

Effect of an Educational Guideline on Quality of Nursing Care Provided during Antenatal Period

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Abstract

Background: Antenatal consideration is a sort of preventive medical services. Its will probably give ordinary registration that permit specialists or attendants to treat and forestall potential medical conditions over the span of the pregnancy and to advance sound ways of life that advantage both mother and youngster. **Aim of the study:** The study aimed assess the impact of an instructive rule on nature of nursing care during antenatal period. **Design:** Aquasi-trial configuration design was utilized to fulfil the aim of the study. **Setting:** The study was conducted at Obstetrical and Gynecological Outpatient Clinic affiliated to Benha University Hospital. **Sampling:** A purposive example of (64) medical caretakers were working at obstetrics and gynecology outpatient center associated at Benha University clinic. **Tools of data collection:** Three tools were used to collect data, **1-**A talking survey sheet which comprised of four sections: The socio-segment attributes, nurture data on the nature of antenatal consideration that included (information on medical attendants about antenatal consideration and medical caretaker's information about pregnancy), medical caretakers' data on wellbeing training given to ladies during antenatal period, Nurses' data about nature of antenatal consideration. **2-**A perception check rundown to survey medical caretakers' works on during antenatal consideration. **3-**Designed the instructive rule in an Arabic language upheld by figures subsequent to surveying related writing. **Results:** The most elevated level of medical caretakers (66.7 %) their age scope of $20 \geq 30$ years, and the mean \bar{x} SD of their age was 27.65 ± 4.98 the marginally not exactly 50% of attendants had helpless information and work on during giving antenatal consideration. Greater part (96.8%) of medical caretakers was not polished stomach assessment and lion's share (39.7%) of attendants had inadmissible information with respect to fundamental component of affirmation. **Conclusion:** A planned instructive rule is viably improved nature of nursing care gave during antenatal period. **Recommendations:** Nurses should have more certain function in rising the consciousness of ladies about the significance of antenatal consideration by standard intermittent in administration preparing programs is expected to stay up with the latest in regards to antenatal consideration.

Key words: Antenatal Period, Educational Guideline, Quality of Nursing Care

Introduction:

Pregnancy is a critical event in women's life that effect women health. Accompanied by physiological and psychological changes that may be accompanied by some problems and

complication which are potentially life threatening to women and the fetus (WHO, 2019).

Pregnancy is a basic occasion in ladies' life that impact ladies wellbeing. Joined by physiological and mental changes that might

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be joined by certain issues and complexity which are conceivably perilous to ladies and the embryo (**Z.Alfirevic, 2015**).

Pregnancy is a crucial chance to advance sound practices and child rearing aptitudes. Great antenatal consideration interfaces the lady and ladies' family with the proper wellbeing framework, expands the opportunity of utilizing a talented orderly upon entering the world and adds to great wellbeing through the existence cycle. Deficient consideration during this time breaks a basic connection in the continuum of care, and impacts the two ladies and children (**A.P.Betrán and E.Bergel, 2018**).

Antenatal consideration (ANC) can be characterized as the consideration gave by talented medical care experts to pregnant ladies and young adult young ladies so as to guarantee the best ailments for both mother and child during pregnancy. The parts of ANC include: hazard ID, avoidance and the board of pregnancy-related or simultaneous infections and wellbeing instruction and wellbeing advancement (**C.J.Catling and NMedley, 2015**).

Antenatal period is considered as one of the most distressing occasions in each lady's life. Antenatal period is regularly connected with certain inconveniences and ailments that may compromise the life of the mother and her child. Henceforth, antenatal consideration is critical to guarantee the conveyance of a sound infant from a solid mother, and diminish maternal and fetal dreariness and mortality (**C.E.Camargo, 2018**).

Antenatal consideration decreases maternal and perinatal bleakness and mortality both straightforwardly, through discovery and treatment of pregnancy-related intricacies, and by implication, through the ID of ladies and young ladies at expanded danger of creating confusions during work and

conveyance, along these lines guaranteeing referral to a fitting degree of care. ANC additionally gives a significant chance to forestall and oversee simultaneous infections through coordinated assistance conveyance (**C.J.Catling, N.Medley, 2015**).

The World Health Organization has given another arrangement of proposals to improve nature of antenatal consideration to lessen the danger of stillbirths and pregnancy complexities and give ladies a positive pregnancy experience. By zeroing in on a positive pregnancy experience, these new rules look to guarantee not just a sound pregnancy for mother and infant, yet additionally a compelling change to positive work and labor and eventually to a positive encounter of parenthood (**A.Austin , Ana Langer**).

