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Knowledge, Attitude and Practice of Village Midwives Regarding HCV in Khartoum State, Sudan; 2014

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Abstract

Hepatitis is a disease of liver that can be caused by chemicals or viruses. The objective of this study is to study level of knowledge, attitude and practice among village midwives regarding HCV, Khartoum State, Sudan, 2014. This study was a descriptive study. Three hundred thirty five village midwives were surveyed. Data was collected through questionaire which was composed of 20 questions; 11 for knowledge, 6 for attitude and 3 for practice. Variables were computed using SPSS version 20. The results shows that most of respondents were in age group less than 49 years (68.4%). Seventy seven percent were educated. About half of them had duration of work for more than twenty years. They had poor knowledge (33.7%) and attitude (42.4%); but they had moderate level of positive practice (61.2%). There was no significant statistical association between knowledge and age, education, or duration of work; no significant statistical association between attitude and age or duration of work, while there was significant statistical association of attitude with education; and no statistical association between practice and age, while there was significant statistical association between practice and education and duration of work. There was a poor level of knowledge and attitude; but there was moderate level of positive practice.

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There was significant statistical association between attitude and education; between practice and education and duration of work. Health education is highly recommended.

Keywords: HCV; KAP; Village midwives; Khartoum State; Sudan.

1. Introduction

1.1 Background information

Hepatitis is a serious health problem; majority of patients are symptom-less, where they recover or pass into chronic states without knowing they are infected. Range of prevalence of HCV of 0.05% to 105% is reported in India. There is low awareness among them and so patients seek health care at irreversible late stage of the disease. A study that carried out among nursing students in Kushabhau Thakre Nursing College, Kolar Road, Bhopal, yields low knowledge about methods of transmission of HCV as well as prevention modalities [1]. Low level of awareness regarding HCV is reported among HCWs of a tertiary hospital in India [2]. Moderate level of knowledge towards occupational exposure is reported among Health Care Workers in a Tertiary Care Hospital; New Delhi, India [3]. The level of knowledge regarding needle stick injuries and their preventions among dental professionals of Bangalore, India, is inadequate [4]. Knowledge, attitude and practice regarding blood borne pathogens among paramedical in nine Primary Health Care centers in Cairo and Giza governorates in Egypt is reported significantly post-interventional [5]. In modeled study for incidence of infections due to percutaneous injuries 16000 HCV, 66000 HBV and 1000 HIV is reported globally [6]. There is un-satisfactory level of knowledge about transmission of HCV among medical groups in Tehran, Zanjan and Ahwaz, Iran [7]. In a study conducted in two national/regional congresses and two university hospitals in Iran, there is unsatisfactory level of knowledge about routes of transmission, prevalence, protection and post-exposure seroconversion rates, regarding HCV [8]. There is a satisfactory level of KAP among medical students regarding HCV in seven medical colleges in Karachi [9]. Inadequate knowledge and poor practice regarding universal precautions is reported among HCWs in Kaboul [10].There is fair level of knowledge and positive attitude, with poor practice regarding HCV among HCWs in Kuwait [11]. Insufficient knowledge, attitude and practice toward standard precautions are reported among most of HCWs in Mizan-Aman general hospital, Ethiopia [12].Very poor practice is reported among nurses in dialysis unit of the Student University Hospital in Alexandria governorate [13]. Negative attitude is reported among HCWs in Banja Luka, Bosnia and Herzegovina [14]. This study was aiming to study the level of knowledge, attitude and practice of village midwives related to HCV, in Khartoum State, Sudan, 2014**.** We did not come across published studies related to this area in Sudan. So policy makers in Khartoum State are in great need for information that can be generated from this study.

1.2 Objective: To determine the level of knowledge, attitude and practice of Village Midwives regarding HCV in Khartoum State, Sudan, 2014.

2. Materials and Methods

2.1 Study design

Descriptive study

2.2 Study area

Khartoum state which is composed of seven localities.

