

Effectiveness of Pregnancy Awareness and its Outcomes in Women of Rural Areas of Pakistan, A Clinical Based Study

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ABSTRACT

The aims and objectives of current study were to assess the level of awareness of pregnancy health and its outcomes among women of rural areas. In group-A, group-B and group-C the percentage of ultrasound sonography test and folic acid levels of pregnant women were showed a significant ($P < 0.05$) changes. Similarly On evaluating the other parameters such as vaginal bleeding, abdominal pain, and pregnancy induced hypertension, gestational diabetes, gestational anemia, Hepatitis B & C, Acquired immunodeficiency syndrome (AIDS) regarding percentage standard mean deviation in different groups the results are significant ($P < 0.05$) and remarkable changes were calculated. It was concluded in this study that public health facilities with proper health awareness programs and increased in qualification of rural women is required for better healthy mother and child.

Keywords: Pregnancy awareness, pregnancy induced hypertension, Gestational diabetes, Gestational anemia

INTRODUCTION

In third world countries still maternal morbidity and mortality is a major public health problem and about 800 women die every day in these countries [7]. According to a medical survey report of World Health Organization (WHO) about 30300 women died every year in rural areas of Pakistan due to Lack of proper maternity health care centers [4]. In another report stated that every year many important lives of new born babies and mothers are wasted in rural areas of Pakistan because of limited medical care resources [5]. The recent medical survey report of World Health Organization (WHO) that 296000 pregnant women die in 2020 worldwide because lack of required health services [10].

Pakistan is a developing country there are very poor health care resources for mother and new born babies as compared to the other countries [12]. The new born deaths proportion in Pakistan is so high. The health awareness is better than treatment in awareness health workers educate people about different health problems and tell them how they take precautions about ways to live healthy [1]. In medical sector number of different public awareness organizations are playing an excellent role which is more beneficiary than treatment [2]. Worldwide 17 million adolescent girls of age 14 to 19 years give birth every year which is very dangerous because in third world countries girls of this age married early and their basic education remain incomplete [3]. It was seen in different studies that adolescent girls handle roughly their pregnancies and after delivery do not baby care properly [6].

For these young pregnant girls awareness about pregnancy and baby care is so important [9]. There are many causes of unwanted and unplanned pregnancies in this age major factors are lack of education, poverty, pressure of early marriage and conceiving pregnancy [8]. Regular female and male health workers are required to provide guidelines of pregnancy to the people for this purpose development agencies, nongovernmental organizations and government sector can play a key role [12]. For pregnant women and fetus health awareness can deliver through program managers, policy-makers and front-line health workers [13].

Different researchers described that vaginal bleeding, severe abdominal pain, pregnancy induced hypertension, gestational diabetes, gestational anemia, Hepatitis B & C and gestational epilepsy are those medical complications which are occurred [15] during three trimesters and their findings were very interesting because majority of the women were not familiar about these diseases, whereas all such pregnancy [17] related problems can be controlled easily through awareness programs among pregnant women. After delivery for better baby care and health proper awareness about different vaccines and its importance is so important [10, 20].

MATERIALS AND METHODS

In this study 300 pregnant women were selected and divided them into different groups regarding their age, education and awareness about pregnancy and baby care. In group- A, there were 100 pregnant women belong to an age of 20-25 years and their average education was higher secondary school level. In group-B 100 pregnant women of age 25-30 years and their average basic qualification was higher college level and they have partial awareness about pregnancy and baby care, while in group-C the average age of 100 pregnant women were in between 30-35. They were well educated with university level and have proper awareness of pregnancy and baby care.

The parameters such as vaginal bleeding, severe abdominal pain, and pregnancy induced hypertension, gestational diabetes, gestational anemia, Hepatitis B & C, Acquired immunodeficiency syndrome (AIDS), gestational epilepsy, ultrasound sonography test, folic acid test were monitored during three trimesters in all groups. A questioner Performa with Pre-intervention and Post-intervention was given to the pregnant women for data collection. ISSP – 2020 version were used to elaborate raw data statistically. Percentage regression of each variable were measured by applying t-test of (mean \pm standard deviation) while Chi-square test of one way ANOVA applied for group comparison.

