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Assessment of Nurses Knowledge Regarding Jaundice in Basra Hospitals

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Abstract
A descriptive study was carried out at the Basra Hospitals started from November 2th 2017 to 2thmarch, 2018.The study aims to assess nurse's knowledge concerning jaundice, and to identifying the relationship between nurse's knowledge and their demographic characteristic. A purposive sample of (100) nurses was selected on the surgical wards in Basra hospitals (AL-Sader, AL-Basra, AL-Fyhaa, and AL-Mawani). The data were collected through the use of direct interview, which comprised of (30) items as mean of data collection. The data were analyzed through the application of descriptive statistical analysis that includes frequency and percentage, and the application of inferential statistics that including the mean of score, and Chi - square test. The study shows that the majority of the nurses were males (60%), with age group (25- 29) years old (28%), nursing institute graduate (48%), the majority of nurses have than less (1 -5) years of experience (44%). The result indicated that there were no significant associations between the nurse's gender, age, years of experience and their knowledge, and there were significant associations between the nurse's level of education and their knowledge. The results demonstrated a knowledge deficit in the most items of questioner about jaundice in all hospitals.

Introduction
Jundice is a condition in which a person's skin and the whites of the eye are discolored yellow due to an increased level of bile pigments in the blood resulting from liver disease[1.2]. Yellowness of skin, sclera, mucous membranes, and excretions due to hyperbilirubinemia and deposition of bile pigments [3]. Jaundice is not a disease; it is a symptom of a number of different diseases and disorders of the liver and gallbladder and of hemolytic blood disorders [4]. There are many different causes for jaundice, but they can be divided into three categories based on where they start before, in, or after the liver (pre hepatic, hepatic and post hepatic) [5.6]. The three types of jaundice are classified as hemolytic, hepatocellular, and obstructive [7].

Hemolytic (pre hepatic) jaundice is due to an increased break down of red blood cells (RBC) which products an increased amount of unconjugated bilirubin in the blood [8]. A Hepatocellular (hepatic) jaundice result from the liver's altered ability to take up bilirubin from the blood or to conjugate or excrete it [9]. Obstructive (post hepatic) jaundice is due to impeded or obstructed flow of bile through the liver or biliary duct system [10].

The nurses should asses for the degree of jaundice. In light-skinned persons the jaundice is usually observed first in the sclera of the eyes and later in the skin. In dark-skinned persons, jaundice is observed in the hard palate of the mouth and inner canthus of the eyes [11.12]. The nurse plays an important role in the therapeutic success and outcome of the patient because they educated the patient about the types of jaundice and to prevent complications through maintaining strict aseptic technique **[13].**

Today infection increased the financial cost on the patients, increase the use of antibiotics, increase in the consumption of medical supplies and increase of time consuming for personnel in the health sector [14].

Methods:
The study aims to assess nurse's knowledge concerning jaundice in Basra hospitals and to finding out the relationship between nurse's knowledge and their demographic characteristics, which include (age, gender, level of education, and years of employment).

A descriptive design was conducted on the surgical wards in AL-Sader Teaching Hospital, AL-Basra general Hospital, AL-Fyhaa general Hospital, and AL-Mawani general Hospital started from November 2th 2017 to 2thmarch, 2018 in order to assess nursing knowledge concerning jaundice. A probability sample of (100) nurses males and females, who were in the all wards. For the purpose of the study, the researcher constructed the study instrument because no existing tool was found to measure the desired knowledge. The construction was based on the extensive review of relevant literature and related studies. A questionnaire format was used for data collection, which consisted of (2) parts. The overall number of the items included in the questionnaire was (30). The items were rated on three level likert scales: know, uncertain, and don't know and scored as 3, 2, and1, respectively, cutoff point was (2). The first part of the questionnaire sheet included (4) items relative to the demographic data of the nurses who work in all wards and units and included; age, gender, level of education, years of employments. The second part of the questionnaire was comprised (30) items that concerned with nurses knowledge relative to jaundice. Data were collected through direct interview with the nurses of the sample. The data analyze through the use of descriptive statistical (frequency and percentage) and the use of

inferential statistical (mean of score and chi-square (X^2). The mean of score, which was equal to (2), was considered significant if greater than (2) and less than (2) was considered non-significant. Chi-square (X^2) used to determine the significant relationship between the nurse's knowledge and their demographic characteristics at $p \leq 0.05$.