2.3 Study population

They are trained village midwives that providing ante-natal, natal and post-natal services in Khartoum State, Sudan, 2014.

2.4 Sample frame

Consisted of all village midwives delivering midwifery services in the localities of Khartoum State.

2.5 Sampling Technique

One stage stratified sampling

2.6 Calculation of sample size

According to the formula:

$$n = \frac{N}{(N-1)\,d^2 + 1}$$

2.7 Data collection

- **Study variables are:**
- **Independent variables:** Socio-demographic variables and Duration of work.
- **Dependent variables:** Knowledge, Attitude and Practice.
- **Tool of data collection:** Pre-tested close end questionnaire. It is composed of 6 questions for demographic variables, 11 questions for knowledge, 6 questions for attitude, and 3 questions for practice.

2.8 Data analysis

Three hundred and thirty five village midwives participated in this study. Demographic variables together with informations about knowledge, attitude and practice regarding HCV were collected through pretested close end questionaire. The questionaire composed of 11 questions for knowledge, 6 questions for attitude and 3 questions for practice. Variales of knowledge covered whether the participant heard about HCV or not, transmission methods, symptoms and signs, and prevention methods. Six variables were related to the attitude. Knowledge about practice determined by three variables and these are: voluntery blood test for HCV, cautery and tattoo. Data was analysed using SPSS version 20.

3. Ethical consideration

It was approved by Sudan Medical Specialization Board and Khartoum State Ministry of Health. At the end consent was taken from each respondent.

4. Results

Three hundred thirty five village midwives were surveyed. With regard to age they were grouped into three: (i) Age group 30-49 (65.8%) (ii) More than 50 years (29.5%) (iii) Less than years (4.6%). Their level of education was as follow: university graduate (0.9%), secondary certificate (9.8%), intermediate (14.2%), primary (50.2%), Quranic School (1.9%) and illiterate (23%). About 61.8% were married, 16.4% widowed, 11.3% divorced and 4.8% were single.

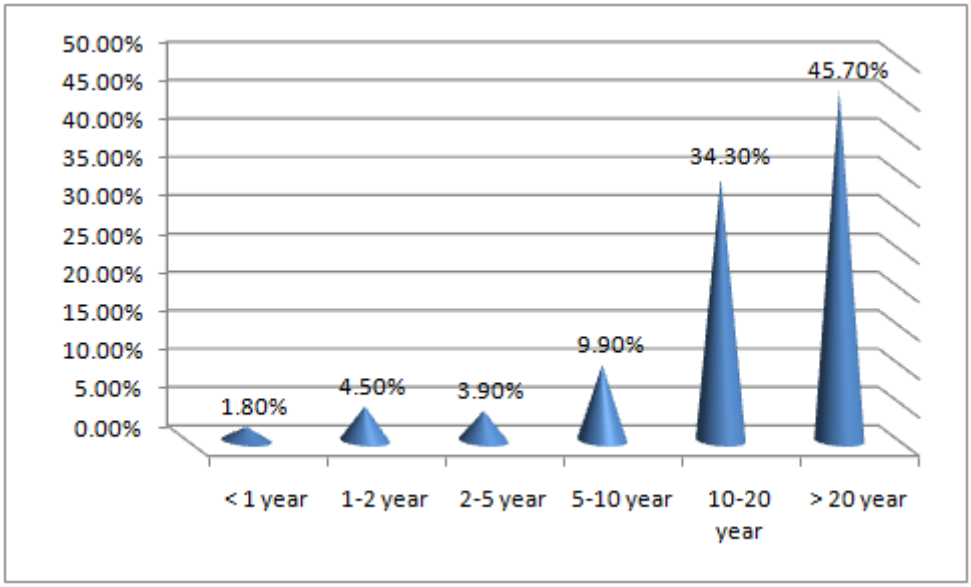

Figure 1: Show the percent of the duration of work of village midwives in Khartoum State, Sudan; 2014 (n= 335)

About 45.7% of participants were working for more than twenty years and 34.3% were working for 10-20 years (Figure 1).

