	130 (21.3)
Workplace/University/school	40 (6.6)
Screening event	23 (3.8)
Don't remember	20 (3.3)
Were you satisfied with the information about hepatitis B given to you	n=613
Satisfied	273 (44.8)
Very satisfied	173 (28.4)
Neutral	130 (21.3)
Dissatisfied	9 (1.5)
Received no information	24 (3.9)
Reasons for not having been tested for hepatitis B *	n=203
I am feeling quite well and don't think testing is necessary	97 (47.9)
I don't know much about the testing	86 (42.4)
I am afraid of having a test	38 (18.7)
The test is too expensive	27 (13.3)
Doctor says I don't need to be tested	25 (12.3)
The test takes too long	25 (12.3)
I don't trust the test or doctor	21 (10.3)
Of those who were unsure if they had tested – reason given for not	n=138
I am feeling quite well and don't think testing is necessary	62 (44.9)
I don't know much about the testing	51 (37.0)
I am afraid of having a test	30 (21.7)

* Items were not mutually exclusive

5.5 Hepatitis B vaccination

More than half of the total sample reported being vaccinated for hepatitis B (n=597, 62.8%), however, this proportion was higher among those participants who completed the survey online with 491 participants (74.4%) reporting to be vaccinated for hepatitis B as compared with 106 participants (36.6%) of the sample who completed the hard copy survey. Of the 742 participants who were born in Vietnam, 427 (58.3%) reported to have received the vaccination for hepatitis B as compared with 167 participants (78.4%) of the 218 participants born in Australia. Of those participants who reported being vaccinated (n=597), 83.5% (n=497) had completed the full course of vaccination. Just over half of the sample (n=322, 53.9%) received their vaccinations in Australia. Of the 427 participants who were born in Vietnam and had received the hepatitis B vaccination, 179 (41.9%) reported to have received their hepatitis B vaccinations in Australia. The main reason given for not completing the full vaccination schedule was that they forgot the doses. See Table 4 for more information on vaccinations.

Table 4: Information on hepatitis B vaccination for Vietnamese sample (N=966)

Have you ever had hepatitis B vaccination	Total sample n(%) n=966
Yes	597 (62.8)
No	186 (19.6)
Not sure	167 (17.6)
Did you complete the full course of vaccination	n=597
Yes	497 (83.5)
No	44 (7.4)
Not sure	48 (8.1)
Prefer not to answer	6 (1.0)
Where did you get the vaccine	n=597
Australia	322(53.9)
Vietnam	212 (35.5)
Reasons for not completing full vaccination schedule	n=44
Forgot doses	19 (43.2)
No time	13 (29.5)
Unaware of how many doses	10 (22.7)
Parents did not know how many doses	11 (25.0)
Too expensive	10 (22.7)
Parents forgot	8 (18.2)
Not Important	8 (18.2)
Not sure	1 (2.3)
Prefer not to answer	1(2.3)

5.6 Health seeking behaviour for hepatitis B

Only 3.5% of the total sample (n=33) reported to be living with hepatitis B, this proportion was higher among those who completed the hard copy survey with 15 participants (5.1%) reporting having hepatitis B compared with 18 participants (2.7%) who completed the survey online. In addition, 118 participants (12.4%) responded that they were 'not sure' whether they have hepatitis

B. This figure was higher among those who completed the hard copy survey with 90 participants (30.7%) reporting they were unsure of their hepatitis B status as compared with 28 participants (4.2%) who completed the survey online. Of the 742 participants who were born in Vietnam, 28 participants (3.8%) reported to be living with hepatitis B as compared with 5 (2.3%) of the 218 participants born in Australia.

Of those participants living with hepatitis B (n=33), 28 (84.8%) were born in Vietnam and 5 (15.2%) were born in Australia. When asked about their health seeking behaviour, 16 (48.5%) of them reported to see their GP/specialist every 6-12 months for monitoring of their hepatitis B and less than half of them (n=14, 42.4%) were advised by their doctors to take medication for their hepatitis B. Most of the doctors/specialists who were seen for monitoring/treatment of hepatitis B spoke both English and Vietnamese (n=21, 63.6%). See table 5 for more details.

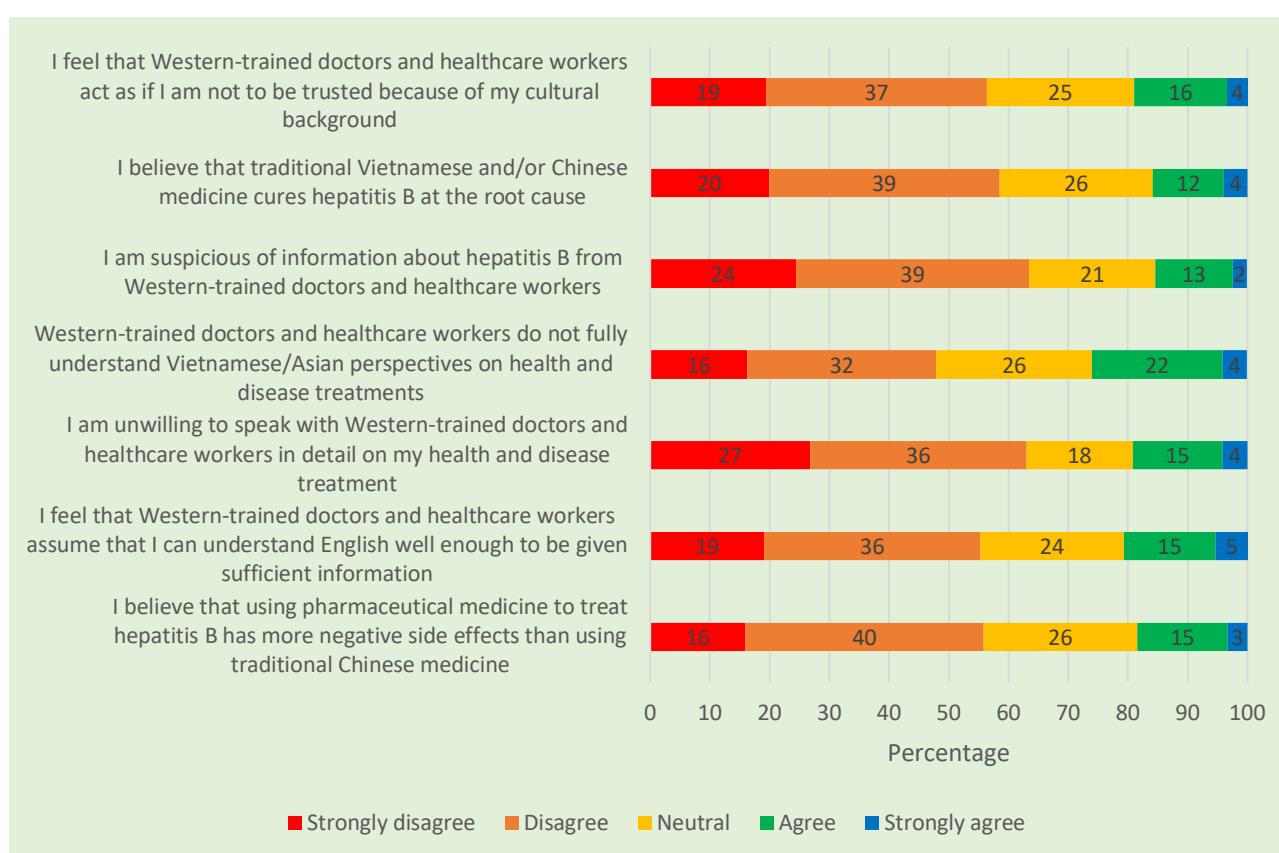
Table 5: Health seeking behaviours for Vietnamese sample (N=966)

Do you have hepatitis B	Total sample n=966
No	788 (82.7)
Yes	33 (3.5)
Not sure	118 (12.4)
Prefer not to answer	14 (1.5)
How often do you visit GP/Specialist for monitoring/treatment of hepatitis B	n=33
Every 1-2 years	6 (18.2)
Every 6-12 months	16 (48.5)
Every 1-6 months	10 (30.3)
Prefer not to answer	1 (3.0)
Language spoken by specialist/GP	n=33
English and Vietnamese speaking	21 (63.6)
English speaking only	10 (30.3)
Vietnamese speaking only	1 (3.0)
Prefer not to answer	1 (3.0)
Did your doctor (GP)/specialist advise you to take medication for hepatitis B	n=33
Yes	14 (42.4)
No	19 (57.6)
What kind of medicines did your doctor (GP)/specialist advise you to take	n=14
Pharmaceutical medicines	14 (100)
Traditional Vietnamese/Chinese medicines	0
Pharmaceutical medicines and traditional Vietnamese/Chinese medicines	0
Has there been a time when you haven't taken the pharmaceutical medicine prescribed by your doctor for hepatitis B?	n=14
Yes	4 (28.6)
Reasons for not taking the pharmaceutical medicines prescribed *	n=4
Feel healthy	1 (25.0)
Side effects	2 (50.0)
Want other therapies	1 (25.0)
Can manage lifestyle	2 (50.0)
Unsatisfied with info and services	1 (25.0)

5.7 Trust in Western healthcare

Participants were asked statements about their trust in Western healthcare, focusing on their beliefs and feelings towards Western medicine versus traditional Vietnamese/Chinese medicine. 145 participants (15.3%) reported being suspicious of information about hepatitis B from Western-trained doctors and/or healthcare workers, with 174 participants (18.4%) agreeing or strongly agreeing that using pharmaceutical medicine to treat hepatitis B has more negative side effects than using traditional Vietnamese and/or traditional Chinese medicine. Further, 150 participants (15.8%) agreed or strongly agreed that traditional Vietnamese and/or Chinese medicine cures hepatitis B at the root cause. In addition, 182 participants (19.2%) reported being unwilling to speak with Western-trained doctors and healthcare workers in detail on their health and disease treatment. See Figure 2 more details on trust in Western healthcare.

Figure 2: Trust in Western healthcare (n=966)



5.8 Attitudes towards hepatitis B

Participants living with hepatitis B were asked questions around disclosure of their positive status. Among the 33 people living with hepatitis B, 29 (87.9%) had told their immediate family, 26 (78.8%) had told their doctor/specialist and only 22 (66.7%) had told their sexual/intimate partner. The main concern around telling/not telling someone they had hepatitis B was worry about being isolated (other people would avoid close contact with them) (n=12, 36.4%). Interestingly, when the rest of the sample (those who reported not to be living with hepatitis B) was asked the following question, “*Imagine that there was a Vietnamese immigrant with hepatitis B living in Australia.*

When this person decided to tell someone or keep it to himself/herself, what would he/she be worried about”, the main reason given was also fear of being isolated (n=480, 52.2%) followed by fear of failure in permanent resident visa application (n=437, 47.5%) and fear of rejection when applying for new jobs (n=387, 42.1%). See Table 6 and table 7 for more details.