Ordinary contact with medical caretaker or birthing assistant during pregnancy permits ladies to get administrations fundamental to ladies' wellbeing. The World Health Organization (WHO) suggests at least eight antenatal consideration contacts to decrease perinatal mortality and improve ladies' insight of care. Anyway fundamental intercessions can be given more than four visits at determined stretches, at any rate for sound ladies with no basic clinical issues. (**Centers for Disease Control and Prevention**).

During the basic pre-birth period, medical caretaker can teach ladies about sound pregnancy practices, peril indications of complexities, breastfeeding and family arranging, recognize and treat pregnancy-related conditions, for example, toxemia and eclampsia, allude moms to particular consideration when essential, support the utilization of a talented birth specialist and limit the danger of mother-to-kid transmission of HIV (**C.J.Catling and NMedley, 2015**).

Quality methods creating perspectives with respect to the structure, cycle and result principles that the medical care conveyance framework must meet in rank for its populaces to accomplish ideal wellbeing gain. The nature of medical care comprises of appropriate execution of intercession that are known to be protected manage the cost of ready to society being referred to and be able to create an effect on horribleness, mortality, handicap and lack of healthy sustenance (**K. E. Dickson and V. K. Mary, 2015**).

Nature of care can be characterized likewise as how much medical services for patients improves the probability of wanted results and is steady with current expert information or evaluation of greatness with deference clinical and nursing administrations got by patients (**T. Dowswell, G. Carroli and L. Duley, 2015**).

The nature of care during an antenatal visit is likewise significant. Especially in low-asset settings, deficiencies in basic drugs, hardware and prepared staff are obstructions to giving excellent consideration. Also, the substance of care conveyed during pregnancy is inadequately estimated, restricting the capacity to recognize and address shortcomings (**A. A. El-Gammal, 2014**).

In 2017, maternal mortality proportion for Egypt was 37 passings for each 100,000 live births. Somewhere in the range of 1998 and 2017, maternal mortality proportion of Egypt was declining at a directing rate to contract from 70 passings for every 100,000 live births in 1998 to 37 passings for each 100,000 live births in 2017. Egypt's enhancements in ANC inclusion were portrayed by diminishing dependence on open administrations and a rising number of ANC visits. Nonetheless, in spite of rising ANC inclusion, not exactly 33% of ladies got the seven fundamental ANC parts estimated

at any rate once during pregnancy, with contrasts among less fortunate and wealthier ladies (**P. A. Gardiner, L. Kalison and R. Viviana, 2016**).

Aim of the study:

This study aimed to evaluate the effect of an educational guideline on quality of nursing care during antenatal period.

Research hypothesis:

Quality of nursing care during antenatal period would be improved post educational guideline.

Subjects and Method

Study design:

A quasi-experimental design was utilized in the present study.

Study Setting:

The research study was conducted in Obstetrics and Gynecological Outpatient clinic affiliated at Benha University hospital, which serves Qalubia Governorate and its neighboring villages. Which consist of only one room divided into two areas, first area for diagnosis that conclude antenatal care, counseling, family planning, follow up and other obstetrics and gynecologic services. Second area for examination includes ultrasonography and ECG. Furthermore, waiting area for women until admission.

Sampling:

Sample type: A convenient sample was used in present study.

Sample size: A total of 64 nurses were working at obstetrics and gynecology outpatient clinic affiliated at Benha University hospital during the time of data collection were involved in the study.

Tools of data collection:

Two main tools were used for data collection :-

Tool (I): A structured interviewing questionnaire:

This tool was developed by the researcher

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after reviewing of literature (Hiran et al., 2017, Sichundu et al., 2017) and under guidance of supervisors. It was written in a simple Arabic language in the form of close and open ended questions and consisted of two parts:-

Part (1) :

General characteristic of the studied nurses as (age, educational level, experience years, previous antenatal care training program, place of residence, current job). (Question from 1-6).

Part (2) :

- Nurse's knowledge about nursing care during antenatal care (concept of antenatal care, goals of antenatal care, basics of antenatal care, procedure that take place during the first visit of the antenatal care unit and follow-up appointments). (Question from 1-5).
- Nurse's knowledge about pregnancy. (Question from 1-9).
- Nurse's knowledge about health education during antenatal period (Question from 1-12).
- Nurse's knowledge about quality of antenatal care. (Question from 1-5).