4.1 Knowledge

Knowledge composed of 11 questions. The 25th percentile at 15 score used as cut-off point to differentiate adequate knowledge from inadequate, that means eight questions out of eleven were correct. One hundred and thirteen of participants (33.7%) had adequate knowledge, (Tale 1)

4.2 Attitude

Knowledge about attitude regarding HCV composed of 6 questions. The 25th percentile at 7 score used as cut-

off point to differentiate positive attitude from negative, that means five questions out of six were correct. One hundred forty two (42.4%) of respondents showed positive attitude (Table 1)

Table 1: Level of knowledge, attitude and practice regarding HCV among village midwives in Khartoum State, Sudan; 2014 (n = 335)

Characteristics	Level	Frequency	Percent
Knowledge	Adequate Knowledge	113	33.7
	Inadequate Knowledge	222	66.3
	Total	335	100.0
Attitude	Positive attitude	142	42.4
	Negative attitude	193	57.6
	Total	335	100.0
Practice	Positive practice	205	61.2
	Negative practice	130	38.8
	Total	335	100.0

4.3 Practice

Three questions were used to determine the level of practice regarding HCV among village midwives. Two hundred and five (61.2%) showed positive practice (Table 1).

4.4 Association between age, education and duration of work with KAP regarding HCV

For simplicity age was grouped into two groups; education level grouped into two: Illiterate and Literate; duration of work grouped into four groups: less than 5 years, 5 – 10 years, 10-20 years and above 20 years.

Two hundred and twenty nine of respondents were in the age group less than 49 years; out of them 84 (36.7%) had adequate level of knowledge. For education the illiterates showed adequate level of 27.5% while literates showed adequate level of 36.1%. Regarding duration of work the least level of adequate knowledge was reported among those who worked for (10-20 years). (Table 2)

Age group less than 49 years showed a higher level (45.9%) of positive attitude in comparison to age group more than 49 years (34.9%). Literate village midwives had adequate level of knowledge of 46.3%, while that of illiterate was 31.9%. Regarding duration of work, those who worked for 5-10 years got the highest level of adequate knowledge (51.5%); (Table 3).

There was no significant statistical association between knowledge and age, education, or duration of work at 0.05. No significant statistical association were found between attitude and age or duration of work, while there was significant statistical association with education, at 0.05. This explain the importance of education among

paramedical. Also there was no significant statistical association between practice and age, while there was significant statistical association between education, and duration of work at 0.05. Education enhances learning and duration of work is related to subjection of the candidate to learning by doing during routine supervision.

Table 2: Association between knowledge regarding HCV among village midwives and their age, education and duration of work; Khartoum State, Sudan; 2014 (n = 335)

Characteristics		Knowledge level		Total	P value*
		Adequate	Inadequate		
Age	< 49 years	84 (36.7%)	145 (63.3%)	229	0.093
	>49 years	29 (27.4%)	77 (72.6%)	106	
Total		113 (33.7%)	222 (66.3%)	335	
Education	Illiterate	25 (27.5%)	66 (72.5%)	91	0.139
	Literate	88 (36.1%)	156 (63.9%)	244	
Total		113 (33.7%)	222 (66.3%)	335	
Duration of work	<5 years	14 (41.2%)	20 (58.8%)	34	0.680
	>5-10 years	12 (36.4%)	21 (63.6%)	33	
	>10-20 years	35 (30.4%)	80 (69.6%)	115	
	> 20 years	52 (34.0%)	101 (66.0%)	153	
Total		113 (33.7%)	222 (66.3%)	335	

*There was no significant statistical association between knowledge and age, education, or duration of work at 0.05.