Table 6: Disclosure of hepatitis B among Vietnamese people living with hepatitis B (N=33)

If you have hepatitis B, who have you told about your hepatitis B *	n=33
Immediate family	29 (87.9)
Doctors (GPs)/specialists	26 (78.8)
Sexual/intimate partner	22 (66.7)
Friends	15 (45.5)
Other relatives	10 (30.3)
Social workers/ support service workers	4 (12.1)
Work colleagues	7 (21.2)
If you decided to tell someone that you had hepatitis B or keep it to yourself, what would you be worried about *	n=33
Being isolated (other people avoid close contact with me)	12 (36.4)
Being seen as a burden to my family/employer	5 (15.2)
Being blamed for having hepatitis B	4 (12.1)
Afraid of losing my job/negatively impact on my job promotion	5 (15.2)
Afraid of rejection when applying for new jobs	4 (12.1)
Being rejected by my sexual/intimate partner	3 (9.1)
Afraid of losing a study opportunity at school/university	3 (9.1)

Table 7: Concerns around disclosure for those not living with hepatitis B among Vietnamese sample (N = 933)

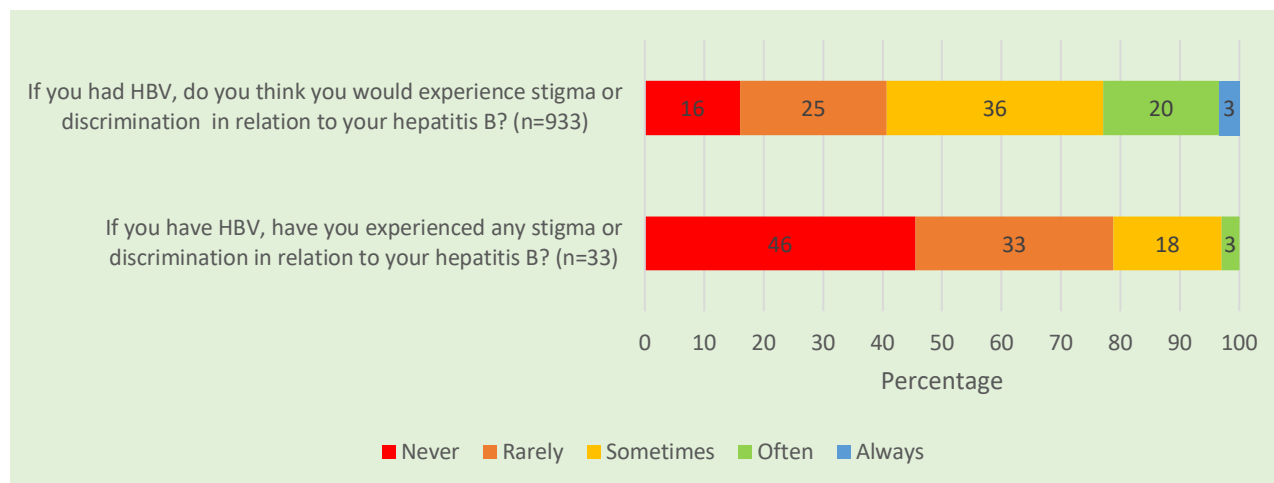
Imagine that there was a Vietnamese immigrant with hepatitis B living in Australia. When this person decided to tell someone or keep it to	n=933
Being isolated (other people avoid close contact with me)	480 (52.2)
Afraid of failure in permanent resident visa application	437 (47.5)
Afraid of rejection when applying for new jobs	387 (42.1)
Afraid of losing my job/negatively impact on my job promotion	386 (42.0)
Being seen as a burden to my family/employer	322 (35.0)
Being seen as an undesirable partner in romantic relationship	312 (33.9)
Being blamed for having hepatitis B	295 (32.1)
Afraid of losing a study opportunity at school/university	281 (30.5)

* Items were not mutually exclusive

Participants who had previously responded that they had hepatitis B (n=33), were asked if they had experienced any stigma or discrimination in relation to their hepatitis B. Results show that 15 (45.5%) participants who are living with hepatitis B have never experienced stigma or discrimination in relation to their hepatitis B, and 11 participants (33.3%) reported rarely experiencing stigma. The rest of the sample (participants who previously responded that they did not have hepatitis B or were not sure if they had hepatitis B) were also asked the frequency with which they would expect to experience stigma or discrimination if they had hepatitis B, one-quarter

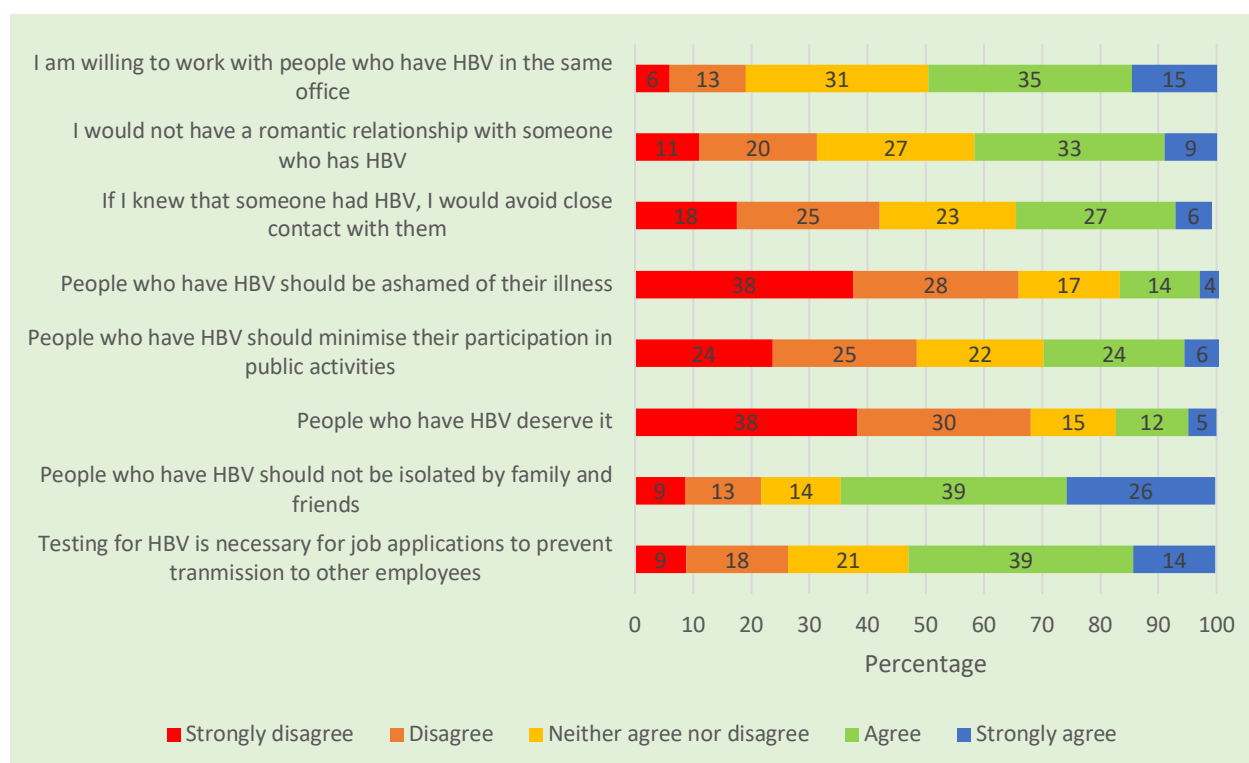
(n=220, 24.7%) responded rarely, 324 participants (36.4%) responding sometimes and a further 174 participants (19.5%) responding often. See figure 3 for details.

Figure 3: Experience and expectations of stigma towards people living with hepatitis B



Participants were also asked eight statements about their attitudes towards people living with hepatitis B. The majority of the sample (n=609, 64.8%) felt that people who have hepatitis B should not be isolated by family and friends. One third of the sample (n=316, 33.6%) reported that if they knew that someone had hepatitis B, they would avoid close contact with them (e.g., shaking hands, hugging). Just over half the sample (n=498, 52.8%) felt that screening or testing for hepatitis B is necessary for job applications because it is helpful for preventing transmission to other employees. 163 participants (17.3%) felt that people who have hepatitis B should be ashamed of their illness. See figure 4 for more information.

Figure 4: Attitudes towards hepatitis B (n=966)

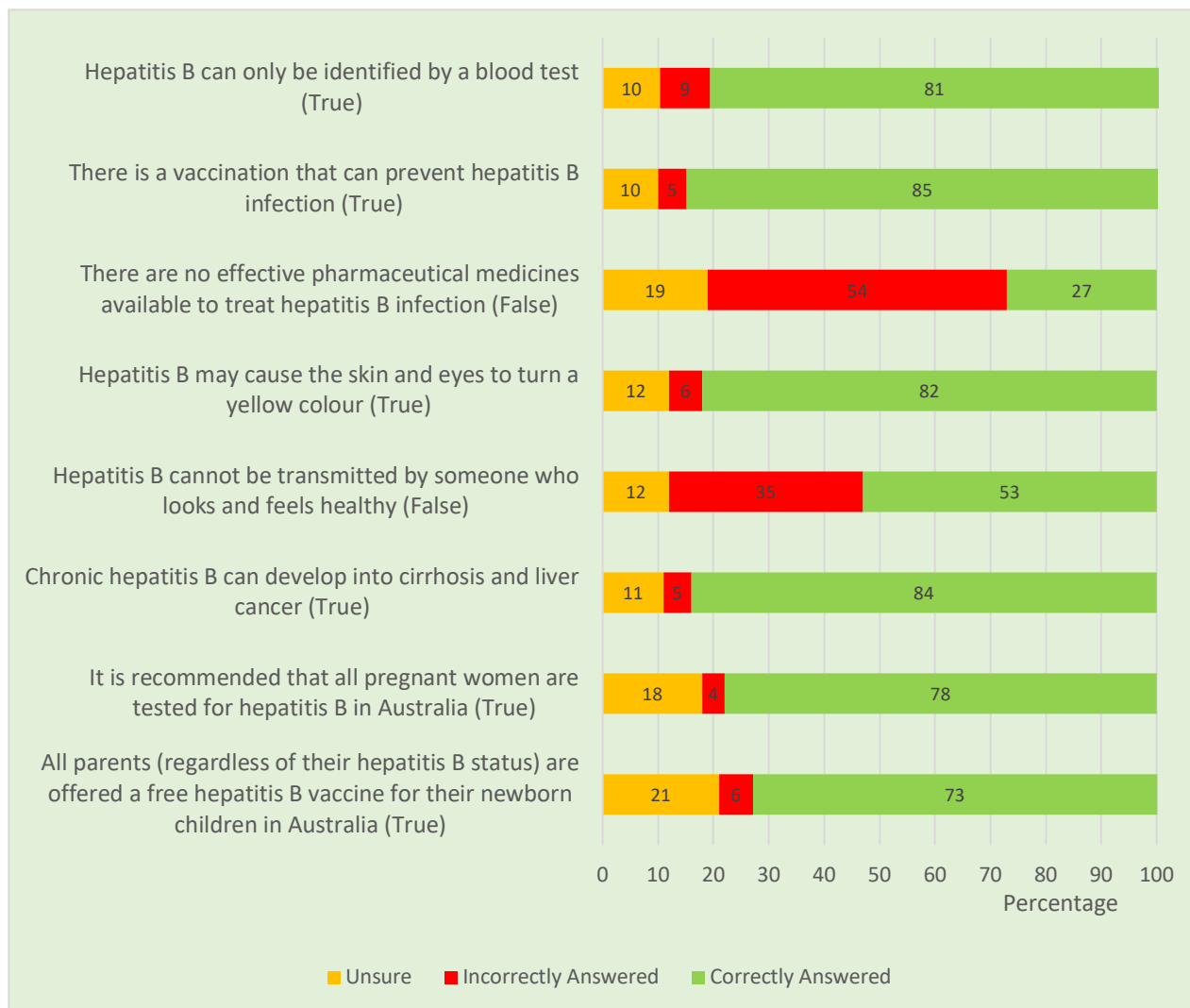


5.9 Knowledge of hepatitis B

Participants were presented with several statements to assess their knowledge of hepatitis B. Knowledge among the sample was mixed.

