

Table 1) The content of training sessions based on the Health Belief Model

<p>First session The familiarity of health liaisons with the definition of hepatitis B infection, its epidemiology (incidence and prevalence) in Iran and the world, ways of transmission, non-transmission and diagnosing of the infection; lecture with mentioning real examples of cases of hepatitis B infection in different ways by the expert of the Malayer Disease Control Unit related to the hepatitis B infection; playing parts of a training video for reviewing and summarizing the content (awareness structure)</p>
<p>Second session The familiarity of health liaisons with the symptoms of hepatitis B infection, the possibility of serious consequences; negative complications and disorders caused by the infection, estimating the economic costs of infected by the disease by the researcher and general practitioner; explaining the available statistics of hepatitis B infection, the population at risk of this disease in the city, and the risk assessment for people in all ages groups using real-world examples, the effects of hepatitis B infection on family, job and interpersonal relationships of the patients to influence perceived benefits, health care liaisons were asked to make sure they had all the information they needed to perform hepatitis B prevention behaviors; training video presentation at the end of the session (perceived sensitivity structures, perceived intensity, perceived benefits)</p>
<p>Third session Asking liaisons to express and write the obstacles and problems about preventing the infection; health liaisons were allowed to find the best solutions and overcome obstacles by discussing in this area; presenting messages containing condom use in sexual intercourse, vaccination, use of personal equipment and tests to diagnose the infection to reduce stress and anxiety to create self-efficacy in PowerPoint format; use of the conversations and experiences of people who have used preventative behaviors so far; summary of trained material (perceived constructs and perceived self-efficacy)</p>
<p>Fourth session Discussing different types of information sources about hepatitis B infection and the ways of its prevent; asking liaisons of contracting the infection and increase their inner peace with preventative behaviors; ask the liaisons to overcome their fear of disease and increase their peace of mind using preventive behaviors; use of practice guidelines accepted by the participants, such as a health center physician, expert of the Disease Control Unit and all health centers and triangular clinics; Introducing several reliable health sites in this regard, such as the site of the Ministry of Health and the National Committee of Hepatitis and several valid educational booklets, Tv shows such as the Health Network; providing advice on preventive behaviors such as a careful selection of reputable hairdressers and dental centers, use of personal items such as personal toothbrushes, tweezers and referring to the laboratory for hepatitis B antigen and so on (operation and performance guide structure)</p>

Table 2) Comparison of quantitative and qualitative demographic characteristics in experimental (n=56) and control (n=60) groups

Demographic variables	Experiment group	Control group	Significance level
Quantitative variables			
Average age (years)	38.39±8.61	34.91±16.98	0.172
Mean of academic years	10.07±2.68	10.70±2.89	0.229
Mean of cooperation years as a health liaisons	6.44±6.24	5.16±6.31	0.275
Qualitative variables (frequency)*			
Job	43(76.8)	52(86.7)	0.180
Housekeeper	3(5.4)	4(6.7)	
Employed	10(17.9)	4(6.7)	
Other			
Marital status			
Single	12(21.4)	5(8.3)	0.101
Married	42(75.0)	54(90.0)	
Widowed and divorced	2(3.6)	1(1.7)	

The numbers in parentheses are percentages*

Table 3) Comparison of statistical mean scores of the Health Belief Model constructs and performance of health liaisons in the experimental and control groups, before and after the intervention

Variables	Before intervention	After intervention	significance level*	Score changes before and after intervention
Awareness				
Experimental group	51.15±22.78	84.9±17.21	<0.001	32.18±95.63
Control group	45.18±15.63	49.19±84.21	0.03	4.16±70.31
Significance level**	0.062	<0.001	-	<0.001
Perceived sensitivity				
Experimental group	76.9±92.83	79.5±86.72	0.04	2.94±11.01
Control group	75.9±37.97	70.10±29.57	0.005	-5.08±13.63
Significance level**	0.403	<0.001	-	<0.001
Perceived intensity				
Experimental group	78.12±78.08	86.5±02.38	<0.001	7.12±29.89
Control group	78.11±38.62	76.12±38.35	0.15	-2.10±00.78
Significance level**	0.858	<0.001	-	<0.001
Perceived benefits				
Experimental group	85.11±71.89	95.6±31.10	<0.001	9.13±59.35
Control group	87.10±76.26	88.10±19.13	0.74	0.10±43.29
Significance level**	0.322	<0.001	-	<0.001
Perceived obstacles				
Experimental group	45.17±50.11	27.12±25.13	<0.001	-18.21±25.64
Control group	42.10±53.56	44.11±53.57	0.23	2.12±00.97
Significance level**	0.268	<0.001	-	<0.001
Internal practice guide				
Experimental group	76.21±90.49	90.13±35.08	<0.001	13.25±45.15
Control group	83.16±44.71	83.18±00.38	0.85	-0.18±44.89
Significance level**	0.069	0.015	-	<0.001
External practice guide				
Experimental group	69.19±59.30	53.12±37.98	<0.001	-16.22±22.81
Control group	65.18±43.05	68.17±09.98	0.16	2.66±14.68
Significance level**	0.233	<0.001	-	<0.001
Perceived self-efficacy				
Experimental group	81.14±25.77	94.7±82.06	<0.001	13.17±57.20
Control group	83.13±42.85	77.18±25.85	0.003	-6.15±16.41
Significance level**	0.417	<0.001	-	<0.001
Performance				
Experimental group	72.13±29.48	87.7±18.66	<0.001	14.89±15.54
Control group	70.15±23.46	73.16±48.92	0.07	3.24±13.98
Significance level**	0.449	<0.001	-	<0.001

Paired T-test*; independent T-test**

Table 4) Comparison of scores of experimental and control groups after the intervention by matching the effect of the score before the intervention using one-way analysis of covariance

Variables	F	significance level	Effect size	Statistical power
Awareness				
Before intervention	163.08	<0.001	0.18	0.99
Group effect	25.57	<0.001	0.57	1
Perceived sensitivity				
Before intervention	1.15	0.284	0.01	0.18
Group effect	34.84	<0.001	0.24	1
Perceived intensity				
Before intervention	22.43	<0.001	0.16	0.99
Group effect	33.44	<0.001	0.22	1
Perceived benefits				
Before intervention	9.96	0.002	0.08	0.87
Group effect	24.87	<0.001	0.18	0.99
Perceived obstacles				
Before intervention	0.70	0.406	0.01	0.13
Group effect	62.17	<0.001	0.35	1
Internal practice guide				
Before intervention	5.73	0.018	0.04	0.66
Group effect	8.34	0.005	0.07	0.81
External practice guide				
Before intervention	21.33	<0.001	0.16	0.99
Group effect	35.24	<0.001	0.23	1
Perceived self-efficacy				
Before intervention	16.40	<0.001	0.13	0.98
Group effect	52.89	<0.001	0.32	1
Performance				
Before intervention	27.18	<0.001	0.19	0.99
Group effect	33.25	<0.001	0.23	1