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Knowledge, Attitude and Practices of Pregnant Women Regarding Iron Deficiency Anemia in A Rural Area of Lahore

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Abstract
Anemia in pregnancy is identified by the WHO, as hemoglobin level less than 11g/dl and is divided into three levels of severity, Mild anemia (Hb level, 9 - 10.9g/dl), Moderate level of anemia (Hb level, 7 - 8.9g/dl) and severe anemia (Hb level 7 - 4.5 g/dl) (Margwe, 2015). Iron deficiency anemia is a global public health problem influencing both developing and developed countries. Iron deficiency anemia a major cause of maternal mortality. This was a quantitative, cross-case study. Data was collected from 131 pregnant women. The result of study showed pregnant women have knowledge about iron deficiency anemia similarly have negative attitude and poor practices. The knowledge of pregnant women towards iron deficiency anemia was better, but negative attitude and low practice found. Women should consume iron rich diet.
Keywords-Knowledge,Attitude,Practice and Iron deficiency anemia

1. Introduction

As per World health organization, anemia is a state in which the quantity and quality of RBCS, or the hemoglobin level, falls beneath a built up cut-off esteem (Organization, 2014). Iron deficiency in pregnancy is distinguished by the world health organization (WHO), as hemoglobin level under 11g/dl and is separated into three levels of seriousness, Mild frailty (Hb level, 9 - 10.9g/dl), Moderate pallor (Hb level, 7 - 8.9g/dl) and extreme anemia (Hb level 7 - 4.5 g/dl) (Margwe, 2015). Press insufficiency sickliness commonly comes about when the admission of dietary iron is deficient for hemoglobin combination. The Iron insufficiency paleness comes about because of dietary inadequacy, loss of iron through dying, or expanded requests amid pregnancy in ladies (Camaschella, 2015).

Moreover, deficiency of iron is a worldwide medical issue influencing both developing and developed countries with major consequences for human well-being as well as social and economic improvement. It happens at all phases of the life cycle, however is more predominant in pregnant ladies and youthful kids(Prakash, Yadav, Bhardwaj, & Chaudhary, 2015). Likewise, iron deficiency main cause of anemia and more common in developing countries. Anemia posing additional burden on health care system. Due to physiological reason female and children are at high risk (Mawani, Ali, Bano, & Ali, 2016). Furthermore, World health organization (WHO) major health consequences of iron deficiency anemia in pregnancy consist of poor outcome of pregnancy, physical disability, and cognitive development. Iron Anemia increased risk of morbidity in children and reduced work productivity in pregnant women. Around 20% of maternal deaths lead by iron deficiency anemia. (Organization, 2011).

In a region of Pakistan, a study showed low knowledge and negative states of mind of pregnant ladies towards the routine antenatal examination and government health facilities (Ghaffar, Pongpanich et al. 2012). Moreover, Regular checkup during pregnancy is essential.

Routine antenatal is a key passage point for pregnant women. Pregnant ladies get a wide scope of wellbeing advancement and preventive wellbeing administrations, including information about healthy practices during pregnancy, nourishing help, and iron deficiency anemia prevention (Ghaffar, Pongpanich et al. 2012).

Othman specified in his article that fitting eating regimen learning is required for pregnant ladies so they can devour balance amount of iron from food and supplement (Othman et al. 2016). Moreover pregnant women attitude and knowledge about iron deficiency anemia and supplements is an important. It includes as a barrier factor or motivation for iron supplements intake (Gowri, Sakthi, & Palanivel, 2017). Balasubramanian emphasis in his article on generating understanding of pregnant women about iron supplementation and health education can grossly reduce the frequency of iron deficiency anemia and thereby prevents anemia related mortality and morbidity (Balasubramanian, Aravazhi, & Sampath, 2016).

Similarly, during antenatal checkup comprehensive nutritional knowledge about iron rich diet and Supplements should be made an integral component. Women should be informed effective nutritional practices and benefits of the iron supplements. In antenatal checkup individual should motivate to increase the consumption of such food those are rich in iron, reduce the consumption of tea and coffee that inhibit iron absorption (Rizvi, 2012). Additionally, a study showed that attitude towards antenatal visits, importance of a healthy diet, and iron and folic acid intake during pregnancy could have a profound influence on their

hemoglobin levels (Margwe, 2015). Namazi established in his study that knowledge and practice of pregnant have significance towards iron deficiency anemia (Namazi and Alizadeh 2016). A study concluded by Paula stated that tea consumption should be avoided by pregnant women as it has adverse effect on fetus outcome (e Paula, Shang et al. 2017).