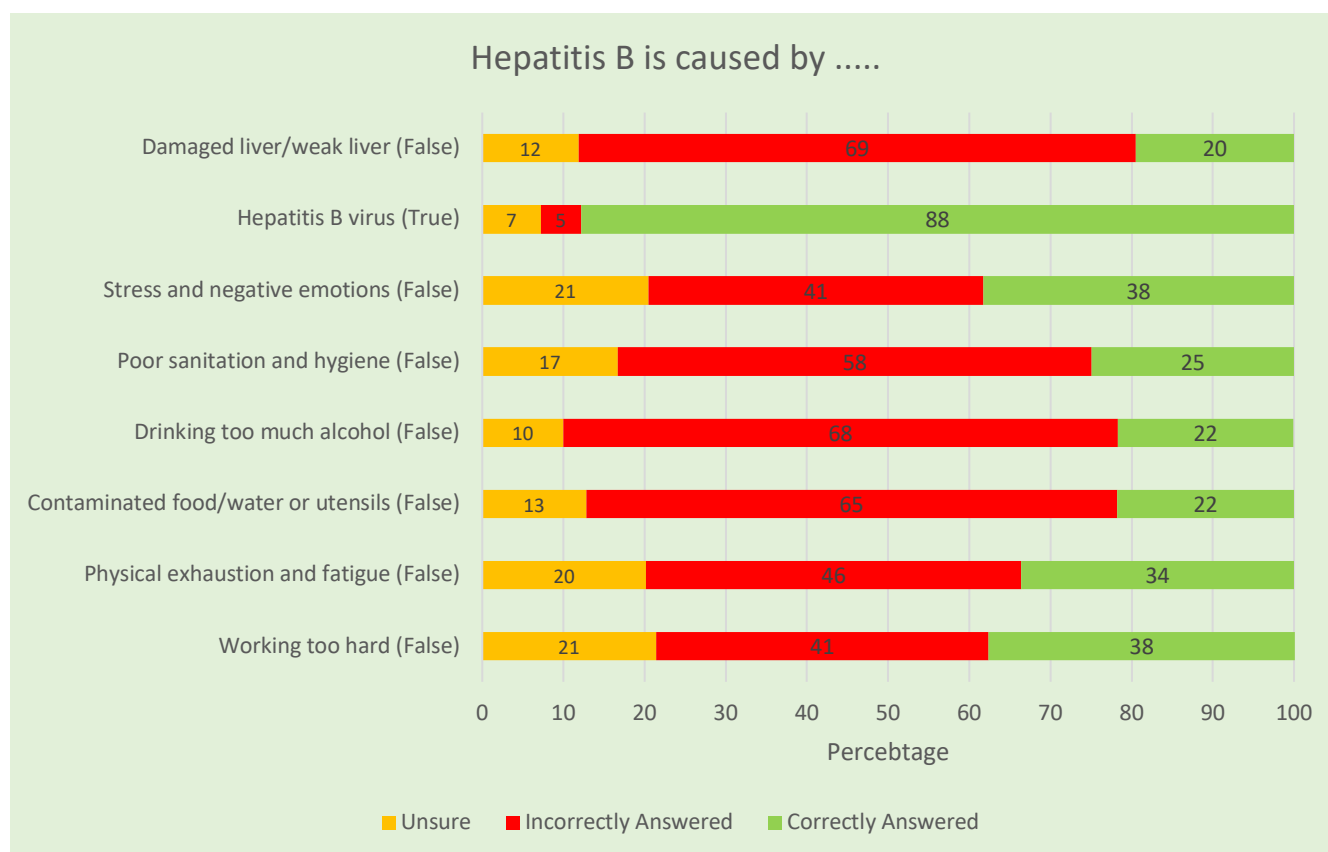
Eight statements were included that assessed general knowledge of hepatitis B. Most of the sample (n=813, 85.2%) knew that there is a vaccination that can prevent hepatitis B infection, and 774 participants (81.1%) correctly answered that hepatitis B can only be identified by a blood test. However, only 252 participants (26.6%) were aware that there are effective pharmaceutical medicines available to treat hepatitis B infection. Further, over one third (n=331, 34.8%) incorrectly responded that hepatitis B cannot be transmitted by someone who looks and feels healthy (see Figure 5 for more details).

Figure 5: Statements about participants knowledge of hepatitis B (N=966)



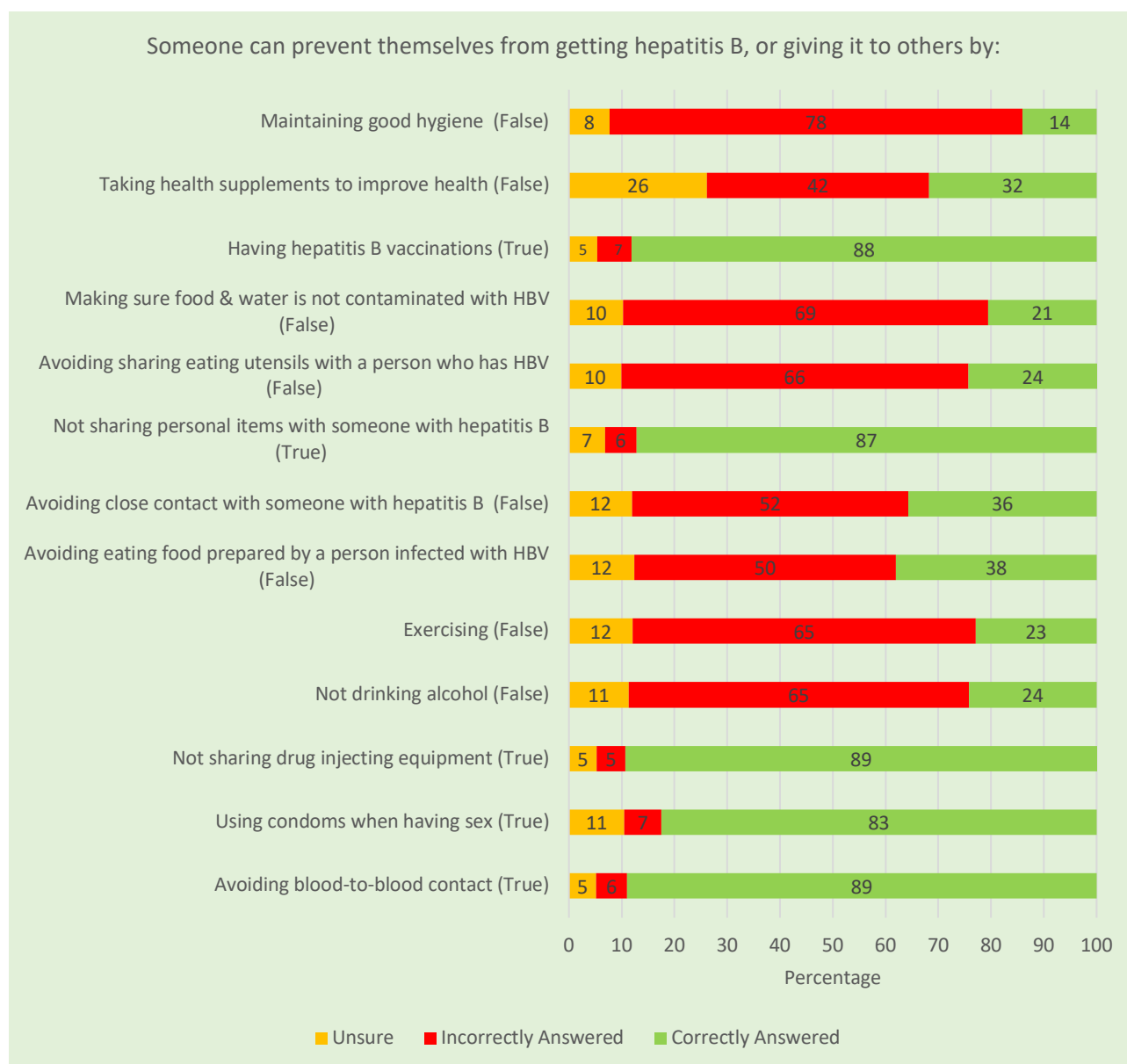
Participants were asked a further seven questions around the causes of hepatitis B. While 87.8% (n=835) knew that hepatitis B was a virus, over two-thirds of the sample incorrectly responded that hepatitis B was caused by a damaged/weak liver, drinking too much, alcohol and from contaminated food/water or utensils (see Figure 6 for more details).

Figure 6: Knowledge of causes of Hepatitis B among the Vietnamese sample (N=966)



Participants were also asked about ways someone can prevent getting hepatitis B, or giving it to others. Most of the sample knew that avoiding blood-to-blood contact (n=848, 89.0%), using condoms (n=787, 82.5%), not sharing drug injecting equipment (n=848, 89.4%), not sharing personal items with someone with hepatitis B such as tooth brush, blades and razors (n=828, 87.2%) and having a hepatitis B vaccination (n=828, 88.1%) were effective in preventing transmission. However, over two thirds of the sample incorrectly thought that someone can prevent getting hepatitis B, or giving it to others, by not drinking alcohol, exercising, avoiding sharing eating utensils with a person infected with hepatitis B, making sure food or water are not contaminated with hepatitis B, as well as maintaining good hygiene (see Figure 7).

Figure 7: Knowledge of prevention / transmission of hepatitis B among Vietnamese sample (N=966)



5.10 Summary of findings for Vietnamese community

- Recruitment was higher using online surveys than hard copy (68.6% vs 31.4%). The average age among those participants who completed the online survey was 31 compared to a mean of 50 years of age among those who completed the hard copy survey.
- 77.0% of the total sample reported to be born in Vietnam
- Over one-third (36.4%) of the sample personally knew someone living with hepatitis B.
- More than 90% of the sample had received some form of information on hepatitis B, with the most common source being the internet.
- Just under two-thirds (64.3%) of the sample reported being tested for hepatitis B, with higher testing rates among those participants born in Australia.