RESULTS

Table 1: pregnant women with higher secondary school level n= 100, age= 20-25 years

Parameters	%Percentage Levels Mean \pm SD	P value P<0.05
Vaginal bleeding	21.10 \pm 20.11	0.00
Severe abdominal pain	41.00 \pm 10.12	0.00
Pregnancy induced hypertension	24.13 \pm 10.21	0.00
Gestational diabetes	11.10 \pm 10.01	0.00
Gestational anemia	51.11 \pm 24.11	0.00
Hepatitis B& C	1.11 \pm 04.11	0.00
AIDS	0.11 \pm 04.11	0.00
Gestational epilepsy	6.11 \pm 04.11	0.00
Ultrasound sonography test	11.10 \pm 20.11	0.00
Folic acid test	20.10 \pm 10.01	0.00

Well informed and conscious are the sign of awareness. The ability to perceive and more conscious of events are states of awareness. These abilities developed by level of education. In other words gynecological awareness also depend upon level of education of pregnant women. Awareness mean to know, to realize or interested in knowing about different things and understand that what is important. Present study was a descriptive

form of awareness about pregnancy which is also correlated with different education levels of pregnant women.

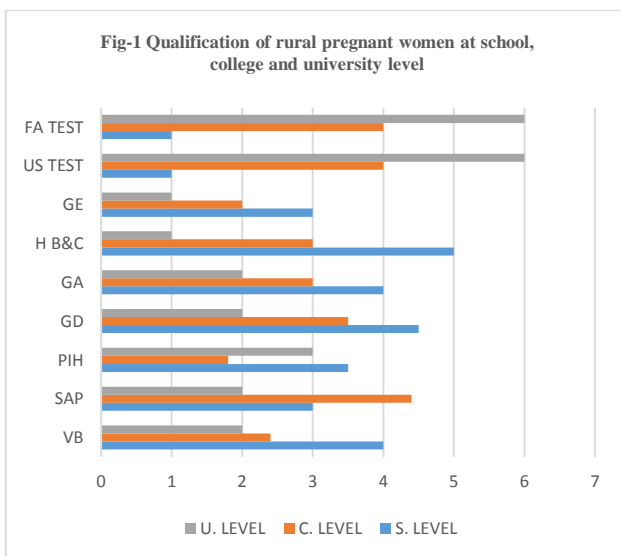
Table 2: pregnant women with higher college level n= 100, age= 25-30 years

Parameters	%Percentage Levels Mean ± SD	P value P<0.05
Vaginal bleeding	16.00 ± 16.10	0.00
Severe abdominal pain	31.00 ± 10.12	0.00
Pregnancy induced hypertension	20.13 ± 10.21	0.00
Gestational diabetes	10.10 ± 10.01	0.00
Gestational anemia	41.11 ± 24.12	0.00
Hepatitis B & C	1.11 ± 04.13	0.00
AIDS	0.11 ± 04.11	0.00
Gestational epilepsy	3.10 ± 03.10	0.00
Ultrasound sonography test	35.12 ± 10.12	0.00
Folic acid test	60.20 ± 12.01	0.00

Table 3: pregnant women well educated with university level n=100, age= 30-35 years

Parameters	%Percentage Levels Mean ± SD	P value P<0.05
Vaginal bleeding	10.02 ± 11.01	0.00
Severe abdominal pain	21.00 ± 11.10	0.00
Pregnancy induced hypertension	13.12 ± 09.11	0.00
Gestational diabetes	10.00 ± 10.12	0.00
Gestational anemia	31.10 ± 14.10	0.00
Hepatitis B & C	1.10 ± 02.11	0.00
AIDS	0.11 ± 03.11	0.00
Gestational epilepsy	2.10 ± 01.10	0.00
Ultrasound sonography test	62.20 ± 21.10	0.00
Folic acid test	70.20 ± 10.21	0.00

Two very important biological markers during each visit in three trimesters were ultrasound sonography test and folic acid levels of pregnant women. These both factors were directly related to pregnant women level of education. In group-A, group-B and group-C the percentage of ultrasound sonography test and folic acid levels of pregnant women were (11.10 ± 20.11, 35.12 ± 10.12, 62.20 ± 21.10) (20.10 ± 10.01, 60.20 ± 12.01, 70.20 ± 10.21) respectively. There was a significant change (P<0.05) in each group regarding level of education. The level of awareness in pregnant women with university level was so high than the higher college and higher secondary school levels.



