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Nurses' Knowledge and Practice in the Care of Anemia during Pregnancy

Widad Ibrahim A/gadir[1*], Suheir AM. Sayed[2], Rabia A .Eltayeb[3] and Alaa Altoum Altayeb Ali[4]

[1]Faculty of applied medical sciences, Taif University, KSA, Rented University of Bahri - Sudan
[2,3]Faculty of applied medical sciences, Nursing Department, Taif University, KSA
[4]College of Nursing sciences, University of Bahri – Sudan

Abstract	Original Research Article

Anemia isn't single disease but condition. Like fever, with many possible causes and many forms it can occur of blood loss, destruction of red blood cell or insufficient red blood cell production. This was study aimed to assess nurses' knowledge and practice regard care of anemia during pregnancy at Alsaudi hospital during period from March to May (2020). The sample size consisted of (20) available nurses in antenatal unite during study period. The data collected by using questionnaire and checklist designed for purpose of study and analyzed using statistical package for social sciences (SPSS). The result showed that 60% of the study sample their age less than 30 years while of the study 95% female. Majority of study sample 70% have master degree and 20% have diploma. Regarding knowledge of anemia disease if found that (60%, 65%, 55%). Regard nursing care to prevent form infection 45% of nurse's poor knowledge. In nursing management of mother with severe anemia it was found 40% of study sample lack of knowledge. 25%of study sample didn΄t know about prevention of anemia and who give advice to the mother. The study group has little knowledge of disease and its impact. The study recommends that nurses should be trained well on competent level of practice regard care of mother.
Keywords: Nurses, knowledge, Practice, Anemia and Pregnant Mother.

INTRODUCTION

Anemia is condition in which number of red blood cells or their oxygen carrying capacity is insufficient to meet physiological needs which vary by age, sex, attitude, smoking and pregnancy status (Ibrahim *et al*., 2016).

Iron deficiency anemia is thought to be most common cause of anemia globally, although other condition such as foliate, Vitamin B12, and vitamin A deficiency.

Chronic inflammation parasitic infections and inherited disorder can all cause anemia, in sever form it is associated with fatigue, weakness, dizziness and drowsiness. Pregnant women and children are particularly vulnerable (WHO).

During pregnancy women may develop slight expansion in blood volume than normal RBCS count as body prepares for catering growth fetus inside mother womb.it is called pseudoanemia of Carly pregnancy, it can be classified as pathologic if it is because of disorder in production of erythrocytes or excessive loss of erythrocytes due to bleeding (Ibrahim *et al*., 2016).

The role of nurse for clients with anemia includes (assess risk factors , decrease fatigue, maintenances of adequate nutrition, maintenance of adequate tissue perfusion, compliance with prescribed treatment regimen and be free from complications.

Anemia, largely due to iron deficiency, affects over two billion people .in many regions, more than 50% preschool and pregnant women are anemic. It was estimated that 20% of maternal deaths are caused by severe anemia. These arise from the physiological requirement of menstruation, pregnancy and to some extent, location. Iron deficiency is common in women of reproductive age even in developed countries.

In pregnant women there is increased demand due to physiological increase in maternal red blood cell mass and the needs of growing fetus and placenta.

Several previous efforts have summarizes the global prevalence and impact of anemia.in 1985 the world health organization (WHO) estimated that about 30% of world population was anemic in 1992 the WHO estimated that 37% of all women were anemic.2008 WHO analysis reported that anemia affected 24.8% of world population, including 42% of pregnancy women 30% in non-pregnant women, and 47% of preschool children .most recently globally anemia prevalence was estimated at 29% in pregnant women, 38% in non-pregnant women and 43% in children with reduction since 1995 in each group.

WHO estimates that even among the south Asian countries, India has highest prevalence of anemia, what is even more important is fact that about half of global maternal deaths due to anemia occur in south Asian countries, approximately 3.5 million Americans have anemia (National Heart Lung and Blood Institution NHLBI) IN 1996 estimated 2.1 million individuals younger than age 45 had anemia's.

In Sudan Prevalence of anemia among women of reproductive age (% of woman ages 15_49) in Sudan were 31.50 as of 2011.its highest value over the past 16 years was 40.80 in 1995, while its lowest value was 31.50 in 2011. Good nursing cares to mother with anemia in pregnancy reduce maternal morbidity mortality and perinatal deaths.

Poor nursing care leads to complication for baby like low birth weight and problems in growth and development. baby may have anemia in infancy even can lead to fetal death .also nursing practice effect on mothers heath put her in difficult complications (infection, preterm delivery, blood loss during pregnancy and maternal death).

METHODOLOGY
Study Design
Descriptive hospital based study aimed at assessing knowledge and practice of nurse regarding care of anemia during pregnancy at antenatal care unit at AL Saudi Hospital conducted from March to May, 2020.

Study Area
The study conduct in AL Saudi Hospital has been established in 1986 location in Omdurman Althora Al ola away from Khartoum center 5k near Omdurman Islamic University. Run by consultant registrars and house officer and midwife and nurse working throughout of week .if received pregnant women part of country so labor unit and unit nursery and ICU and word general , gynecological word, average number of delivery 30_40 women daily.