Table 3: Association between attitude regarding HCV among village midwives and their age, education and duration of work; Khartoum State, Sudan; 2014 (n = 335)

Characteristics		Attitude Categories		Total	P value*
		positive	negative		
Age	< 49 years	105 (45.9%)	124 (54.1%)	229	0.429
	>49 years	37 (34.9%)	69 (65.1%)	106	
Total		142 (42.4%)	193 (57.6%)	335	
Education	Illiterate	29 (31.9%)	62 (68.1%)	91	0.017*
	Literate	113 (46.3%)	131 (53.7%)	244	
Total		142 (42.4%)	193 (57.6%)	335	
Duration of work	< 5 years	17 (50.0%)	17 (50.0%)	34	0.490
	>5-10 year	17 (51.5%)	16 (48.5%)	33	
	>10-20 years	46 (40.0%)	69 (60.0%)	115	
	> 20 years	62 (40.5%)	91 (59.5%)	153	
Total		142 (42.4%)	193 (57.6%)	335	

*There was no significant statistical association between attitude and age or duration of work, while there was significant statistical association with education, at 0.05.

There was no significant statistical association between practice and age, while there was significant statistical association between education, and duration of work at 0.05

Table 4: Association between practice regarding HCV among village midwives and their age, education and duration of work; Khartoum State, Sudan; 2014 (n = 335)

Characteristics		Practice		Total	P value*
		Positive	Negative		
Age	< 49 years	147 (64.2%)	82 (35.8%)	229	0.098
	>49 years	58 (54.7%)	48 (45.3%)	106	
Total		205 (61.2%)	130 (38.8%)	335	
Education	Illiterate	46 (50.5%)	45 (49.5%)	91	0.015*
	Literate	159 (65.2%)	85 (34.8%)	244	
Total		205 (61.2%)	130 (38.8%)	335	
Duration of work	< 5 years	26 (76.5%)	8 (23.5%)	34	0.052*
	>5-10 years	23 (69.7%)	10 (3.3%)	33	
	>10-20 years	73 (63.5%)	42 (36.5%)	115	
	> 20 years	83 (54.2%)	70 (45.8%)	153	
Total		205 (61.2%)	130 (38.8%)	335	

Age group less than 49 years had positive practice of 64.2%; literates had a level of 65.2%; duration of work for less than 5 years associated with positive practice of 76.5%; (Table 4).

5. Discussion

A total of three hundred thirty five village midwives were studied. Most of respondents were in the age group less than 49 years (68.4%). Seventy seven percent were educated. About half of respondents had duration of work for more than twenty years. They had poor knowledge (33.7%) and attitude (42.4%); but they had a moderate level of positive practice (61.2%). These findings are similar to international levels that reported in India, among nursing students in Kushabhau Thakre Nursing College, Kolar Road, Bhopal; HCWs of a tertiary hospital; dental professionals of Bangalore [1, 2, 4]. In Iran there is un-satisfactory level of knowledge among medical groups in Tehran, Zanjan and Ahwaz; in two national/regional congresses and two university hospitals [7, 8]. In Kaboul there is inadequate knowledge and poor practice among HCWs [10]. In Ethiopia there is insufficient knowledge, attitude and practice among most of HCWs in Mizan-Aman general hospital [12]. There is very poor practice among nurses in dialysis unit of the Student University Hospital in Alexandria governorate [13]. Negative attitude is reported among HCWs in Banja Luka, Bosnia and Herzegovina [14]. A satisfactory level of KAP is reported among medical students in seven medical colleges in Karachi [9]. There is fair level of

knowledge and positive attitude, with poor practice among HCWs in Kuwait [11]. These findings indicated a serious situation in the medical field regarding KAP about HCV in the mentioned countries together with Sudan.

6. Conclusions and recommendations

There was a poor level of knowledge and attitude; but there was moderate level of positive practice among village midwives in Khartoum State, Sudan. There was significant statistical association between attitude and education; between practice and education and duration of work. Health education is highly recommended.

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