Knowledge's scoring system:

Each item was assigned a score (2) given when the answer was completely correct answer, a score (1) was given when the answer was incompletely correct answer and score (0) was given when the answer was unknown. Total score ranged from 0-37.

Total knowledge score was determined as the following scoring

Good knowledge >75% correct answers.

Average knowledge 50-75% correct answer.

Poor knowledge < 50% correct answer.

Tool (II) observational checklist about antenatal care provided by nurses

This tool was designed by the researcher

after reviewing related literature to assess nurses' practices during antenatal care included 14 procedures:

- 1- Admission procedure that include (9 items)
- 2- History taking include (10 items)
- 3- Assess blood pressure (15 items).
- 4- Weight measuring (6 items), height measuring (8 items) and body mass index (2 items).
- 5- Assessing of general appearance (9 items).
- 6- Abdominal examination (10 items).
- 7- Uterine fundus (4 items).
- 8- Auscultation of fetal heart rate (12 items).
- 9- Urine analysis for suger that include two methods use benedict solution (5 items) and use dip sticks (5 items).
- 10- Urine analysis for albumin that include three methods use boiling method (5 items), use dip sticks (5 items) and use of albumin/creatinine ratio.
- 11- Blood test (15 items).
- 12- Breast care (16 items).
- 13- Psychological status (4 items).
- 14- Health education given to mother during pregnancy (12 items).

Observation checklist's scoring system:

Each item of the procedure was assigned a score (1) if done and a score (0) if not done. The total score was calculated by addition of the total score of all procedures. The total score was ranged from (0-152) and classified into:-

- Unsatisfactory practice < 75%
- Satisfactory practice \geq 75%

Supported materials:-

The researcher designed the educational guideline in an Arabic language supported by figures after reviewing related literature. It included two parts, theoretical and practical. The theoretical part, discuss pregnancy' signs

and symptoms, minor discomfort of pregnancy. Knowledge regarded antenatal care, importance of proper nutrition in the prenatal period, the basic elements of the requirements of a pregnant woman and fetus and health education for sports in the prenatal period. While the practical part, explained the procedure's nurses need to take care of women during the prenatal period. Such as blood pressure measurement, urine analysis, weight and height measurement and so on.

Validity and reliability:

The tool was developed and translated into Arabic after reviewing the current and past international relevant literature related to antenatal care and pregnancy, by using local and international books, journals, periodicals and computer searches then tool of data collection was tested for content validity by panel of experts (three specialized in maternity health nursing). Reliability it was applied by the researcher for testing the internal consistency of the tool by administration of the same tool to the same subjects under similar condition on one occasion. Internal consistency of tool was assessed by Cronbach's alpha coefficient test which revealed that each of tools consisted of relatively homogenous items as indicated by the moderate to high reliability of each tool. The internal consistency of knowledge was 0.89 and Cronbach's alpha for observational check list was 0.81.

Ethical consideration:

Ethical aspect were considered before implementation of the study as the following: An oral informed consent was obtained from each nurse before starting the data collection. The aim of the study was explained to each nurses before apply the tool. Each nurse was informed that participation is voluntary and withdrawal will not affect her.

Confidentiality was ensured throughout the study process, where personal data were not disclosed.

Pilot study:

A pilot study was undertaken after the development of the tools and before starting the data collection. A Pilot study was done on 10 % of the sample size (6) nurses were recruited for the study sample to assess clarity, applicability and time needed for completing the tool. There was no modification in tool of data collection, nurses are involved in the pilot were included from the study.

Field work:

Information were gathered through a period from the earliest starting point of March to the start of December 2019 spread 9 months. The scientist visited the examination setting three days\ week (Sunday, Monday and Tuesday) began from 9 A.M to 12 P.M. The investigation was directed through four stages:

Talking and evaluation stage:-

The scientist met each medical caretaker, presented herself and clarified the point of study to each attendant to pick up their participation. Medical caretakers were guaranteed that data gathered would be dealt with secretly and it would be utilized distinctly for reason for research and took from contemplated attendants' oral agree to take an interest in study. Information was gathered by the scientist through the conveyance of An organized meeting poll to gather medical attendant's attributes and evaluate information with respect to antenatal consideration then observational agenda was finished by the analyst to survey medical attendants' work on with respect to antenatal consideration.

Planning stage:-

In view of results from appraisal of

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medical caretaker's information and work on with respect to antenatal consideration. The specialist planned the instructive rule in an Arabic language upheld by figures and included two sections hypothetical and practice.