Study population
Nurses working at antenatal unit qualified nurses WHO graduated from universities and have diploma, bacloria, master, or PHD degree.

Inclusion criteria
All nurses with above criteria working in antenatal unit.

Exclusion criteria
Other nurses working in others department

Sample size
Total coverage, Data collection by questionnaire and observation checklist include (sociographic data, definition, risk factor, causes, signs and symptoms, diagnostic test, nursing care plan, complications and prevention). Checklist include (hand washing, using aseptic technique, IV fluid, monitor laboratory result, weight measure).

DATA ANALYSIS
Computer by SPSS

RESULT

Table-1: Distribution of sample according to their age

Variable		Frequency	Percent
	less than 30	12	60.0%
	31-40	4	20.0%
	more than 41	4	20.0%
	Total	20	100.0%

Table-2: Distribution of sample according to their gender

Variable		Frequency	Percent
	Male	1	5.0%
	Female	19	95.0%
	Total	20	100.0%

Table-3: Distribution of sample according to their qualification

Variable		Frequency	Percent
	Diploma	2	10.0%
	Bacloria	4	20.0%
	Master	14	70.0%
	Total	20	100.0%

Table-4: Distribution of sample according to their experience years

Variable		Frequency	Percent
	less than 5 years	5	25.0%
	5-10	7	35.0%
	above 10	8	40.0%
	Total	20	100.0%

Table-5: Distribution of sample according to their Knowledge

Question	Good		Fail		Poor	
	F	%	F	%	F	%
What is the definition of anemia	12	60.0%	0	0	8	40.0%
What are the causes of anemia	13	65.0%	3	15.0%	4	20.0%
What are the symptoms of anemia	11	55.0%	6	30.0%	3	15.0%
What are the risk factors of anemia	8	40.0%	7	35.0%	5	25.0%
What is the purpose of nursing care during pregnancy	12	60.0%	5	25.0%	3	15.0%
What is the nursing intervention to help patient to perform daily activity	14	70.0%	1	5.0%	5	25.0%
What is the nursing care to prevent infection result from anemia	8	40.0%	3	15.0%	9	45.0%
What is the first aid during first stage of labor	9	45.0%	3	15.0%	8	40.0%
How mother prevent her self from anemia	7	35.0%	8	40.0%	5	25.0%
What is the diet that contain high value of vitamin C and help body to absorb iron	8	40.0%	4	20.0%	8	40.0%
What is the complication of anemia for mother during pregnancy	9	45.0%	4	20.0%	7	35.0%
What is the complication on fetus	11	55.0%	4	20.0%	5	25.0%

Table-6: Distribution of sample according to their Practice

Question	Done		not done	
	F	%	F	%
Hand washing	19	95.0%	1	5.0%
Using Aseptic technique	12	60.0%	8	40.0%
Giving oxygen	18	90.0%	2	10.0%
Taking vital sings	12	60.0%	10	50.0%
Obtain sample for cross match and blood grouping	18	90.0%	2	10.0%
Monitor fetal well being	12	60.0%	8	40.0%
Monitor laboratory result	13	65.0%	7	35.0%
Anemia screening	8	40.0%	12	60.0%

DISCUSSION

Anemia in pregnancy is associated with increased risk of maternal and fetal morbidity and mortality absent nursing care can put mother and fetus in further outcomes preterm labor, low birth weight, small for gestational fetus. Mother attend hospital and her hemoglobin less than ll0 mg that means reduce oxygen carry capacity for that need emergency interventions and proper technique for management. Majority of study group have master degree and less than half have bachelor due to hospital policy that allow nurses work in antenatal unit their educated level one of two degrees. And all of them are female that indicate the female more acceptable to work in unit (Ahmed & Sayed, n.d).

Regard anemia causes the majority of study group know about causes due to their experience year between 5-10years and most them graduated from nursing university (Mohammed *et al.*, 2021).

Regard symptoms and risk factor of anemia most of study sample did not know due to stress of work that face nurse in unit make mistake in care when offer to mother and can᾿t give advice to mother with risk to prevent disease and it^s effect less than half of study sample have poor practice. About preventive measure that prevent spread of infection due to neglect by hospital(Sayed *et al.*, 2020) on importance on importance of prevention for patients and nurses the result contracted with study done by Grace Roman Bilal

at 2012 in Omdurman teaching hospital state that state that all nurses using all preventive measures properly .Regard nursing management of mother suffer from severe anemia in stage of labor (Ahmed & Sayed, n.d.)less than half of study sample don not know about management that offer to mother for safe her life that due to overcrowded of hospital by patients and lack of nurses the result match with study done by smaila Guedrago in 2013 from district Allada from southern Africa state that full of hospital effect on nurse performance (Eltayif *et al*., 2021).

Regard teach mother about diet high value of iron, folic acid and vitamin B_{12} less than half of study sample not know of who mother protect herself from anemia and importance of antenatal visit in early detection complication for mother and fetus.

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