- Among the 203 participants (21.3%) who reported not having ever been tested for hepatitis B, the main reason given was they were feeling quite well and did not think testing to be necessary.
- There was high reported satisfaction among participants about the information they were given about hepatitis B at testing, with just under three-quarters of the sample (73.2%) reporting being either satisfied or very satisfied with the information given at the time of testing.
- Over half the sample reported being vaccinated for hepatitis B (62.8%). Rates of vaccination were much higher among those participants who completed the survey online (74.4% compared with 36.6% of the sample who completed the hard copy survey) and higher among those born in Australia (78.4% as compared with 58.3% of those born in Vietnam). It is interesting to note that that over half the participants (53.9%) received their hepatitis B vaccinations in Australia despite the fact that 77.0% were born in Vietnam. In fact, 41.9% of those participants who reported to be vaccinated and who were born in Vietnam, reported to have received their hepatitis B vaccinations in Australia.
- Only 3.5% reported to be living with hepatitis B – this figure was higher among those participants born in Vietnam than Australia (3.8% compared with 2.3%); 12.4% of the total sample were unsure if they had hepatitis B.
- Fear of being isolated, followed by being afraid of failure in permanent resident visa application and being afraid of rejection when applying for new jobs were the main reasons given by participants for deciding whether to disclose a positive hepatitis B status in the hypothetical scenario that they were living with hepatitis B.
- Trust in Western healthcare was mostly good, however 15.3% of the sample reported being suspicious of information about hepatitis B from Western-trained doctors and /or healthcare workers. In addition, 18.4% of the sample reported agreeing/strongly agreeing that using pharmaceutical medicine to treat hepatitis B has more negative side effects than using traditional Vietnamese and/or traditional Chinese medicine. Further, 15.8% of the sample agreed/strongly agreed that traditional Vietnamese and/or Chinese medicine cures hepatitis B at the root cause.
- Expectation of experiencing stigma was quite different from the reported experience of stigma. Results showed that 15 (45.5%) of the 33 participants who reported living with hepatitis B have never experienced stigma or discrimination in relation to their hepatitis B, with 11 of these participants (33.3%) reporting to have rarely experienced stigma. However among those participants living with hepatitis B, 54.5% reported experiencing any stigma, compared with 83.6% of the remaining sample who would anticipate any stigma (among those participants who reported they did not have hepatitis B or were unsure if they had it). This finding, that participants expect more stigma than what was actually experienced, must take into account that 33 participants living with hepatitis B is a small sample, however the finding is still interesting and echoes findings from other studies involving young people and sexually transmitted illnesses.
- Attitudes towards people living with hepatitis B were on the whole were mixed, with over half the sample (64.8%) reporting that people who have hepatitis B should not be isolated by family and friends. However, one third of the sample (33.6%) still felt that if they knew that someone had hepatitis B, they would avoid close contact with them and just over half the

sample (52.8%) felt that screening or testing for hepatitis B is necessary for job applications because it is helpful for preventing transmission to other employees.

- Knowledge among the sample was mixed. While 87.8 % knew that hepatitis B is a virus and 81.1% knew that it can only be identified by a blood test, over 40% thought it was caused by physical exhaustion, working too hard, stress and negative emotion and internal/external imbalances and over 60% from drinking too much alcohol, contaminated food, water, or utensils and from a damaged/weak liver.
- Because of elevated prevalence of hepatitis B among the Vietnamese migrant populations, it is important to increase hepatitis B knowledge and raise awareness of the different of routes of transmission.
- Health education and promotion should focus on increasing hepatitis B knowledge about transmission, testing and aim to reduce negative attitudes and misinformation about hepatitis B.

6 Results for the Chinese community

6.1 Demographics

The Chinese general community sample consisted of 997 adults, with an average age of 43 years (average age among those participants who completed the online survey was 35 compared to a mean of 50 years of age among those who completed the hard copy survey). There were 424 (43.8%) males and 541 (55.9%) females - notably a larger proportion of females completed the hard copy (72.7%) than the online version (35.3%). Almost three-quarters of the total sample (n=717, 72.4%) were born in Mainland China (this figure was higher among those who completed the online survey, 77.1% compared with 68.6% for the hard copy). Of the total sample, 818 participants (87.2%) identified as heterosexual and 631 participants (64.9%) were married. Participants were recruited primarily from the states of Queensland (n=322, 33.3%), Victoria (n=172, 17.8%), New South Wales (n=166, 17.2%) and South Australia (n=148, 15.3%). With regard to highest level of education attained, over one-third of the sample had an undergraduate degree (n=338, 35.0%) followed by a diploma/trade certificate (n=227, 23.5%). Just less than half of the total sample reported to be employed in full time work (n=473, 48.4%) with only 23 participants (2.4%) being unemployed. Full time work was higher (65.7%) among those who completed the online survey compared with 33.5% among those who completed the hard copy survey, with being retired and housekeeping higher among those who completed the hard copy survey. Of the total sample, Mandarin was the languages spoken most frequently at home (n=431, 43.2%) followed by English (n=429, 43.0%); however, Mandarin was most frequently spoken by those who completed the hard copy survey (n=286, 55.0%) followed by Cantonese (n=165, 16.5%) and English was the language spoken most by those who completed the online survey (n=305, 59.5%). Over two-thirds of the total sample (n=685, 71.4%) reported being proficient/very proficient in English. See Table 8 for more socio-demographic information.

Table 8: Socio-demographic comparisons between online and hard copy surveys for Chinese sample (N=977)

	Online surveys n (%) n=438	Paper surveys n (%) n=559	Total number of surveys n (%) n=997
Where were you born?			
Mainland China	336 (77.1)	381 (68.6)	717 (72.4)
Australia	80 (18.3)	28 (5.0)	108 (10.9)
Hong Kong	9 (2.1)	69 (12.4)	78 (7.9)
Taiwan	7 (1.6)	29 (5.2)	36 (3.6)
Other	4 (0.9)	48 (8.6)	52 (5.2)
Current gender identity			
Female	154 (35.3)	387 (72.7)	541 (55.9)
Male	282 (64.7)	142 (26.7)	424 (43.8)
Non-binary	0 (0)	1 (0.2)	1 (0.1)
I use a different term/prefer not to answer	0 (0)	2 (0.2)	2 (0.2)
Sex assigned at birth			
Female	149 (34.3)	384 (72.7)	533 (55.3)
Male	285 (65.5)	143 (27.1)	428 (44.4)

Something else/prefer not to answer	1 (0.2)	1 (0.2)	2 (0.2)
Age			
Mean (SD) (Range)	35 (8.7)(18-79)	50 (15.3)(18-84)	43 (14.7)(18-84)
Sexuality			
Heterosexual	407 (93.3)	411 (81.9)	818 (87.2)
Gay/Lesbian/Queer	22 (5.1)	2 (0.4)	24 (2.5)
Bisexual/pansexual	6 (1.4)	4 (0.8)	10 (1.1)
I use a different term	0 (0)	12 (2.4)	12 (1.3)
Prefer not to answer	1 (0.2)	73 (14.5)	74 (7.9)
Variation of sex characteristics at birth			
No	376 (86.8)	452 (88.3)	828 (87.6)
Yes	46 (10.6)	26 (5.1)	72 (7.6)
Don't know	10 (2.3)	21 (4.1)	31 (3.3)
Prefer not to answer	1 (0.2)	13 (2.5)	14 (1.5)
Highest level of education			
Undergraduate university	160 (36.7)	178 (33.6)	338 (35.0)
Diploma/Trade certificate	110 (25.2)	117 (22.1)	227 (23.5)
Postgraduate university	67 (15.4)	109 (20.6)	176(18.2)
Years 11-12	41 (9.4)	85 (16.0)	126 (13.0)
Years 7-10	51 (11.7)	30 (5.7)	81 (8.4)
Years 1- 6	7 (1.6)	11 (2.1)	18 (1.9)
Employee status in past 3 months			
Full time	286 (65.7)	187 (33.5)	473 (48.4)
Part time/casual	106 (24.4)	96 (17.2)	202 (20.7)
Retired	9 (2.1)	139 (24.9)	148 (15.1)
Housekeeping	8 (1.8)	60 (10.7)	68 (7.0)
Part time/casual and studying	7 (1.6)	25 (4.5)	32 (3.3)
Unemployed	11 (2.5)	12 (2.1)	23 (2.4)
Full time studying	4 (0.9)	13 (2.3)	17 (1.7)
Government benefits	4 (0.9)	10 (1.8)	14 (1.4)
Marital status			
Married	251 (57.6)	380 (70.9)	631 (64.9)
No relationship	116 (26.6)	57 (10.6)	173 (17.8)
De facto/steady partner	58 (13.3)	29 (5.4)	87 (9.0)
Separated/divorced	10 (2.3)	34 (6.3)	44 (4.5)
Widowed	0 (0)	18 (3.4)	18 (1.9)
Prefer not to answer/other	1 (0.2)	18 (3.4)	19 (1.9)
Where do you live			
Queensland	54 (12.4)	268 (50.6)	322 (33.3)
Victoria	77 (17.7)	95 (17.9)	172 (17.8)
New South Wales	104 (23.9)	62 (11.7)	166 (17.2)
South Australia	51 (11.7)	97 (18.3)	148 (15.3)
Western Australia	56 (12.8)	1 (0.2)	56 (5.8)
Australian Capital Territory	39 (8.9)	8 (1.5)	47 (4.9)
Tasmania	30 (6.9)	0 (0)	30 (3.1)
Northern Territory	25 (5.7)	0 (0)	25 (2.6)
Language spoken most frequently at home *			
Mandarin	113 (25.9)	318 (56.9)	431 (43.2)
English	300 (68.8)	129 (23.1)	429 (43.0)

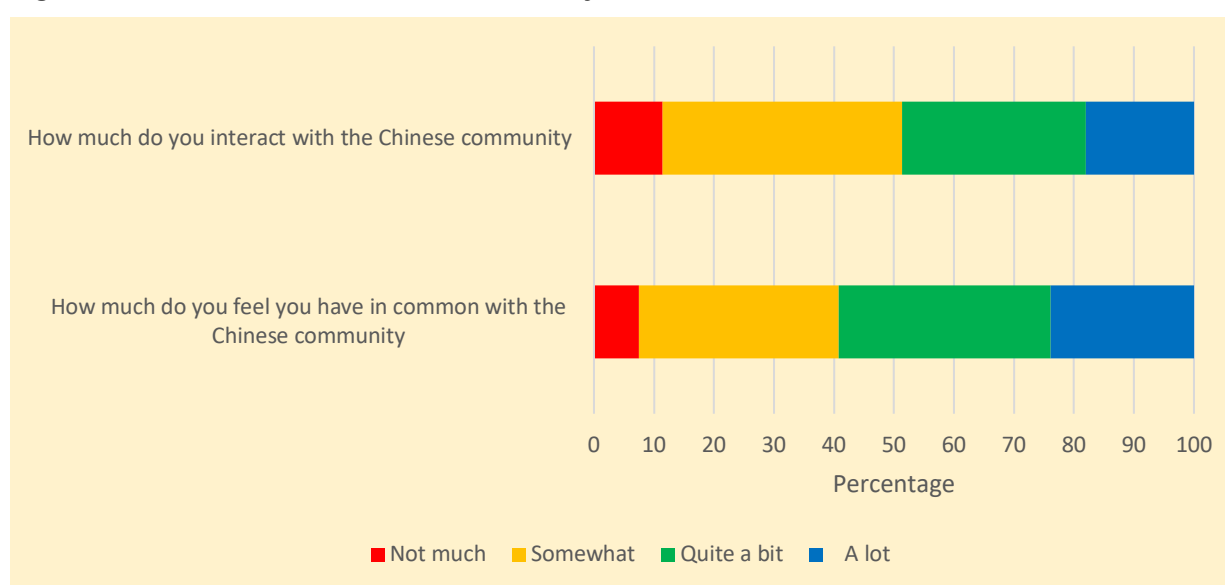
Cantonese	21 (4.8)	144 (25.8)	165 (16.5)
Other	2 (0.5)	11 (2.0)	13 (0.1)
Proficiency in speaking English			
Very proficient	216 (49.8)	91 (17.3)	307 (32.0)
Proficient	151 (34.8)	227 (43.2)	378 (39.4)
Not proficient	36 (8.3)	131 (25.0)	167 (17.4)
Not proficient all	28 (6.5)	49 (9.3)	77 (8.0)
Can't say/prefer not to say	3 (0.7)	27 (5.1)	30 (3.2)

* select all that apply

6.2 Community connection

Almost all of the sample reported feeling they had something in common with the Chinese community (n=925, 92.5%). In addition, almost half the sample reported that they interact quite a bit/a lot (n=462, 48.7%) with the Chinese community, with only 108 participants (11.4%) reporting that they have not much interaction with the Chinese community. See Figure 8 more details on community connection.

