นิพนธ์ต้นฉบับ

Health behavior, knowledge and attitude toward viral hepatitis among some groups of intravenous drug abusers.

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Viral hepatitis is a major public health problems in many parts of the world, including Thailand. The intravenous drug abusers (IVDAs), one of the high risk groups of parenterally viral hepatitis, may spread the virus to others. This study attempted to determine the health behavior, knowledge and attitude toward viral hepatitis in some groups of IVDAs. One hundred and fifty male IVDAs who sought medical treatment at Phranungkhlao and Rajavithi Hospitals during June to October 1992, were interviewed about general information, personal behavior, drug abuse behavior, knowledge and attitude toward viral hepatitis by using a structural questionnaire (the reliabilities were 0.7 for knowledge and 0.8 for attitude). It was found that the mean age of the 150 IVDAs was 30.89 ± 6.47 years. More than half (56.67%) had been imprisoned, 66.00% had tattoos or ear pierced and 75.33% had a history of extramarital relations without using condoms. Also, 66.33% had a history of sharing needles and only 9.33% cleaned the needle and syringe by boiling or use of anti-septics or by using disposables. Sixty-two percent had knowledge scores lower than the mean score. Only 26.67 % knew the hepatitis transmission methods and 22.00% knew the methods of prevention. 46.67% had attitude scores lower than the mean score and almost 70% believed that it was an ordinary practice for man to have sexual enjoyment with prostitutes.

Key words : *Health behavior, Knowledge, Attitude, Viral hepatitis, IVDAs.*

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โรคไวรัสตับอักเสบเป็นปัญหาสาธารณสุขที่สำคัญของหลายประเทศรวมทั้งประเทศไทย ผู้ติดยาเสพติดชนิดฉีดเป็นกลุ่มเสี่ยงกลุ่มหนึ่งที่อาจมีบทบาทสำคัญในการแพร่เชื้อบุคคลอื่น การศึกษาพฤติกรรมอนามัย ความรู้และเจตคติต่อโรคไวรัสตับอักเสบในกลุ่มเป้าหมายนี้ จึงอาจมีประโยชน์ในการป้องกันและควบคุมการระบาดของโรค คณะผู้วิจัยได้ทำการสัมภาษณ์ผู้ติดยาเสพติดชนิดฉีดเพศชายที่มารับบริการที่โรงพยาบาลพระนั่งเกล้าฯ และโรงพยาบาลราชวิถีระหว่างเดือนมิถุนายน ถึง ตุลาคม 2535 จำนวน 150 ราย โดยใช้แบบสอบถามที่มีค่าความน่าเชื่อถือ (Reliability) = 0.7 และ 0.8 ในการวัดความรู้และเจตคติต่อโรคไวรัสตับอักเสบ จากการศึกษาพบว่าอายุเฉลี่ยของกลุ่ม = 30.89 ± 6.47 ปี, ร้อยละ 56.67 เคยถูกจำคุกมาก่อน, ร้อยละ 66 มีรอยสักหรือเจาะหู, ร้อยละ 75.33 มีประวัติมีเพศสัมพันธ์นอกสมรสโดยไม่ใช้ถุงยางอนามัย, ร้อยละ 66.33 มีประวัติการใช้เข็มร่วมกัน, มีเพียงร้อยละ 9.33 ที่มีการทำความสะอาดเข็มและหลอดฉีดยาด้วยการต้มหรือใช้ยาฆ่าเชื้อหรือใช้แล้วทิ้ง, ร้อยละ 62 มีคะแนนความรู้เกี่ยวกับโรคไวรัสตับอักเสบต่ำกว่าคะแนนเฉลี่ยของกลุ่ม มีเพียงร้อยละ 26.67 ที่ทราบวิธีการแพร่เชื้อ และร้อยละ 22 ทราบวิธีการป้องกันโรค สำหรับเจตคติ ร้อยละ 46.67 มีคะแนนต่ำกว่าคะแนนเฉลี่ยของกลุ่ม และเกือบร้อยละ 70 เชื่อว่าเป็นเรื่องธรรมดาที่เพศชายจะมีเพศสัมพันธ์กับหญิงบริการอาชีพพิเศษ