The aim of this study was to assess the knowledge, attitude and practices of pregnant women regarding iron deficiency anemia.

This study has enhanced the knowledge, attitude and practice among pregnant women towards iron deficiency anemia. A health education session conducted for pregnant women living in rural area. Moreover, this study has a great significance being a nurse I have identify the ratio of knowledge, attitude and practice of pregnant women towards iron deficiency anemia. Through this study, to create a good insight for the policy makers,Non-governmental organizations and other governmental service provider shows directions to concerned bodies on how to implement the service in order to overcome the problem.

2. Literature Review

Anemia a global health problem. It is influencing both developing and developed countries and its incidence in pregnant women has been estimated to be 51% (Melku, Addis, Alem, & Enawgaw, 2014). Anemia can be found at all stages of the life cycle, but is more prevalent among pregnant women (Abriha, Yesuf, & Wassie, 2014). Asia has the most elevated rates of anemia on the planet. Half of the universes, anemic ladies live in the Indian subcontinent and 88% of them create frailty amid pregnancy (Melku, Addis, Alem, and Enawgaw, 2014).
In developing countries iron deficiency is a major cause of anemia. Iron deficiency anemia is responsible for about half of anemia cases in pregnancy, and it is estimated that in developed countries 38% of pregnant women have iron depletion (Fiedler, 2015).

According to National Nutrition Survey revealed that 45% of women suffer from iron deficiency anemia during pregnancy. However, many studies have established that above 80% cases of anemia in women especially in pregnancy are associated with iron deficiency (Rizvi, 2012).

Additionally, knowledge has significance association. A study conducted in India indicated that only 52.4% women have knowledge regarding iron rich foods and value of iron supplementation during pregnancy (Nivedita, 2016).

Similarly, the lack of knowledge regarding anemia, iron rich foods and the importance of iron supplementation among pregnant women special effects on the health of pregnant women (Nivedita 2016).

Likewise, Health care professionals in Pakistan commonly observe that practice of pregnant women eat less during pregnancy to prevent difficulty in delivery. Rizvi revealed in his study that pregnant women attitude towards iron supplements are also considered to be hot and overall 25% of women take iron supplements (Rizvi, 2012). Recent statistics revealed that tea, coffee consumption, low intake of eggs and red meat are associated with anemia (Baig-Ansari, Badruddin et al. 2008).

During pregnancy iron and folate supplements are essential to prevent iron deficiency anemia and in the developing countries strictly follows iron supplementation in pregnancy. Iron supplements consider as a standard and routine practice for the prevention of anemia (Chacko, Premkumar et al.).

3. Methodology

A Cross sectional descriptive study. Data was collected from 131 pregnant women using convenient sampling technique. A well adopted questionnaire was used, Likert scale consist of 17 question. Participants were well informed. Data was analyzed through SPSS 21. The data was collected from September, 2017 to January, 2018.

4. Results

This section represent the result of this study. Total 131 female participants participated in study. The mean of participant's ages was 2.31. 122 women were found housewives and rest of working women. The mean of participant's qualification 1.56. Figure showed the ages of participants.