Results of the study

Table1: Distribution of nurses by their demographic data.

Gender .1	F	%
Male	56	56%
Female	44	44%
Total	100	100%
Age .2		
20-29	44	44%
30- 39	25	25%
40- 49	31	31%
Total	100	100%
Level of education .3		
Secondary nursing school	48	48%
Nursing institute graduate	35	35%
Nursing college graduate	17	17%
Total	100	100%
Years of employment .4		
9 -1	61	61%
10-19	22	22%
20- 29	17	17%
Total	100	100%

This table reveals that the majority of the sample were males (56%), (20- 29) years old (44%), secondary nursing school (48%), (1 -9) years of employment (61%).

Table2: Mean of scores of the nurse's knowledge concerning jaundice.

N	Items	know	Un certain	don't know	M.S
1	Jaundice is a darkening of the skin and mucous membranes solid (whites of the eyes) in yellow	35	35	30	2.5
2	Three types of jaundice (lytic, obstructive, inflammation)	20	41	39	1.81
3	The cause of jaundice is high or hypertext accumulation of bilirubin in the blood and tissues of the body	25	44	31	1.49
4	Bilirubin is the sum of waste produced when red blood cells break down	23	32	45	1.78
5	The normal range for bilirubin 0.1-3.0 melgm \ dl	18	43	39	1.79
6	Symptoms of jaundice in adults yellow appear on (the skin, whites of the eyes, and under the tongue)	45	25	30	2.15
7	Symptoms of jaundice in adults is also a sense of apathy and laziness, vomiting, nausea, itching and sometimes constipation	15	40	45	1.70
8	Symptoms when adults are also an imbalance in the nerves and lack of appetite, pain in the upper area of the abdomen	14	39	47	1.67
9	Jaundice is threatening complications as serious as hearing loss and the destruction of brain cells	29	33	38	1.91
10	Complications of jaundice sepsis, especially in the bile ducts and liver cirrhosis	18	44	38	1.80
11	Lytic jaundice caused by a broken red blood cells	20	39	41	1.79
12	Jaundice is caused by inflammationary total of viral hepatitis	42	22	36	2.06
13	Obstructive jaundice caused by a blockage of the bile duct (gallstones, and the tumor)	33	38	29	2.04
14	Obstructive jaundice and amplification are the two most common in adults	21	33	46	1.75

N	Items	know	Un certain	don't know	M.S
15	Gallbladder cancer, bile duct cancer are relatively rare condition may cause obstructive jaundice	27	26	47	1.80
16	Some drugs can cause jaundice (such as paracetamol ...)	16	40	44	1.72
17	The use of alcohol and drugs can cause jaundice inflationary	20	30	50	1.70
18	Spiral disease bacterial infection caused by animals jaundice inflationary	23	33	44	1.79
19	Malaria is transmitted through blood by mosquitoes cause jaundice lytic	25	44	31	1.94
20	Jaundice may be the result of hereditary condition such as ((thalassemia syndrome Aljelbrt))	26	34	40	1.86
21	Symptoms of jaundice in new-borns italic skin yellow, yellowing of the eyes, severe crying, poor feeding	17	37	46	1.71
22	Lytic jaundice is more common in new-borns	22	32	46	1.76
23	Jaundice occurs in new-borns because of abnormal physiology or where a child is born a very large number of red blood cells which is not needed by the body and thus cracking process is happening or to blood cells and excess saw her self-analysis about the need, leaving a high concentration of a substance bilirubin	20	35	45	1.75
24	Jaundice occurs in new-borns because of a defect in liver enzymes or occurrence of gall bladder blockage in the channels in which case the baby's skin color turns green olivine	21	29	50	1.71
25	Jaundice may occur in the new-born due to contamination of the umbilical cord	18	44	38	1.80
26	Jaundice analysis (ALP, AST ALT, GGT, PT ...)	22	44	34	1.88
27	The patient is advised jaundice Elly eating sweets lean and eat more fruits and vegetables and stay away from eating frozen	44	18	38	2.06
28	One of the changes in lifestyle may help prevent jaundice (such as maintaining a healthy weight categorize)	23	37	40	1.83
29	It advised not to exposure to substances known to necrosis of the liver (such as phenol and fourth carbon chloride) that causes liver cancer	18	46	36	1.85
30	Treatment of jaundice depends on the security situation are causing H.hat advise proper treatment after conducting tests to determine the type of jaundice	18	44	38	1.80
	total				1.841

The findings of this table indicate that the nurses have adequate knowledge concerning jaundice on items 1, 6, 12, 13 & 27 and inadequate on the remaining items.