Figure 8: Connection with Chinese community



6.3 Knowing someone living with hepatitis B and receiving information

Most of the sample (n=877, 88.0%) had received some form of information on hepatitis B. The most common source was via the internet (n=346, 34.7%), followed by newspapers/magazines (n=274, 27.5%) and by general practitioners (GP) (n=270, 27.1%). Over half the total sample (n=504, 51.5%) reported that they personally know someone who has hepatitis B (see Table 11 for more details). Of the 883 participants who were born outside of Australia, 469 (54.0%) reported to personally know someone with hepatitis B and a further 122 participants (14.1%) were not sure. This can be compared with the 108 participants who were born in Australia, of which only 35 of

them (32.7%) reported to personally know someone with hepatitis B and a further 6 (5.6%) were unsure (see Table 9).

Table 9: Knowing someone with hepatitis B and receiving information for Chinese sample (N=997)

Received information about hepatitis B from the following sources	Total sample n=997
Internet	346 (34.7)
Newspapers/magazines	274 (27.5)
GP	270 (27.1)
Friends/colleagues	238 (23.9)
Community organisations	238 (23.9)
TV/radio	213 (21.4)
Family	222 (22.3)
Specialists	137 (13.7)
Hepatitis information Line	120 (12.0)
Never received information	132 (12.6)
Do you personally know anyone with hepatitis B	
No	341 (34.8)
Yes	504 (51.5)
Not sure	128 (13.1)
Prefer not to answer	6 (0.6)

6.4 Testing for hepatitis B

Nearly three-quarters (n=712, 71.8%) of the sample reporting ever being tested for hepatitis B. Testing was higher among participants who completed the survey online with 339 participants (77.8%) reporting having been tested, compared with 373 participants (68.3%) of those who completed the hard copy survey. Of the 883 participants who were born outside Australia, 644 (74.0%) reported to have tested for hepatitis B as compared with 64 participants (59.8%) of the 108 participants born in Australia. The main reason given for testing was that it was part of regular health check (n=282, 39.6%), with the most commonly reported location for testing being at a clinic or hospital (n=344, 48.8%). More than two-thirds of the sample (n=476, 68.1%) reported being either satisfied or very satisfied with the information they were given about hepatitis B at the time of testing. Among the 200 participants (20.4%) who reported not having ever been tested for hepatitis B, the main reason given was they were feeling quite well and did not think testing to be necessary. Of those who were unsure if they had tested (n=70, 7.1%), the main reason given for not testing was they do not know much about the testing. See Table 10 for more information on testing for hepatitis B.

Table 10: Information on testing for hepatitis B for Chinese sample (N=997)

Do you recall having ever been tested for Hepatitis B	Total sample n(%) n=997
Yes	712 (72.5)
No	200 (20.4)
Not sure	70 (7.1)
What made you decide to get tested for hepatitis B	n=712

Part of regular health check	282 (39.6)
Doctor recommended	219 (30.8)
Work requirement	152 (21.3)
Travel or immigration purposes	128 (18.0)
Family member/friend suggested	116 (16.3)
I know someone who has hepatitis B	104 (14.6)
School/university requirement	102 (14.3)
I learned about hepatitis B on the Internet/social media	93 (13.1)
I learned about hepatitis B in newspaper/TV/radio/printed ad	92 (12.9)
Part of pregnancy screening	52 (7.3)
Last place of testing for hepatitis B	n=712
Clinic or hospital	344 (48.8)
Health check centre	147 (20.9)
Doctor's office	106 (15.0)
Screening event	47 (6.7)
Workplace/University/school	45 (6.4)
Don't remember	10 (1.4)
Were you satisfied with the information about hepatitis B given to you at the	n=712
Satisfied	281 (40.2)
Very satisfied	195 (27.9)
Neutral	150 (21.5)
Dissatisfied	38 (5.4)
Very dissatisfied	4 (0.6)
Received no information	31 (4.4)
Reasons for not having been tested for hepatitis B (more than one option)	n=200
I am feeling quite well and don't think testing is necessary	72 (36.0)
I don't know much about the testing	70 (35.0)
Doctor says I don't need to be tested	43 (21.5)
I am afraid of having a test	26 (13.0)
The test takes too long	21 (10.5)
I don't trust the test or doctor	20 (10.0)
The test is too expensive	17 (8.5)
Of those who were unsure if they had tested – reason given for not testing	n=70
I don't know much about the testing	26 (37.1)
I am feeling quite well and don't think testing is necessary	20 (28.6)
Doctor says I don't need to be tested	3 (4.3)

6.5 Hepatitis B vaccination

More than half of the total sample reported being vaccinated for hepatitis B (n=592, 60.4%), again this number was higher among those participants who completed the survey online with 312 participants (71.4%) reporting to be vaccinated for hepatitis B as compared with 280 participants (51.6%) of the sample who completed the hard copy survey. Of the 831 participants who were born outside Australia, 490 (60.0%) reported to have received the vaccination for hepatitis B as compared with 68 participants (63.6%) of the 108 participants born in Australia. Of those participants who reported being vaccinated, 485 participants (83.0%) had completed the full course of vaccination. 245 participants (41.4%) reported receiving them in Australia and 241 participants

(40.7%) received their vaccinations in China. Of the 522 participants who had been vaccinated and were born outside Australia, 185 (35.4%) reported to have received their hepatitis B vaccination in Australia. The main reason given for not completing the full vaccination schedule was that they were unaware of how many doses there are. See Table 11 for more information on vaccinations.

Table 11: Information on hepatitis B vaccination for Chinese sample (N=997)

Have you ever had hepatitis B vaccination	Total sample n (%) n=997
Yes	592 (60.4)
No	294 (30.0)
Not sure	94 (9.6)
Did you complete the full course of vaccination	n=592
Yes	485 (83.0)
No	49 (8.4)
Not sure	48 (8.2)
Prefer not to answer	2 (0.3)
Where did you get the vaccine	n=592
Australia	245 (41.4)
China	241 (40.7)
Other countries	25 (4.2)
Did not answer	81 (13.7)
Reasons for not completing full vaccination schedule	n=49
Unaware of how many doses	17 (34.7)
No time	17 (34.7)
Forgot doses	14 (28.6)
Parents forgot	11 (22.4)
Not Important	11 (22.4)
Parents did not know how many doses	10 (20.4)
Too expensive	8 (16.3)
Not sure	2 (4.1)

6.6 Health seeking behaviour for hepatitis B

When asked about their hepatitis B status, 227 participants (23.1%) reported that they are living with hepatitis B. This number was higher among those who completed the survey online with 155 participants (35.6%) reporting to have hepatitis B; 72 participants (13.1%) who completed the hard copy survey reported to have hepatitis B. Of the 883 participants who were born outside Australia, 213 participants (24.5%) reported to be living with hepatitis B as compared with 14 (13.0%) of the 108 participants born in Australia. Of the 227 participants who reported having hepatitis B, 85.4% of participants (n=192) saw their GP/specialist at least once a year for monitoring of their hepatitis B. Almost all the participants (n=216, 97.7%) reported that their doctor (GP)/specialist who treats their hepatitis B lives in Australia. Most of these doctors spoke both English and Chinese (n=169, 78.2%) and advised participants to take medication for their hepatitis B (n=169, 76.1%). However, when advised to take medication by their doctor, less than half (n=82, 48.5%) were advised to take pharmaceutical medicines only, 47 participants (27.8%) were advised to take traditional Chinese medicines and a further 40 participants (23.7%) were advised to take both pharmaceutical medicines

and traditional Chinese medicines. Many of the participants (n=93, 77.5%) who had been prescribed pharmaceutical medicines reported that there had been a time when they had not taken their medication. See Table 12 for more details.

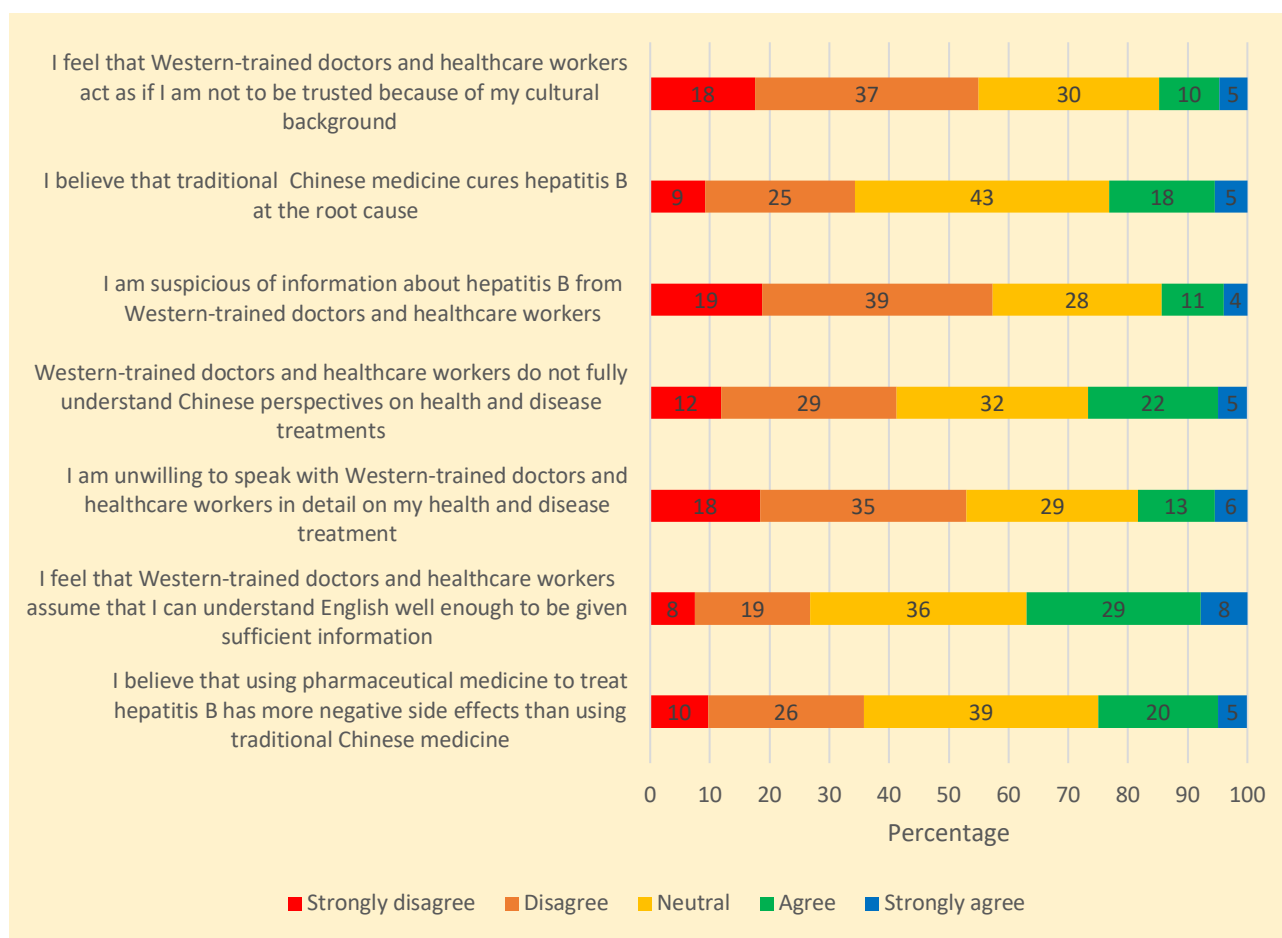
Table 12: Health seeking behaviours for Chinese sample (N=997)