Usage stage:-

Usage of the instructive rule was done at the pre referenced setting. The meetings' number and its substance were resolved and the span of every meeting was gone from 30-45 minutes included times of conversation as per medical caretakers' accomplishment and input. The specialist used organized meeting survey to gather socio segment information and attendants' information with respect to antenatal consideration that took 15-25 minutes. The subsequent device (observational check list) sheet that took 15-20 minutes. The specialist talked with 2-3 attendants every day. The specialist utilized distinctive showing techniques, for example, address, bunch analyzation and instructional media as instructive rule about antenatal consideration.

Assessment stage:-

During this stage the impact of the instructive rule was assessed (posttest) by utilizing similar organization of the devices which were utilized before the usage of the instructive rule (pretest). Prompt assessment was led after execution of the instructive rule to assess attendants' information addition and execution of down to earth abilities.

Authoritative plan:

A composed authority endorsement to lead the examination was gotten from the dignitary of staff of nursing to the overseers of Benha college clinic, so as to get endorsement to direct the investigation in the wake of outlining the title and targets of the investigation.

Measurable plan:

All information gathered were confirmed

before modernized passage. The measurable bundle for sociologies (SPSS rendition 22) was utilized for the reason, trailed by information organization and examination. Distinct measurements were applied (e.g., mean, standard deviation, recurrence and rates). Trial of hugeness was utilized chi-square, Fisher Exact Test and Pearson connection was utilized to explore connection between the investigation factors.

A significant level value was considered when:

- No statistically significant difference obtained at $p > 0.05$.
- Statistically significant difference obtained at $p < 0.05$.
- A highly statistically significant difference obtained at $p > 0.001$.

Results:

Table (1): Shows that The highest percentage of nurses (66.7 %) their age range of $20 \geq 30$ years, and the mean \bar{x} SD of their age was 27.65 ± 4.98 . The greatest majority of nurses (55.6%) were staff nurses with diploma, while the least percentage (31.7%) were having a technical institute and (12.7%) were having faculty of nursing. Regarding years of experience about (63.5%) had $5 \geq 10$ years and 22.2% had $10 \geq 15$ years of experience, while (14.3%) < 15 years of experience and the Mean \bar{x} SD was 9.93 ± 4.52 and about occupation the greatest majority (90.5%) were nurses while (9.5%) were ahead nurses, the majority of nurses (65.1%) live in urban and about (34.9%) live in rural area. The greatest of nurse (85.7%) have't any training course in antenatal care while (14.3%) taking training courses in antenatal care.

Table (2): Demonstrates that, the majority of nurses (61.9%) had incomplete correct answer about definition of antenatal care during pre test, while in post test the

majority of them (84.1%) had complete correct answer. In pre test (54.0%) of them had complete correct answer about goals of antenatal care and the majority of nurses (73.0%) had complete correct answer in post test. (55.6%) of nurses had incomplete correct answer about essentials of prenatal care in pre test while the majority of them (90.5%) had complete correct answer in post test. About (66.7%) of nurses had complete correct answer about procedure that take place during the first visit in pre test while the majority of nurses (96.8%) had complete correct answer in post test. About (54.0%) of nurses had complete correct answer about follow up visits and its frequencies in pre test while had (92.1%) in post test.

Figure (1): Clarifies that nursing knowledge in all nursing care given in antenatal period was commonly average (52.4%) followed by poor knowledge (31.7%) and good knowledge (15.9%) in pre test.

While in post application of educational guideline found that nursing knowledge in all nursing care given in antenatal period was commonly good (92.1%) followed by average knowledge (7.9%) and (0.0%) poor knowledge.

Figure (2): Illustrates that Nurses' level of total practice high unsatisfactory (82.5%) in pretest and (17.5%) satisfactory while in post test highly satisfactory (85.7%) than unsatisfactory(14.3%).