Hepatitis is a common complication of infections caused by different viruses; for example, yellow fever virus, cytomegalovirus, Ebstein-Barr virus and rubella virus.[1-3] But there is a different group of five viruses which infect the liver as the primary target organ to cause the disease "viral hepatitis".[1,3,4] These viruses are hepatitis A virus (HAV), hepatitis B virus (HBV), hepatitis C virus (HCV), hepatitis D virus (HDV) and hepatitis E virus (HEV).[1,2,5] Hepatitis caused by these viruses is presented clinically in similar fashions. Although the incubation periods may be a differentiating feature, it is of little help in diagnosis unless the time of contracting the virus in known. Laboratory tests are essential to identify viral hepatitis.[2,6] The disease is a major public health problem and it can occur in all persons, but most cases are children and young adults.[1,5] The major transmission route of HAV and HEV is oral-fecal, and that of HBV, HCV and HDV is parenteral.[3-5] Hepatitis B and C are important diseases caused chronic liver infection, liver cirrhosis and hepatocellular carcinoma, which is one of the world's most common and fatal malignancies.[7-10] The chronic HCV infection rate is higher than HBV infection which occurs in about 5-10% of the cases.[11] If the HCV patients are infected with other agents such as HIV or HBV,they will be associated with serious liver damage and likely will develop liver cirrhosis with in 3 years.[12] In Thailand, one of the high risk groups for parenterally viral hepatitis, especially HCV infection, is intravenous drug abusers (IVDAs), because of the high prevalence of HCV infection (93% to 95%)[13,14] and the increasing rate of drug addicts. These seek treatment from clinics and hospital throughout the country[15] but may easily spread the infection to other persons. At present, there are no special prevention and effectivecurative drugs or procedures for HCV infection, besides health education for aviodance of the risk factors. This study attempted to determine the health behavior patterns and some socio-psychological aspects (knowledge and attitude) toward viral hepatitis among IVDAs which might be valuable for improving the health education manuals about viral hepatitis prevention in this target group.

Meterials and Methods

Studied population and studied design

A cross-sectional study was conducted in 150 male IVDAs who sought medical treatment at Phranungkhlao and Rajavithi Hospitals during June to October 1992. Because these two hospitals permitted to take the study. The subjects were selected on purpose with their permission (76 individuals from Phranungkhlao Hospital and 74 from Rajavithi Hospital). All studied IVDAs were interviewed for general information, personal behavior, drug abuse behavior and some socio-psychological factors (knowledge and attitude) toward viral hepatitis by using a structural questionnaire which was pretested for reliability. The reliabilities of knowledge and attitude to viral hepatitis were 0.7 and 0.8, respectively.

Data analysis

Data from the study were expressed by using percentage, mean or median and other descriptive statistics.

Results

1. General characteristics of studied Intravenous Drug Abusers

Of the 150 male IVDAs, 79 (52.67%) were 25-34 years of age and 41 (27.33%) were 35-44 years of age (mean age was 30.89 ± 6.47 years, range 18-55 years). Most of them (89.33%) were Buddhist. The marital status between those that were married or separated and those single were nearly equal. Sixty two of the cases (41.33%) studied in secondary school, 33 (22.00%) were unemployed and 67 (44.67%) were employed. Sixty eight (45.33%) had incomes of 3000-5999 bahts per month and 37 (24.67%) had no income (the mean income of those who had income was 3912.67 bahts). (Table 1)

Table 1. General characteristics of studied IVDAs.