Table3: Association between nurse's knowledge and their gender.

Gender		Know	Uncertain	Don't know	Total
Male	F	710	403	193	1306
	%	54.37 %	30.86 %	14.77 %	100%
Female	F	874	549	293	1716
	%	50.94%	31.99%	17.07%	100%
Total	F	1584	952	486	3022
	%	52.41%	31.51%	16.08%	100%
X^2 calculated = 4.33 df= 2 X^2 tabulated= 5.991 P > 0.05					

The finding of this table presented that there were no significant associations between the nurse's gender and their knowledge.

Table4: Association between nurse's knowledge and their age.

Age		know	uncertain	Don't know	Total
25-34	F	698	400	201	1299
	%	53.73%	30.79%	15.70%	100%
35- 44	F	703	312	146	1161
	%	60.55%	26.87%	12.57%	100%
45- 54	F	283	220	59	562
	%	50.35%	37.16%	14.49%	100%
total	F	1684	932	406	3022
	%	55.27%	30.84%	13.43%	100%
X^2 calculated = 8.40		df= 10	X^2 tabulated= 18.307		P > 0.05

The finding of this table presented that there were no significant associations between the nurse's age and their knowledge.

Table5: Association between nurse's knowledge and their level of education.

The finding of this table presented that there were significant associations between the nurse's level of education and their knowledge.

Level of education		know	uncertain	Don't know	Total
Secondary nursing school	F	627	490	208	1325
	%	47.34%	36.98%	15.68%	100%
Nursing institute graduat	F	487	298	145	930
	%	52.36%	32.05%	15.59%	100%
College of nursing	F	521	168	78	767
	%	67.92%	21.92%	10.16%	100%
Total	F	1635	956	431	3022
	%	54.10%	31.63%	14.27%	100%
X^2 calculated = 22.72		*df= 4*	*X^2 tabulated= 9.488*		*P < 0.05*

Table6: Association between nurse's knowledge and their years of experience.

Years of experience		know	uncertain	Don't know	Total
1-9	**F**	898	594	222	1714
	%	52.39%	34.66%	12.95%	100%
10- 19	**F**	477	208	124	809
	%	58.96%	25.71%	15.33%	100%
20- 29	**F**	397	77	25	499
	%	79.55%	15.43%	5.02%	100%
Total	**F**	1772	879	371	3022
	%	58.63%	29.08%	12.27%	100%
X^2 calculated = 9.72		***df= 6***	***X^2 tabulated= 12.592***		***P > 0.05***

The finding of this table presented that there were no significant associations between the nurse's years of experience and their knowledge.

Discussion of the results

Throughout the course of the present study, it has noticed that the majority (56%) of the study sample was males. The highest proportion (44%) of them were (20-29) years old. concerning level of education, secondary nursing school (48%), (1 -9) years of employment (61%).Throughout the use of observational checklist the highly percentage of nurse's have adequate knowledge in items concerning (1, 6, 12, 13& 27).

Throughout the use of statistical analysis there were no significant relationships between nurse's knowledge and their age, gender& years of employment (table 3, 4 and 6), while they were high significant relationships between nurse's knowledge and their level of education. (table5) so nurses with low certification and inadequate knowledge cannot do difficulty responsibilities for patients. The researchers suggest an opportunity for nurses to be enrolled in training sessions to improve their knowledge.

Conclusions

According to the findings of the study and their discussion, the researcher concluded that:

1.The majority of the study nurse were males (56%), (20- 29) years old (44%), nursing institute graduate (48%), (1 -9) years of employment (61%).

2.The results demonstrated a knowledge deficit in the most items.

3. There is no significant relationship between age, gender &years of employment and nurse's knowledge about.
4. There is a significant relationship between level of education, and nurse's knowledge.

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