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Period**

Table (1): Distribution of the studied nurses according to demographic characteristics (n=63)

Demographic characteristics	No.	%
Age (years)		
2.00	42	66.7
3.00	16	25.4
4.00	5	7.9
Mean ± SD	27.65 ± 4.98	
Educational level		
1.00	35	55.6
2.00	20	31.7
3.00	8	12.7
Experience years		
2.00	40	63.5
3.00	14	22.2
4.00	9	14.3
Mean ± SD	9.93 ± 4.52	
Occupation		
1.00	57	90.5
2.00	6	9.5
Residence		
Urban	41	65.1
Rural	22	34.9
Taking train about antenatal care		
Yes	9	14.3
No	54	85.7

Table (2): Distribution of nurses' knowledge about antenatal care definition, the goals of antenatal care, essentials of prenatal care, procedure that take place during the first visit and follow up visits and its frequencies. pre and post application of educational

Times of assessment Items		Pre n	%	Post n		X ² / FET	P value
Definition of antenatal care							
Complete correct answer	1	17.5	3	4.1	57.7	26 [£]	0.000**
Incomplete correct answer	9	61.9	0	5.9			
Don't know	3	20.6	0	.0			
Goals of antenatal care							
Complete correct answer	4	54.0	6	3.0	4.93	0 [£]	0.026*
Incomplete correct answer	9	46.0	7	7.0			
Don't know	0	0.0	0	.0			
Essentials of antenatal care							
Complete correct answer	8	44.4	7	0.5	30.406 [£]	0.000**	0.000**
Incomplete correct answer	5	55.6	0	.5			
Don't know	0	0.0	0	.0			
Procedures that take place during the first visit							
Complete correct answer	42	66.7	61	96.8	19.201 [£]	0.000**	0.000**
Incomplete correct answer	21	33.3	2	3.2			
Don't know	0	0.0	0	.0			
Follow-up date.							
Complete correct answer	34	54.0	58	92.1	23.9	65 [£]	0.000**
Incomplete correct answer	22	34.9	5	7.9			
Don't know	7	11.1	0	0.0			

*A statistical significant difference ($P \leq 0.05$)

**A highly statistical significant difference ($P \leq 0.001$)

[£]= Fisher Exact Test

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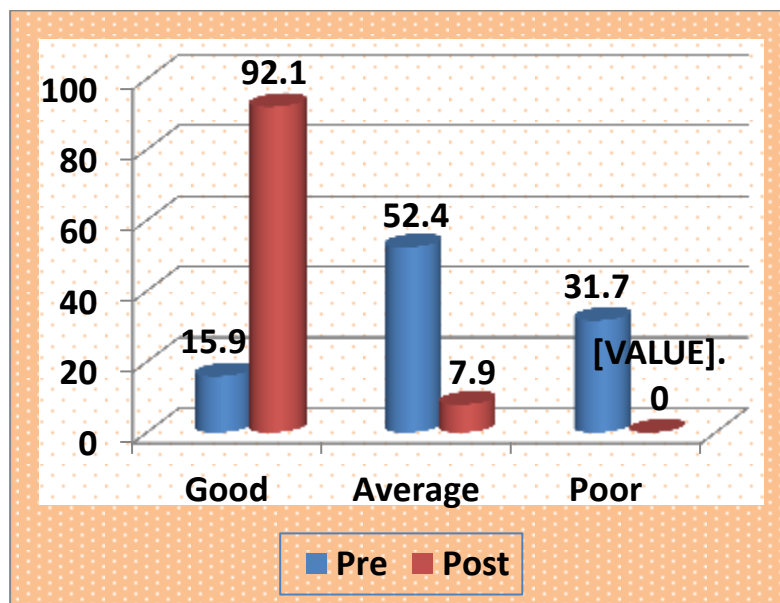


Fig. (1) Distribution of nurses' level of total knowledge score about quality of nursing care during antenatal period pre and post application of educational guidelines (n=63)

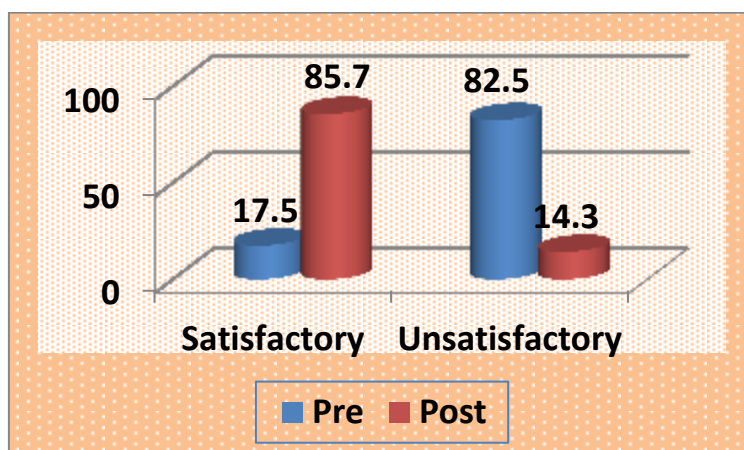


Fig. (2): Distribution of nurses' level of total practice regarding antenatal care pre and post application of educational guidelines (n=63)

Discussion:

Antenatal consideration is the clinical appraisal of mother and hatchling, during the time of pregnancy utilized for getting the most ideal outcome for the mother and youngster. Early perception and progressing care during pregnancy gave more great births contrasted with no pre-birth perception. It is a key passage point for pregnant ladies to get various scope of wellbeing administrations, for example, nourishing support, counteraction or treatment of frailty, anticipation, discovery and treatment of intestinal sickness, tuberculosis and explicitly communicated contaminations (**Gardiner et al., 2016**).