Characteristics		Number (n=150)	Per cent
Age (years)	15-24	26	17.33
	25-34	79	52.67
	35-44	41	27.33
	45-54	3	2.00
	>54	1	0.67
$\bar{X} \pm SD = 30.89 \pm 6.47$ years			
Religion	Buddhism	134	89.33
	Islamism	16	10.67
Marital status	Married/Separated	73	48.67
	Single	77	51.33
Education	Primary school	52	34.67
	Secondary school	62	41.33
	Vocational education	33	22.00
	Higher vocational education	3	2.00
Occupation	Unemployed	33	22.00
	Employee	67	44.67
	Private business	36	24.00
	Other	14	9.33
Income per month (baths)	No	37	24.67
	< 3000	16	10.67
	3000 - 5999	68	45.33
	≥ 6000	26	17.33
	Uncertain	3	2.00

2. Personal behavior

The personal behavior traits included a history of previous imprisonment, closing with jaundice patient, used sharing blade, having tattoos or pierced ears, and extramarital relations. This study found that 56.67% (85/150) had been imprisoned, 9.33% had a history of closing with jaundice patients, 66.00% had tattoos or pierced ears, and 75.33% had a history of having extra-marital relations. (Table 2)

Table 2. Personal behaviors of 150 IVDAs.

Personal behaviors	No.	%
History of imprisonment		
yes	85	56.67
no	65	43.33
History of contacting with jaundice patients		
yes	14	9.33
no	136	90.67
Sharing used toothbrush		
yes	3	2.00
no	147	98.00
Sharing used blade		
yes	23	15.33
no	127	84.67
Tattoo or ear piercing		
yes	99	66.00
no	51	34.00
Extramarital relations without condom *		
yes	113	75.33
no	37	24.67

*Sexual intercourse with the women who are not their wives, and /or history of homosexual.

3. Drug abuse behavior

The traits regarding drug abuse were place of drug abuse, numbers of drug abusers at each use, frequency of drug abuse, duration of drug injection, use of shared needle, and the method of cleaning the needle and syringe. This study found that 40.67% of the 150 studied IVDAs injected drugs in their homes, only 17.33% injected drugs alone, 98.00% used drugs for more than 2 times per day, 89.33% used drugs for more than 2 years, 65.33% had a history of shared needle use, and only 9.33% of them cleaned the needle and syringe by boiling or use of anti-septics or used disposable syringes. (Table 3)

Table 3. Practicing behavior of 150 IVDAs.

Drug abusing behaviors	No.	%
Place of drug abusing		
in their house	61	40.67
other place	89	59.33
Number of drug abusers in each time		
himself alone	26	17.33
1-2 persons	7	4.67
> 2 persons	117	78.00
Frequency of drug abusing		
≤ 2 times per day	3	2.00
> 2 times per day	147	98.00
Duration of drug injection		
≤ 2 years	43	28.67
> 2 years	134	71.33
Sharing used needle		
yes	98	65.33
no	52	34.67
Cleaning needle and syringe		
washing with tap-water or did nothing	136	90.67
Boiling or used disposable needle and syringe	14	9.33

4. Select socio-psychological aspects

(Knowledge and Attitude)

Of the 150 studied IVDAs, less than half of them answered correctly concerning knowledge about viral hepatitis and 38% of the IVDAs had knowledge scores higher than the mean score. The mean score was 2.12 and the score ranged from 0 to 8. Questioning showed that only 26.67% knew the disease transmission methods, 15.33% knew the cause of this disease, 17.33% knew that viral hepatitis B and C have the major risk of hepatocarcinoma, and only 22.00% knew the methods of disease prevention. (Table 4)

Table 4. Number and per cent of 150 IVDAs who answered the knowledge about viral hepatitis correctly sort by each question.*

Question	Number (n=150)	Per cent
1. Viruses are the major cause of hepatitis.	23	15.33
2. Jaundice is the major symptom of viral hepatitis.	40	26.67
3. Viral hepatitis B is the most well-known hepatitis.	62	41.33
4. Viral hepatitis is a communicable disease that transmits by blood, sexual intercouse, use sharing things and mother to child.	40	26.67
5. Viral hepatitis is diagnosed by blood testing.	61	40.67
6. Viral hepatitis may have no signs and symptoms.	33	22.00
7. Viral hepatitis B or C have the major risk of hepatocarcinoma.	26	17.33
8. Vaccination can prevent some of viral hepatitis.	33	22.00

*The mean score was 2.12 and the score ranged from 0 to 8 38 % had score higher than score.