Do you have hepatitis B	n (%) n=997
No	709 (72.1)
Yes	227 (23.1)
Not sure	42 (4.3)
Prefer not to answer	6 (0.6)
How often do you visit GP/Specialist for monitoring/treatment of hepatitis B	n=227
Every 6-12 months	112 (49.8)
Every 1-6 months	80 (35.6)
Every 1-2 years	32 (14.2)
I don't see a GP/specialist	1 (0.4)
The doctor (GP)/specialist who treats my hepatitis B live in	n=227
Australia	216 (97.7)
China or other areas	5 (2.3)
Language spoken by specialist/GP	n=227
English and Chinese speaking	169 (78.2)
English speaking only	18 (8.3)
Chinese (Mandarin and/or Cantonese or other) speaking only	27 (12.5)
Prefer not to answer	2 (0.9)
Did your doctor (GP)/specialist advise you to take medication for hepatitis B	n=227
Yes	169 (76.1)
No	53 (23.9)
What kind of medicines did your doctor (GP)/specialist advise you to take	n=169
Pharmaceutical medicines	82 (48.5)
Traditional Chinese medicines	47 (27.8)
Pharmaceutical medicines and traditional Chinese medicines	40 (23.7)
Has there been a time when you haven't taken the pharmaceutical medicine	n=122
Yes	93 (77.5)
No	25 (20.8)
Prefer not to answer	1 (0.8)

6.7 Trust in Western healthcare

Participants were asked statements about their trust in Western healthcare, focusing on their beliefs and feelings towards Western medicine versus traditional Chinese medicine. One-quarter of the sample (n=238, 24.9%) agreed or strongly agreed that using pharmaceutical medicine to treat hepatitis B has more negative side effects than using traditional Chinese medicines. Similar numbers (n=217, 23.1%) agreed or strongly agreed that traditional Chinese medicine cures hepatitis B at the root cause. 134 participants (14.4%) reported being suspicious of information about hepatitis B from Western-trained doctors and /or healthcare workers. In addition, 172 participants (18.3%) reported being unwilling to speak with Western-trained doctors and healthcare workers in detail on their health and disease treatment. See Figure 9 more details on trust in Western healthcare.

Figure 9: Trust in Western healthcare for Chinese sample (N=997)



6.8 Attitudes towards hepatitis B

Participants living with hepatitis B were asked questions around disclosure of their positive status. Among the 227 people living with hepatitis B, 44.1% (n=100) had told their immediate family, 42.3% (n=96) had told their sexual/intimate partners and 40.1% (n=91) had told their doctor/specialist about their hepatitis B status. The main concern around telling/not telling someone they had hepatitis B was worry about being isolated (other people would avoid close contact with them) (n=84, 37.0%) followed by being afraid of rejection when applying for new jobs (n=79, 34.8%). Interestingly, when the whole sample was asked the following question, “*Imagine that there was a Chinese immigrant with hepatitis B living in Australia. When this person decided to tell someone or keep it to himself/herself, what would he/she be worried about*”, the main reasons given were also fear of being isolated (n=419, 55.4%) followed by being seen as an undesirable partner in a romantic relationship (n=297, 39.2%), as well as being afraid of rejection when applying for new jobs (n=294, 38.8%). See Table 13 and Table 14 for more details.

Table 13: Disclosure of hepatitis B among Chinese people living with hepatitis B (N = 227)

If you have hepatitis B, who have you told about your hepatitis B (all that apply)	n=227
Immediate family	100 (44.1)
Sexual/intimate partner	96 (42.3)
Doctors (GPs)/specialists	91 (40.1)
Friends	61 (26.9)

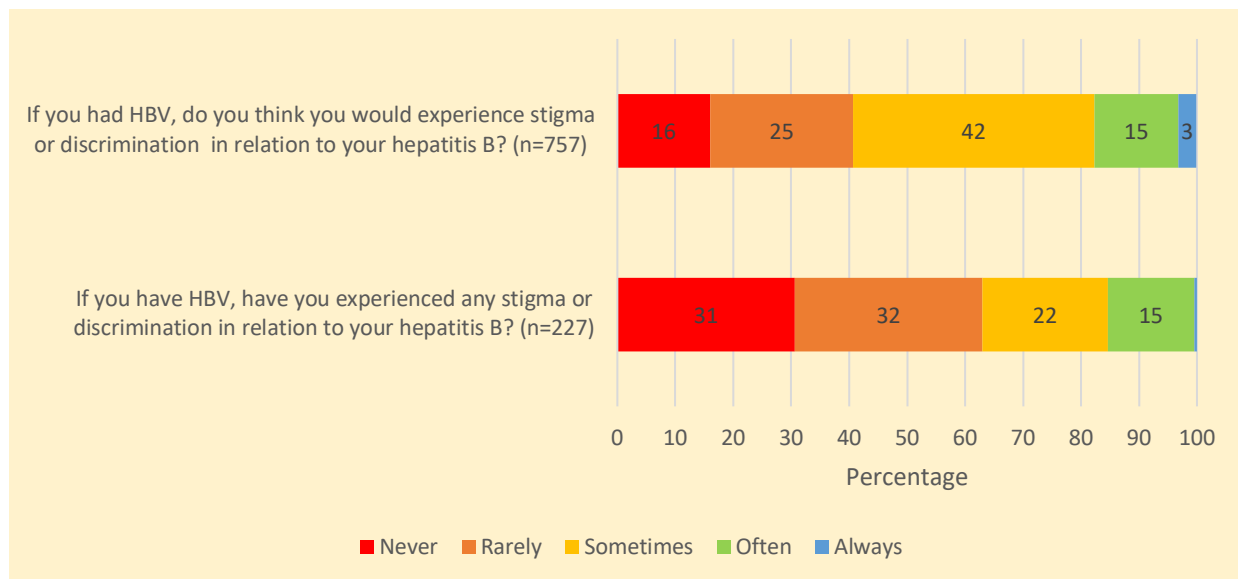
Social workers/ support service workers	51 (22.5)
Work colleagues	43 (18.9)
Other relatives	33 (14.5)
If you decided to tell someone that you had hepatitis B or keep it to yourself, what would you be worried about (all that apply)	n=227
Being isolated (other people avoid close contact with me)	84 (37.0)
Afraid of rejection when applying for new jobs	79 (34.8)
Being rejected by my sexual/intimate partner	64 (28.2)
Afraid of losing my job/negatively impact on my job promotion	58 (25.6)
Being blamed for having hepatitis B	56 (24.7)
Being seen as a burden to my family/employer	54 (23.8)
Afraid of losing a study opportunity at school/university	48 (21.1)

Table 14: Concerns around disclosure for those not living with hepatitis B among the Chinese sample (N = 839)

Imagine that there was a Chinese immigrant with hepatitis B living in Australia. When this person decided to tell someone or keep it to himself/herself, what would he/she be worried about	n=757
Being isolated (other people avoid close contact with me)	419 (55.4)
Being seen as an undesirable partner in romantic relationship	297 (39.2)
Afraid of rejection when applying for new jobs	294 (38.8)
Afraid of losing my job/negatively impact on my job promotion	273 (36.1)
Being seen as a burden to my family/employer	244 (32.2)
Afraid of failure in permanent resident visa application	227 (30.0)
Being blamed for having hepatitis B	189 (25.0)
Afraid of losing a study opportunity at school/university	209 (24.9)

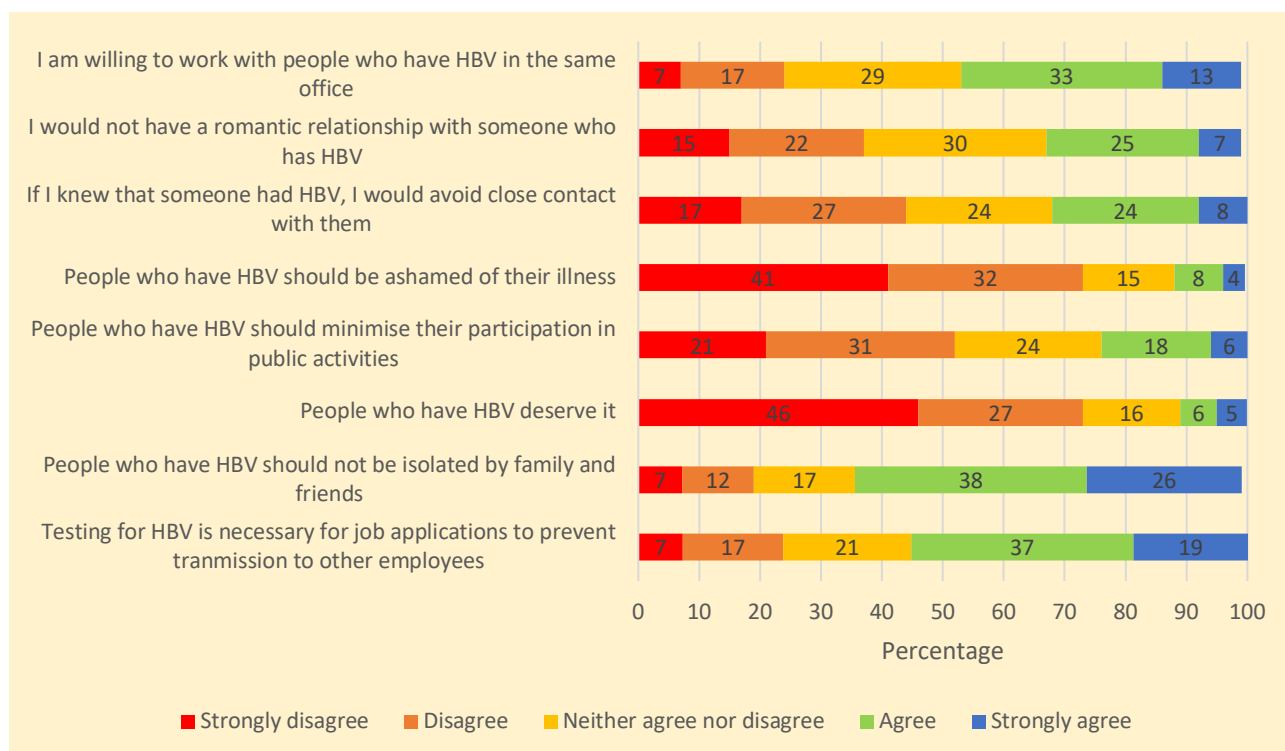
Participants who had previously responded that they are living with hepatitis B, were asked if they had experienced any stigma or discrimination in relation to their hepatitis B. Results show that 48 participants (21.6%) of the 227 participants who are living with hepatitis B have ‘sometimes’ experienced stigma or discrimination in relation to their hepatitis B, and a further 33 of these 227 participants (14.9%) reported ‘often’ experiencing stigma. Only one participant reported to ‘always’ experience stigma or discrimination in relation to their hepatitis B. However, when the rest of the sample (excluding those who reported to be living with hepatitis B) was asked, if they had hepatitis B, would they expect to experience stigma or discrimination in relation to their hepatitis B, 281 participants (41.6%) responded ‘sometimes’, 98 participants (14.5%) responded ‘often’ and a further 21 participants (3.1%) thought it would occur ‘always’. Overall, people living with hepatitis B report less frequent stigma than those without hepatitis B would expect to experience. See figure 10 for details.