Consistently around 6 million ladies become pregnant; 5 million of these pregnancies lead to the introduction of the kid. A sufficient utilization of antenatal wellbeing administrations is related with improved maternal and neonatal wellbeing status. Pregnancy care expected to influence the advancement of the hatchling and the child just as the mother. Early reserving and standard appearance of antenatal consideration can just accomplish this. (**Betrán et al., 2018**).

Maternal wellbeing administrations have a conceivably basic function in the improvement of regenerative wellbeing. The utilization of wellbeing administration identified with accessibility, quality and cost of administrations just as the social structures, wellbeing convictions and individual attributes of the clients. Over a large portion of 1,000,000 ladies kick the bucket every year from confusions of pregnancy or labor. Most maternal passings happen during labor and the presence of prepared clinical staff could extraordinarily lessen this number (**Centers for Disease Control and Prevention, 2017**).

In medical care framework, attendants are the foundation of medical services

conveyance framework. Henceforth preparing of nursing understudies is significant so as to obtain the essential information and mentality to give quality obstetric consideration which will therefore contribute in decrease of maternal passings (**Gardiner et al., 2016**).

The point of this examination was to assess the impact of an instructive rule on nature of nursing care during antenatal period.

The examination uncovered that the qualities of the contemplated medical attendants, the most elevated level of medical attendants the greater part of them their age scope of $20 \geq 30$ years, and the mean \pm SD of their age was 27.65 ± 4.98 . The best dominant part of attendants (55.6%) were staff medical caretakers with recognition. With respect to of involvement about (63.5%) had $5 \geq 10$ years and 22.2% had $10 \geq 15$ years of involvement, while (14.3%) < 15 years of involvement and the Mean \pm SD was 9.93 ± 4.52 and about occupation the best larger part (90.5%) were medical caretakers while (9.5%) were ahead attendants. The best of medical attendant (85.7%) haven't any instructional class in antenatal consideration while (14.3%) taking instructional classes in antenatal consideration.

Maternal mortality is inadmissibly high. Around 800 ladies bite the dust from pregnancy or labor related complexities around the globe consistently. As indicated by WHO (2011) in 2010, 287 000 ladies passed on internationally during and following pregnancy and labor. Practically these passings happened in low-asset settings, and most might have been forestalled (**Centers for Disease Control and Prevention, 2017**).

As indicated by the target of the examination " Assessing medical caretakers' information and practice about antenatal consideration ", the investigation uncovered that most of attendants (61.9%) had deficient right answer about meaning of antenatal

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consideration. About (66.7%) of medical attendants had total right answer about strategy that happen during the principal visit. Their insight was improved after instruction program. These outcomes were upheld by investigation of **Abraham, 2015** as they announced that information in the zone of Antenatal exhortation was 49.17%, information with respect to general ideas and antenatal visits was 41.88%. They led a graphic report to evaluate the information with respect to Antenatal consideration among BSC Nursing understudies of chosen Nursing Colleges of Udaipur City so as to build up a data Booklet

Emam and Saber, 2018 detailed that there was measurably critical distinction when with respect to all things of the information with expanded information on medical attendants after program connection to medical caretaker's information in regards to mind of eclampsia ($p < 0.05$).

The greater part of medical attendants (66.7%) had revised answer with respect to side effects of pregnancy affirmation About indications of risk in pregnancy in pretest the medical caretakers had (46.0%) in complete right answer. About (52.4%) of medical attendants had inadequate right answer about testicles required for pregnant ladies. 50.8% of medical caretakers had fragmented right answer about the most class presented to chances. (73.0%) of attendants had inadequate right answer about mental change in pregnancy. Every one of these angles improved in posttest. This was upheld by investigation of 17 as they uncovered that the complete information score of attendants with respect to antenatal assessment was 1286 with the score scope of 14-27. The mean for information score among them was 20.07 with mean rate score of 66.97%.