The mean attitude score to viral hepatitis was 24.07 and 46.67% of the IVDAs had scores lower than the mean score. Over 80% of studied IVDAs agreed that: (a) a routine physical checkup is necessary, (b) sexually transmitted diseases and viral hepatitis can be prevented by using condoms, (c) if you are infected with viral hepatitis, you should inform your neighbors, (d) needle sharing isn't the way to save money in drug abusing and (e) once or twice needle sharing will not prevent one from getting the diseases. About 60-70% believed that : (a) it is a common practice for men to have sexual enjoyment with prostitutes and (b) fear of AIDS is greater than the fear of viral hepatitis. These were shown in Table 5.

Table 5. The per cent of attitude to viral hepatitis in the 150 studied IVDAs*.

Attitude	Agree	Uncertain (per cent)	Disagree
1. Routine physical checkup is unnecessary.	6.00	2.00	92.00
2. It is an ordinary practice of man to have sexual enjoyment with prostitutes.	65.33	8.00	26.67
3. Sexually transmitted diseases and viral hepatitis can be prevented by using condom.	83.33	9.33	7.33
4. Viral hepatitis is a preventable disease.	82.00	14.67	3.33
5. You are risk to infect with viral hepatitis.	74.00	11.33	14.67
6. If you are infected with viral hepatitis, you will not inform your neighbors.	8.00	5.33	86.67
7. Needle sharing is the way to save money in drug abusing.	14.67	0.00	85.33
8. Once or twice needle sharing might be safe from getting the diseases.	9.33	10.67	80.08
9. Fear of AIDS is superior to the fear of viral hepatitis.	68.00	7.33	24.67
10. You prefer to have blood checked for viral hepatitis, although you must pay for some money.	76.67	3.33	20.00

*Mean attitude score was 24.07

Discussion

One of the high risk groups for parenterally viral hepatitis in many parts of the world is intravenous drug abusers. High prevalence rates of parenterally viral hepatitis have been reported.[13,14,16-18] Viral hepatitis B is a disease of global importance, with more than 300 million carriers of the virus world-wide. Intravenous drug abusers have consistently showed the highest HBV infection rate in Europe and North America, with 65 to 90% being positive for HBV markers.[16] Hepatitis C infection rates in IVDAs were 53-81% in Taiwan,[19] 42-85% in the USA,[20,21] 80% in Sweden,[22] and 93-95% in Thailand.[13-14] High hepatitis D virus seroprevalence rates in IVDAs have been reported in several countries including in Thailand.[17,18] The results from our study showed low levels of knowledge and poor attitude scores toward viral hepatitis in this group, only 22% of them knew the methods of disease prevention. A high percentage of them (65.33%) had a history of

shared needle use, and 75.33% had a history of having extramarital relations without use of condoms. Most of them believed that it wasn't natural to use condoms when having sex, and these diseases were easy to cure although they got them. Moreover, they believed that expensive or well dressed prostitutes and women know to them were free from those sexually transmitted diseases. These informations indicated that these people might play important roles in viral hepatitis transmission to other persons via sexual contact and needle sharing.

At present, there are hepatitis B vaccines for HBV prevention but there is no effective vaccine or drugs for HCV and HDV infections. Information and education about viral hepatitis by using posters or leaflets and individual or group health education should be provided during methadone treatment in drug addict treatment clinic. Information about sexually transmitted diseases caused by extramarital relations without condoms should also be provided. Good clothing or the high price prostitutes are not indications of a lack of disease. Drug addicts should be educated about use of disposable needles or syringes, and boiling or using antiseptics before subsequent uses. The AIDS/HIV pandemic is a global health crisis and there are many preventive and control programmes. Health education about viral hepatitis should be integrated into the AIDS/HIV education programmes because IVDAs are more afraid of AIDS than viral hepatitis and they have often been exposed to AIDS information.

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