Figure 10: Stigma towards people with hepatitis B



Participants were also asked nine statements about their attitudes towards people living with hepatitis B. Over half the sample (n=524, 53.0%) felt that screening or testing for hepatitis B is necessary for job applications because it is helpful for preventing transmission to other employees. Almost two-thirds (n=604, 64.3%) felt that people who have hepatitis B should not be isolated by family and friends. 108 participants (11.6%) agreed/strongly agreed that people who have hepatitis B should be ashamed of their illness. See figure 11 for more information.

Figure 11: Attitudes towards hepatitis B for Chinese sample (N=997)

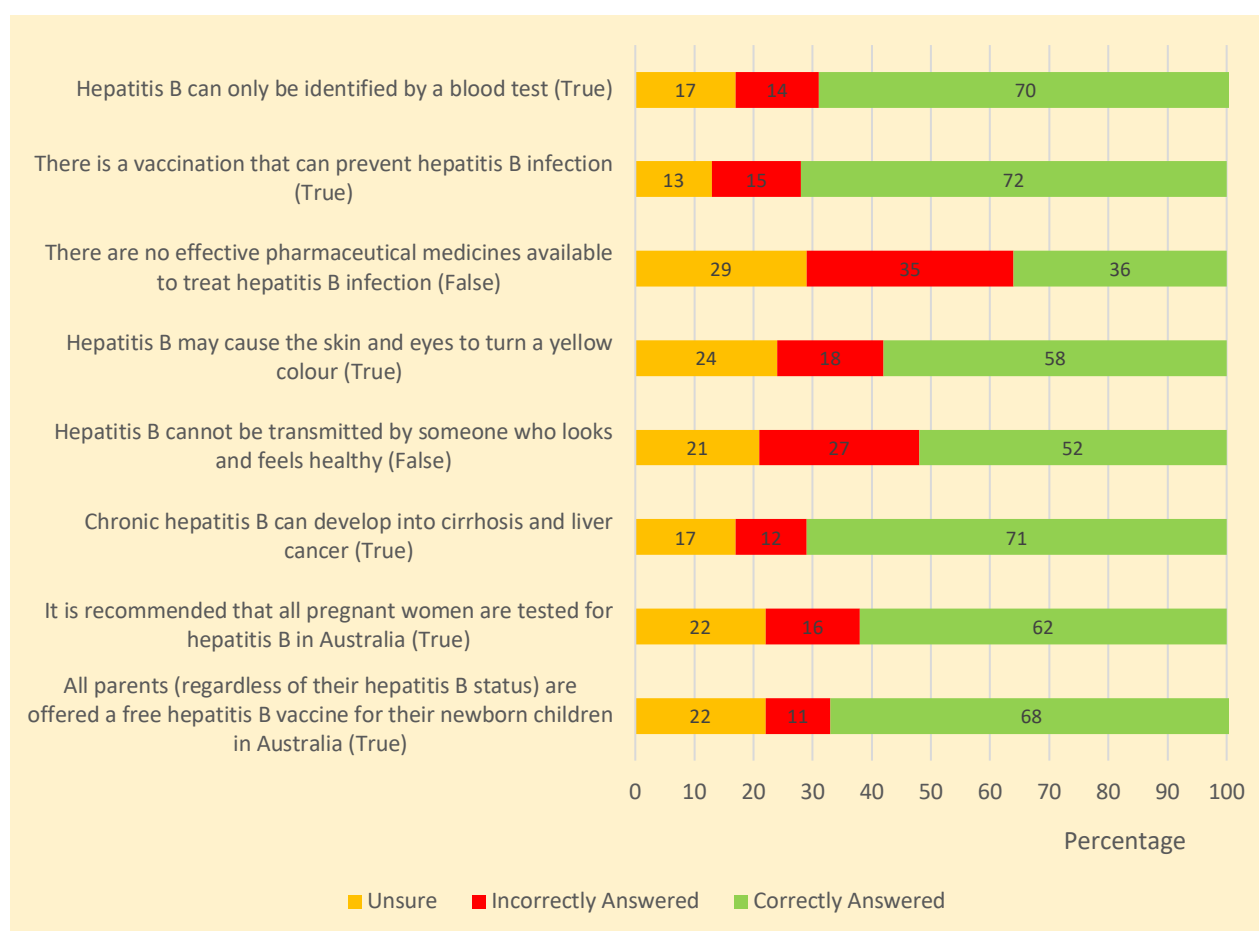


6.9 Knowledge of hepatitis B

Participants were presented with several statements to assess their knowledge around hepatitis B. Knowledge among the sample was mixed.

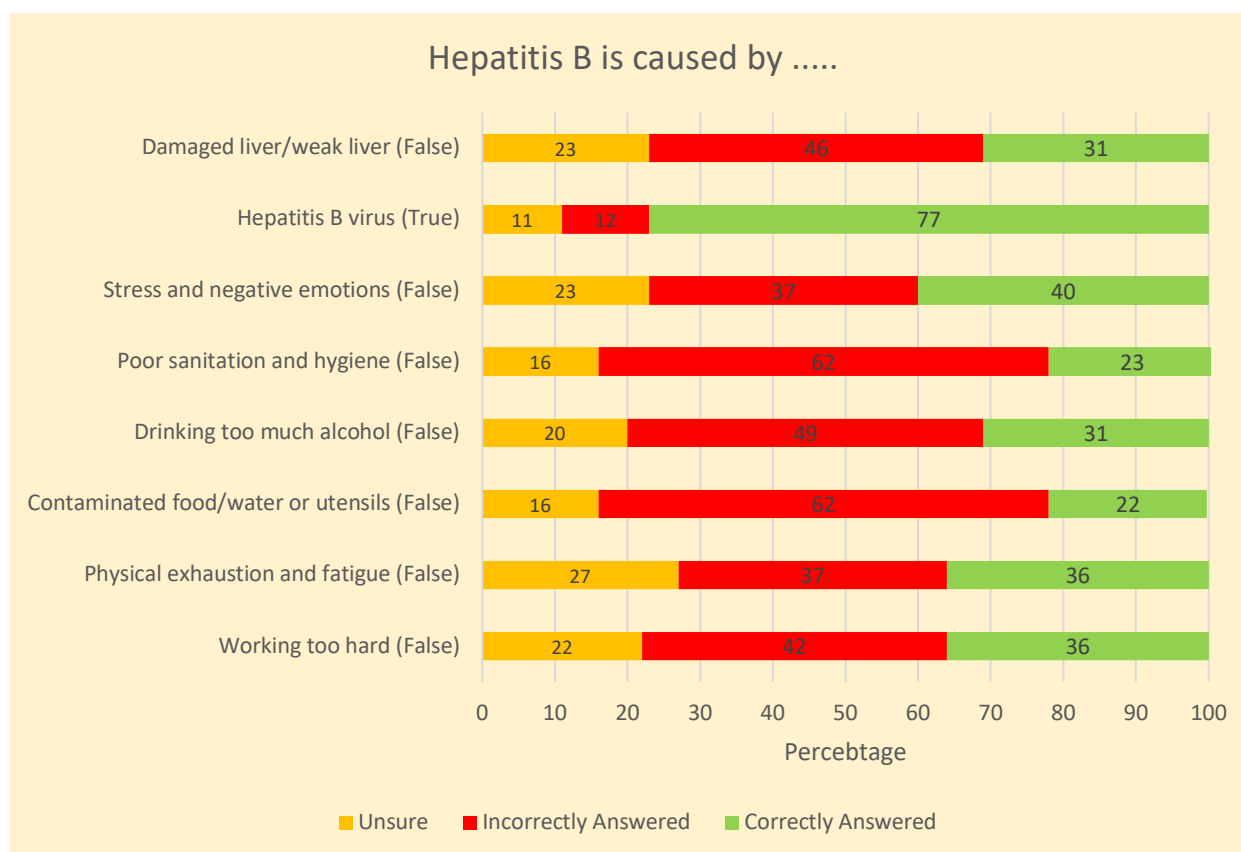
Eight statements were included that assessed general knowledge of hepatitis B. At least 70% of the sample knew that there is a vaccination that can prevent hepatitis B infection (n=704, 72.8%), that hepatitis B can only be identified by a blood test (n=676, 69.6%) and that chronic hepatitis B can develop into cirrhosis and liver cancer (n=689, 71.4%). However, only 349 participants (36.4%) were aware that there are effective pharmaceutical medicines available to treat hepatitis B infection. (see Figure 12 for more details).