On evaluating the other parameters such as vaginal bleeding, abdominal pain, and pregnancy induced hypertension,

gestational diabetes, gestational anemia, Hepatitis B & C, Acquired immunodeficiency syndrome (AIDS) the percentage standard mean deviation were (21.10 ± 20.11, 41.00 ± 10.12, 24.13 ± 10.21, 11.10 ± 10.01, 51.11 ± 24.11, 1.11 ± 04.11, 0.11 ± 04.11, 6.11 ± 04.11), (16.00 ± 16.10, 31.00 ± 10.12, 20.13 ± 10.21, 10.10 ± 10.01, 41.11 ± 24.12, 1.11 ± 04.13, 0.11 ± 04.11, 3.10 ± 03.10), (10.02 ± 11.01, 21.00 ± 11.10, 13.12 ± 09.11, 10.00 ± 10.12, 31.10 ± 14.10, 1.10 ± 02.11, 0.11 ± 03.11, 2.10 ± 01.10) measured collectively and findings were showed significant changes (P<0.05) in each group.

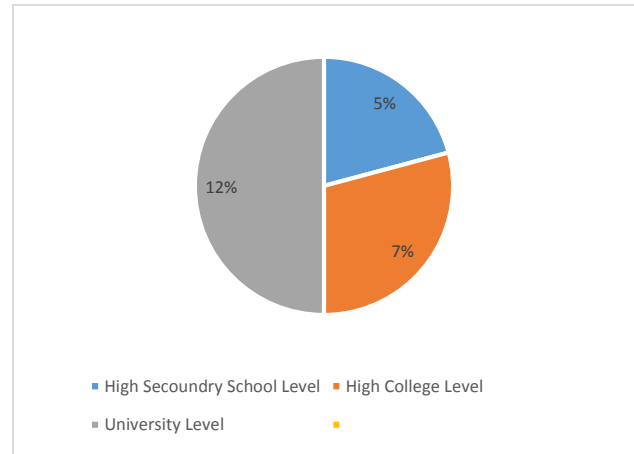


Fig 2: Percentage (mean ± standard deviation) of awareness

Percentage Levels of awareness in each group were presented in fig-1 and fig- 2 graphically.

DISSUASION

Baron R. et al., (2015) conducted a study and concluded the outcomes of gynecological problems among pregnant women of rural areas and they correlated these medical complications with the qualification of these pregnant women. It has seen in Etokidem AJ. et al., (2017) that high qualified women can save both mother and fetus life. In that study they compare different women of rural areas regarding their qualification and age. The findings of current study was also very similar to the results of their study. A study conducted by Chitayat D. et al., (2015) was claimed that pregnant women and their families from rural areas are not familiar with importance of health awareness.

Parveen and Latifa (2003) described in their study that malnutrition is a big problem in under developed countries especially in rural areas where unbalanced maternal nutrition created sever health problem in mother and fetus. Different studies by many researchers were concluded that women in rural places take absolutely unbalanced nutrition during pregnancy because of poverty and lack of proper awareness about balanced diet for pregnancy preparation and during pregnancy. This is a reason pregnancy losses rate is very high in third world countries. Wojtyla et al., (2019) indicated in their study the causes of miscarriages in villages because of low education and weak awareness among pregnant women of rural areas.

Current study suggests that proper health awareness and qualification level of women in the rural areas of Pakistan play an important role in health care of mother and child and these suggestions were supported by Thompson et al., (2020). In this study medical complications in different groups of pregnant women directly base on their levels of qualifications, small gynecological problems were produced in well-educated university level pregnant women and these results were satisfactory because in different studies of last decade described same results in their studies. Further suggestions by different researches are required for better improvement.

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