In the investigation directed by **Scaria et al., 2013** who found that pretest information

on nursing understudies with respect to antenatal assessment were free of their past experience, past information and introduction to broad communications on antenatal assessment.

Helpless directing of the pregnancy threat signs is viewed as one reason for helpless familiarity with peril signs among ladies who have gone to antenatal consideration (**Anya et al., 2008**). This implies there is a need to guarantee that suppliers illuminate all antenatal consideration customers about the pregnancy risk signs. Fortifying steady oversight from the District Health Management Team so as to improve advising during antenatal consideration is consequently urgent.

It was seen that there were absence of attendants information identified with most things in pretest, where the majority of their answer in complete right and the most noteworthy percent (55.6%) were about significance of legitimate sustenance during pregnancy and in movement wellbeing training, while after application instructive rule (posttest) (84.1%) of them had total right answer and (73.0%) with respect to go in posttest. Most attendants (55.6%) had total right answer in pretest about diminish weakness, (69.9%) in rest, (76.2%) in work wellbeing instruction, (71.5%) on close to home cleanliness, (57.1%) in taking drugs and nutrients and (58.8%) about planning for bosom taking care of. Every one of these perspectives improved in posttest. These outcomes were upheld by investigation of Abraham, 2015 as they uncovered that information with respect to the Antenatal counsel was 49.17%, information with respect to general ideas and antenatal visits was 41.88%, information in regards to mediation was 40.83%, with respect to antenatal test was 32.56% and least information was found in the region of recognizable proof of high-

hazard pregnancy.

Garnweidner et al., 2013 inferred that antenatal consideration may possibly elevate a solid eating regimen to pregnant ladies. Discoveries recommend that nourishment correspondence in antenatal consideration ought to be more customized towards ladies' dietary propensities and social foundation, wholesome information just as level of sustenance proficiency.

In the investigation of **Lee et al., 2018**, ladies sticking to dietary proposals was having deficient information on the dietary suggestions and getting restricted data from their consideration suppliers. Thus, just as time requirements, restricted sustenance information and an absence of nourishment preparing affected on the limit of clinicians to give satisfactory sustenance instruction.

The idea of nature of care is progressively perceived as a key component in the arrangement of medical care, and it is related with the results of care as far as viability, consistence, and coherence of care. Considering this, ongoing suggestions for ANC stress the need to address both the psychosocial and clinical needs of ladies, just as the idea of the new ANC model, as advanced by the World Health Organization (WHO), mirrors the new comprehension of the function of ANC (**WHO., 2002**). The current investigation, most of attendants (not exactly 50% of them) had inadequate right answer about idea of value in pretest while in posttest had (the greater part of them) complete right answer. Almost 50% of medical attendants don't know segment of value in pretest while they had (the greater part of them) complete right answer in posttest. In pretest about (almost 50% of them) don't know contraindication to accomplishing quality in antenatal consideration while after application instructive rule the attendants (the greater part

of the) had total right answer. During pretest about (not exactly 50% of them) of attendants had inadequate right answer in objective of value while in posttest larger part of them (the greater part of the) had total right answer. There was noteworthy contrast among pretest and posttest as respect nature of antenatal consideration. This was upheld by investigation of **Pembe et al., 2010** as they inferred that nurture helpers ought to be energized and given possibility for additional preparation and moving up to improve their exhibition and increment human asset for wellbeing.

In a subjective report directed by **Manongi et al., 2006** in Northern Tanzania, which depicted a few hindrances to the arrangement of care and included helpless oversight from the locale level, deferred advancements, just as absence of criticism on the cases alluded to the more elevated level.

Anatole et al., 2013 uncovered that medical attendants prepared in quality improvement and coaching methods were incorporated into the MOH's (Ministry of Health) locale administrative group to give progressing, nearby individual mentorship to wellbeing focus medical caretakers and to drive frameworks level quality improvement exercises. The program focused on 21 wellbeing communities in two rustic regions and upheld execution of MOH proof based conventions. Introductory outcomes exhibit critical improvement in various nature of-care pointers.

Another investigation directed by **Mahramus (2014)**, found that there is perceived improvement in attendants' information with respect to high chance pregnancy in the wake of applying instructive program. In addition, the examination uncovered that a huge improvement in post-test score.