Figure 12: Statements about participants knowledge of hepatitis B (N=997)



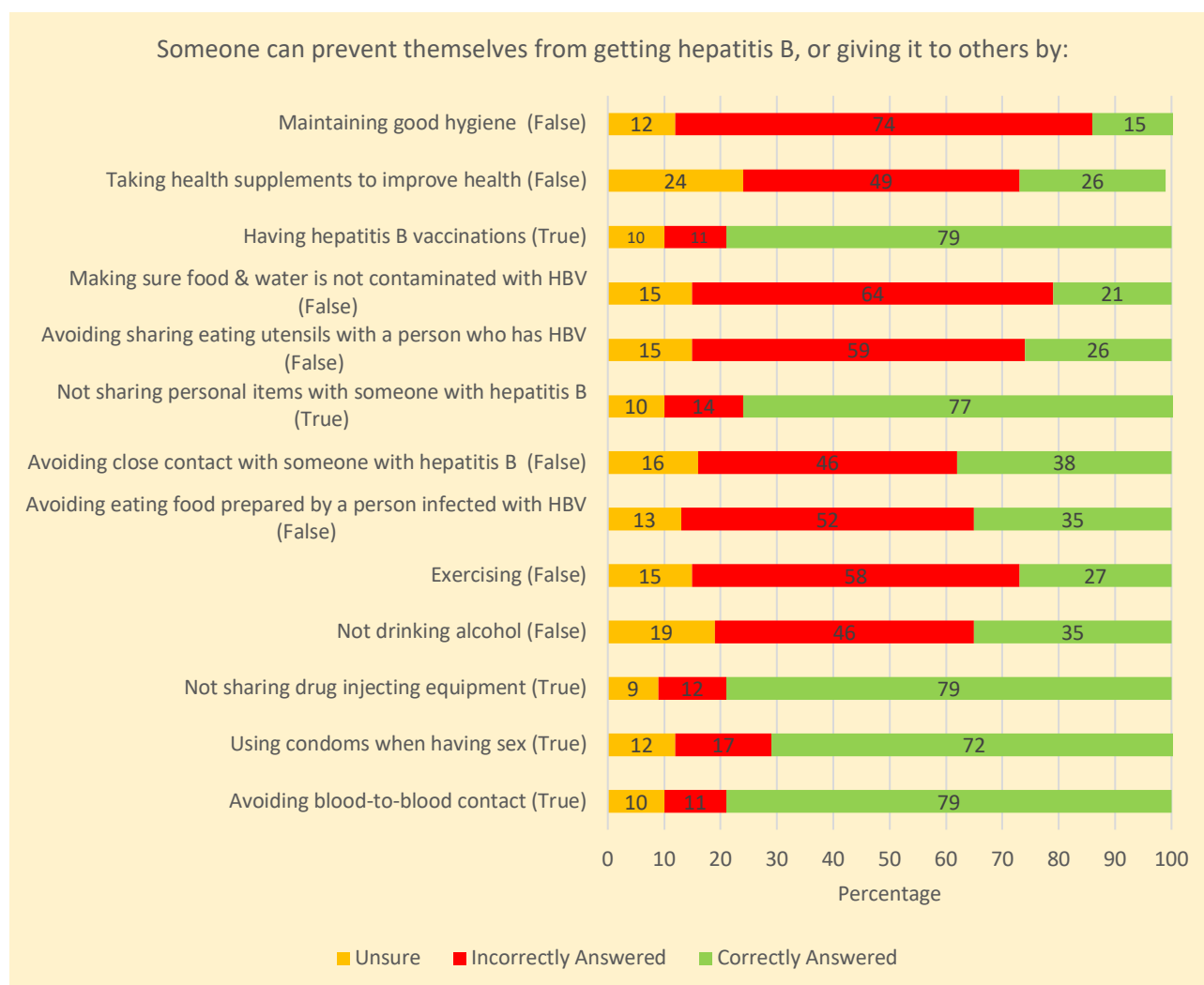
Participants were asked a further seven questions around the causes of hepatitis B. While 747 participants (77.3%) knew that hepatitis B was caused by a virus, almost two thirds of the sample incorrectly responded that hepatitis B was caused by a poor sanitation and hygiene (n=583, 61.6%) and from contaminated food/water or utensils (n=592, 62.1%) and almost half incorrectly thought that drinking too much alcohol (n=459, 48.8%) and a damaged/weak liver (n=434, 46.2%) can also cause hepatitis B (see Figure 13 for more details).

Figure 13: Knowledge of causes of Hepatitis B among the Chinese sample (N=997)



Participants were also asked about ways someone can prevent getting hepatitis B or giving it to others. Most participants knew that avoiding blood-to-blood contact (n=766, 79.1%) and using condoms (n=688, 71.7%) were effective in preventing transmission. However, many participants incorrectly thought that maintaining good hygiene (n= 710, 73.5%) and making sure food or water are not contaminated with hepatitis B (n=612, 63.9%) can prevent someone getting hepatitis B or giving it to others. Exercise, avoiding eating food prepared by a person infected with hepatitis B, and avoiding sharing eating utensils with a person infected with hepatitis B were all incorrect assumptions made by more than half the sample as a way of preventing transmission of hepatitis B (see Figure 14).

Figure 14: Knowledge of prevention / transmission of hepatitis B among the Chinese sample (N=997)



6.10 Summary of findings for Chinese Sample

- Recruitment was slightly higher for hard copy surveys than online surveys (56.1% vs 43.9%) with the average age among those participants who completed the online survey being 35 compared to a mean of 50 years of age among those who completed the hard copy survey
- 89.1% of the total sample reported to be born outside of Australia (China, Taiwan and Hong Kong).
- Over half (51.5%) of the sample personally knew someone living with hepatitis B, with people born outside Australia more likely to report knowing someone with hepatitis B (54.0% vs 32.7%).
- Most of the sample (88.0%) had received some form of information on hepatitis B, with the most common source being the internet.
- 71.8% of the sample reporting being tested for hepatitis B, with a higher proportion of people born outside Australia reporting testing (74.0% vs 59.8%). The main reason given for testing was that it was part of regular health check.

- The main reason given for not testing for hepatitis B was that participants were feeling quite well and did not think testing to be necessary. Hence it appears that participants who think they are well believe they do not need to be tested for hepatitis B.
- 68.1% reported being either satisfied or very satisfied with the information they were given about hepatitis B at the time of testing.
- More than half the sample reporting being vaccinated for hepatitis B (60.4%). Rates of vaccination were higher among those participants who completed the survey online (71.4% compared with 51.6% of the sample who completed the hard copy survey). 60.0% of the participants who were born outside Australia reported to have received the vaccination for hepatitis B as compared with 63.6% born in Australia. It is interesting to note of the 522 participants who had been vaccinated and were born outside Australia, 35.4% reported to have received their hepatitis B vaccination in Australia.
- 23.1% of the sample reported to be living with hepatitis B, this number was higher among those who completed the survey online (35.6% compared with 13.1% who completed the hard copy survey). This figure was also higher among those born outside Australia (24.5% compared with 13.0% of those born in Australia).
- Interestingly among those living with hepatitis B, when advised to take medication less than half (48.5%) were advised to take pharmaceutical medicines, 27.8% were advised to take traditional Chinese medicines only and a further 23.7% were advised to take both pharmaceutical medicines and traditional Chinese medicines. Many of the participants (77.5%) who had been prescribed pharmaceutical medicines reported that there had been a time when they had not taken their medication.
- Of the 227 participants who reported having hepatitis B, 85.4% of participants saw their GP/specialist at least once a year for monitoring of their hepatitis B.
- Fear of being isolated, followed by being seen as an undesirable partner in romantic relationship as well as afraid of rejection when applying for new jobs were the main reasons given by participants for deciding whether to disclose a positive hepatitis B status in the hypothetical scenario which depicted that that they were living with hepatitis B.
- Trust in Western healthcare was mixed. Just less than one-quarter of the sample (24.9%) agreed or strongly agreed that using pharmaceutical medicine to treat hepatitis B has more negative side effects than using traditional Chinese medicines yet similar numbers (23.1%) agreed or strongly agreed that traditional Chinese medicine cures hepatitis B at the root cause.
- Expectations of receiving stigma was different from the actual reported experience of stigma (69.0% verse 84.0%) - indicating more participants expected more stigma than what was actually experienced.
- Attitudes towards people living with hepatitis B were mixed, with the majority (64.3%) reporting that people who have hepatitis B should not be isolated by family and friends. However, almost one third of the sample (32.0%) still felt that if they knew that someone had hepatitis B, they would avoid close contact with them and over half the sample (55.3%) felt that screening or testing for hepatitis B is necessary for job applications because it is helpful for preventing transmission to other employees. Interestingly, feeling of 'being ashamed' and of 'deserving hepatitis B' was found to be less negative than other attitudes for both the Vietnamese and Chinese samples, hence participants were less likely to ascribe personal blame for hepatitis B.

- Knowledge among the sample was mixed. While 77.3 % knew that hepatitis B is a virus and 69.6% knew that it can only be identified by a blood test, 63.9% incorrectly thought that contaminated food and water can cause hepatitis and 59.3% incorrectly thought that contaminated utensils can cause hepatitis B.
- Because of elevated prevalence of hepatitis B among these migrant populations, it is important to increase hepatitis B knowledge and raise awareness of the different routes of transmission.
- Health education and promotion for both these communities should focus on increasing hepatitis B knowledge about transmission, testing and aim to reduce negative attitudes and misinformation about hepatitis B.

7 Reference

Australian Bureau of Statistics. (2016). 2016 Census: Multicultural. Retrieved from <https://www.abs.gov.au/ausstats/abs@.nsf/lookup/Media%20Release3>

Australian Bureau of Statistics. (2019). Migration, Australia, 2017-18. Retrieved from <https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/3412.0Main%20Features22017-18?opendocument&tabname=Summary&prodno=3412.0&issue=2017-18&num=&view=>

Australian Government Department of Health. Third National Hepatitis B Strategy 2018-2022. Canberra: Australian Government Department of Health; 2018. Available at: <https://www.health.gov.au/sites/default/files/documents/2022/06/third-national-hepatitis-b-strategy-2018-2022.pdf>

Australian Government Department of Health. Fourth National Sexually Transmissible Infections Strategy 2018-2022. Canberra: Australian Government Department of Health; 2018. Available at: <https://www.health.gov.au/sites/default/files/documents/2022/06/fourth-national-sexually-transmissible-infections-strategy-2018-2022.pdf>

Australian Government Department of Health. Eighth National HIV Strategy 2018-2022. Canberra: Australian Government Department of Health; 2018. Available at: <https://www.health.gov.au/sites/default/files/documents/2022/06/eighth-national-hiv-strategy-2018-2022.pdf>

Australian Government Department of Health. Fifth National Hepatitis C Strategy 2018-2022. Canberra: Australian Government Department of Health; 2018. Available at: <https://www.health.gov.au/sites/default/files/documents/2022/06/fifth-national-hepatitis-c-strategy-2018-2022.pdf>

Australian Government Department of Health. Fifth National Aboriginal and Torres Strait Islander Bloodborne Viruses and Sexually Transmissible Infections Strategy 2018–2022. Canberra: Australian Government Department of Health; 2018. Available at: <https://www.health.gov.au/sites/default/files/documents/2022/06/fifth-national-aboriginal-and-torres-strait-islander-bloodborne-viruses-and-sexually-transmissible-infections-strategy-2018-2022.pdf>

Broady, T. R., Cama, E., Brener, L., Hopwood, M., de Wit, J., & Treloar, C. (2018). Responding to a national policy need: development of a stigma indicator for bloodborne viruses and sexually transmissible infections. *Australian and New Zealand Journal of Public Health*, 42(6), 513-515. <http://www.doi: 10.1111/1753-6405.12809>

Cowie, B. (2011). The linguistic demography of Australians living with chronic hepatitis B. *Australian and New Zealand Journal of Public Health*, 35(1), 12-15. <https://doi.org/10.1111/j.1753-6405.2010.00634.x>

Cui, F, & Zhuang, H. (2016). Hepatitis B control in China: progress, challenges and strategies. *Chinese Journal of Viral Disease*, 6(2), 81-87.

MacLachlan, J. H., & Cowie, B. C. (2018). Cultural and linguistic diversity of people living with chronic hepatitis B in 2011–2016: changing migration, shifting epidemiology. *Australian and New Zealand Journal of Public Health*, 42(5), 441-443. <https://doi.org/10.1111/1753-6405.12826>

Quy, N (2021). Vietnam position worsens on global cancer map: report. Retrieved from <https://e.vnexpress.net/news/news/vietnam-position-worsens-on-global-cancer-map-report-4222324.html>