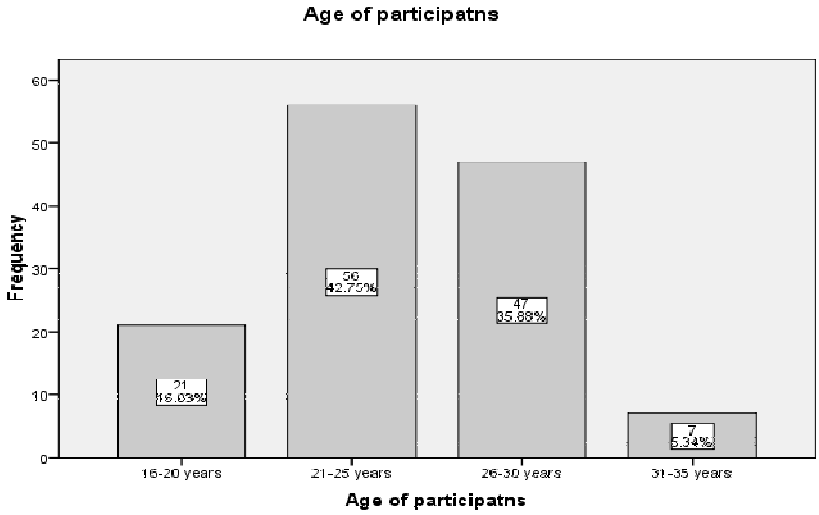

Table 1: *Knowledge Response of Participants Regarding Iron Deficiency Anemia.*

Responses	Yes	No	Don't Know
Anemia is more prevalent in pregnant women	71	35	25
Pregnant women can develop complications due to anemia.	57	40	25
Severe anemia can affect growth of the fetus.	8	66	57
Pregnant women should take iron supplementation in spite of taking healthy diet.	4	106	21
Excessive consumption of Tea/coffee can lead to IDA.	55	70	6
Consuming Iron along with food reduces side effects.	2	39	90
Iron tablets are dispensed free of cost in Government Hospitals	0	131	0
Awareness of Hb level during Pregnancy	69	60	2

As per the results, 71 participants were aware that anemia is more common in pregnant women. Unfortunately participants expressed they didn't get iron tablets from government center. Only 69 women were found aware about Hb level during pregnancy. Participants were found lack of knowledge about iron supplements during pregnancy.

Table 2: *Attitude Response of Participants Regarding Iron Deficiency Anemia*

Questions		F	%
Regular antenatal checkup, blood tests are essential during pregnancy	SA	12	9.2
	Agree	21	16
	Disagree	47	35.9
It is essential to take special diet during pregnancy	SA	51	38.7
	Agree	39	29.8
	Disagree	29	14
	SD	16	12.2
Pregnant women should consume Iron tablets in spite of healthy diet	Agree	4	3.1
	Neutral	68	51.9
	Disagree	59	45
Promotion of family planning methods for spacing with prevent anemia	Neutral	76	58
	Disagree	51	38.9
	SD	4	3.1

48.7% pregnant women showed positive attitude regarding antenatal checkup and prevention of anemia through family planning. Government need to play an important role because 100% participants revealed they didn't get iron supplements from government hospital as showed in table 2.

Table 3: *Practice Response of Participants Regarding Iron Deficiency Anemia.*

Practice	Frequency	Percentage
How is your food habit after becoming pregnant?		
Taking the usual diet	98	74.8
Taking the special diet	33	25.2
Are you taking iron tablets during this pregnancy?		
Regular	4	3.1
Irregular	47	35.9
Not Taking	80	61.1
When are you taking Iron tablets?		
After Meal	51	38.9
Not Taking	80	61.1
What is the reason for irregular iron consumption?		
Forgetfulness	4	3.1
Side effects	39	29.8
Not Taking	88	67.2

Practices of women found that 75% women were taking their usual diet during pregnancy. Only (3.1 %) participants reported that they are taking iron tablets. Moreover, 51 participants reported they took iron tablets after meal as showed in table 4.

5. Discussion

The present study showed that overall 42.5% of the participants had great information towards anemia, Iron rich food and iron supplementation but when specifically questioned only 39.87% were aware of and understood the term anemia. In our examination, 81.96% knew that utilization of eating regimen poor in iron to be the purpose for weakness however information about iron rich food was missing among our members. 79.74% had properly said that green verdant vegetables are a decent wellspring of iron yet just 25.9% thought about meat as a decent wellspring of iron.48.7% pregnant women showed positive attitude regarding antenatal checkup and prevention of anemia through family planning. Government need to play an important role because 100% participants revealed they didn't get iron supplements from government hospital, moreover in demographics it revealed that 67.6% women have less 15000 income so getting iron supplements is quite difficult for them. 78.1% pregnant women are taking usual diet, only 3.1% pregnant women revealed that they are taking regular iron supplements.
The present study showed the absence of information with respect to anemia, iron rich foods and the significance of iron supplementation during pregnancy. As awareness propels behavioral changes, awareness should be created through appropriate nutritional counselling during antenatal visits and through media Targeted estimation of hemoglobin levels in pre-adult young girls and women in reproductive age group, intensive counselling and motivation of pregnant women to consume Iron and folic acid and ensuring adequate supply to them would help in reducing the incidence of anemia in pregnant ladies.

6. Conclusion

Iron deficiency ration among pregnant women is increasing day by day. Pregnant women have knowledge, positive attitude but they are not practicing. Every individual need to emphasize the need to iron rich diet and supplement during period of antenatal.

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