As to's practice, most of medical

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caretakers' degree of all out training was high unacceptable in pretest while in posttest most of them was profoundly satisfactory. Our results were in accordance with investigation of **Emam and Saber, 2018** as they detailed that close to 66% of contemplated test have normal by and by and not as much as quarter of them were acceptable before giving system, while after program the greater part had great and higher by and by (63.3%, 83.3%) separately.

Another exploration led by **Remadurg et al., 2016** who have uncovered that one of the terrible needs of medical attendants is to refresh their insight and abilities for early discovery and appropriate therapy of toxemia.

Gooda et al., 2020 demonstrated that huge improvement in nurses' work on in regards to relational and communicational part of care, 25% of the investigation test had palatable practice about urging the mother to communicate her inclination in the pre-intercession and arrived at 90% & 82.5% in post and follow up individually. While 57.5% of the examination test had palatable practice about inviting the ladies and present yourself in the pre-intercession and arrived at 85% & 77.5% in post and follow up individually.

In the investigation of **Mohamed et al., 2019**, indicated that 47.2% of the examined medical caretakers had inadmissible absolute practice score pre-program, which improved to 54.4% of the contemplated attendants had high acceptable all out training post-program.

With respect to between complete information and practice score, there was solid positive connection between's attendants' degree of information and their degree of training in pretest (0.521) and post utilization of instructive rule (0.637). This was in concurrence with investigation of **Gooda et al., 2020** as they exhibited that there was factually huge connection between nurses' all out information and their training

all through the mediation stages.

This outcome was in concurrence with **Garris (2014)**, who demonstrated that giving instruction classes to attendants can be fruitful in expanding medical caretakers' information and practice consequently; the executed instructive program was compelling and affects medical caretaker's information about administration of patients with high danger pregnancy.

Likewise, an examination directed by (13) done in Port Said emergency clinics found that the medical attendant had inadequate information and practice identified with care of ladies with high danger pregnancy. The individuals who go to a preparation program in overseeing high danger pregnancy were not many and furthermore crisis medications and revival hardware were inadequate.

Mohamed et al., 2019 revealed that there was an exceptionally measurably huge distinction when nursing rules of the contemplated medical caretakers' information and practice.

With respect to connection between of the studied medical caretakers' segment qualities and level of information, in pretest there was positive relationship between's attendant's information both their age (18.043) while a solid positive relationship post application instructive rule (posttest) (34.929). their degree of training in pretest (19.312) while in posttest (4.345). long stretches of involvement (18.043) while in posttest (19.242). their occupation (8.227) in pretest and about (16.059) in posttest. Their living arrangement in pretest (1.910) while in posttest (2.914) and about taking preparing in pretest (30.507) while a solid positive relationship in posttest. Our outcomes were upheld by investigation of (17) as they revealed that there was a noteworthy contrast in information scores between medical attendants of various age gathering. information with respect to

Antenatal consideration was high in the time of >21 years, when contrasted with the age gathering of 18-19 years 19-20 years and 20-21 yrs. The least scorer was between 18-19 years age gathering.

Nonetheless, in the investigation of **Gardiner et al., 2018**, there was no affiliation seen with nursing understudy's information with their age, presentation to video on antenatal assessment, number of times performed antenatal assessment and more long periods of hypothesis went to in maternity care.

As to connection between the contemplated medical caretakers' segment qualities and level of training, there was a solid relationship between's attendants' training and their age.

At last, this examination indicated the significance of training rules in improving the nature of nursing care with respect to the antenatal consideration.

Conclusion:

Most medical attendants in Benha college clinic having helpless information and inadmissible practice at pre applied of instructive rule, anyway the score of complete information and practice expanded post intercession demonstrating that the medical caretakers' training improved after applied of instructive rule with respect to nature of nursing care gave during antenatal period. There was critical distinction between examined attendants' information mean score pre and post applied instructive rule ($P \leq 0.001$) and shows that was profoundly factual noteworthy complete act of the contemplated medical caretakers with respect to nature of antenatal consideration pre and post applied of instructive rule ($P \leq 0.001$). So every exertion ought to be made to improve the

nature of nursing care gave during antenatal period. This could be accomplished by expanding the consciousness of medical attendants by norms of nursing care during antenatal period

Recommendations:

- Nurses should have more positive role in rising the awareness of women about the importance of antenatal care by regular periodic in service training programs is needed to keep nurses up to date regarding antenatal care.
- Health education programs of awareness to improved maternal health and prevent complication during pregnancy.
- Further study should be conducted to study the same problem in deferent obstetric health agencies, using large number of nurses.
- Quality improvement programs to fulfill the different structures, processes and outcome standards.

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