



ASTUDY ON KNOWLEDGE OF PRACTICING MIDWIVES IN BASRAH ABOUT THEIR TASKS IN REPRODUCTIVE HEALTH CARE

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Article history:	Abstract:
Received: March 26 th 2022 Accepted: April 26 th 2022 Published: June 8 th 2022	Introduction: The midwife is a responsible and reliable person who provides care and advice to the mother during pregnancy, childbirth and postpartum period. Objective: The objective of this study was to assess the Knowledge of practicing midwives in Basrah about their tasks and duties in reproductive health care before delivery, during delivery and after birth. Methodology: The study was cross-sectional, with in-depth interviews and questionnaires prepared by the researchers for the study's purposes. Result: This research included a total of 57 midwives: 37 (64.9%) Graduated midwifery obstetric academy and 20(35.1%) Graduated nursery school who is classified with midwifery course,16(28.1%) in the age group (41 -50) , 23(40.4%) of them have more than 11 years of work experience ,50(87.7%) work with a team of two or more , 15(26.3%)of them have no children and42 (73.6%) have from one to seven children. Conclusion: The study show evidence of ineffective practices during labour and delivery among healthcare workers. the results show more than two thirds have good knowledge about immediate postpartum care.

Keywords: A midwife, duties and tasks, antenatal care, postpartum care, knowledge, counseling, quality of services.

INTRODUCTION

A midwife is a person who enrolls in educational programs for midwifery and obstetrics and is duly recognized in the country to which she belongs ,has successfully completed the midwifery course and has been given a license to practice the profession of midwifery. ^(1,2,3)

The primary responsibility of the midwife is summarized in the four aspects of work: maintaining health, preventing disease, reducing suffering and improving health.⁽⁴⁾

The midwife is a responsible and reliable person who provides care and advice to the mother during pregnancy, childbirth and postpartum period⁽⁵⁾, The midwife gives birth under her own responsibility and provides care for newborns, and infants^(6,7). The care provided by the midwife includes preventive measures, encouragement of a normal delivery, detection of complications for the mother and child, And dealing with emergency situations^(8,9). The midwife provides advice not only to the mother, but to the family and society⁽¹⁰⁾. Her work includes antenatal counseling , sexual and reproductive health, and preparing the mother to take care of her child^(11,12).

The midwife performs her work in several places, which include home, community, clinics, hospitals, and health centers^(13,14).

Qualifications for the midwife work in Iraq:

- 1- A graduate of College of Nursing and qualified with midwifery course for a period of 6 months.
- 2- A Graduate of Midwifery and Obstetrics Academy.
- 3- A graduate of a nursing school who is qualified with midwifery course for one year, Established by the Ministry of Health⁽¹⁵⁾.

One of the fundamental principles of the midwifery profession is respect the dignity of the client ,trust and worthy⁽¹⁶⁾, Announcing the truth to the patient and obtaining her consent to take the procedures and health care for her case, teamwork, Confidentiality and privacy, professional knowledge and competences and risk reduction⁽¹⁷⁾ .

THE MIDWIFE'S DUTIES AND TASKS IN IRAQ BEFORE DELIVERY:

Receiving and welcoming the pregnant mother, Providing a safe and clean environment for the mother and the newborn in the delivery room as part of the general safety and infection control measures, Wash



the hands with soap and water before and after each practical procedure, Preparing adequate and sterile delivery tools and supplies, Preparing newborn resuscitation supplies⁽¹⁸⁾, Wearing sterile clean clothes, sterile paws, putting on a mask, and wearing special shoes in the delivery room, Conducting a general examination for the pregnant woman before childbirth and measuring vital signs⁽¹⁹⁾, Psychologically supporting the pregnant woman and not leaving her alone for a long time, giving a back massage and encouraging her to breathe deeply during uterine contractions, Use and application of the birth chart (partograph) for the mother to follow the progress of labor, Continuous monitoring and evaluation of the fetal heartbeat and uterine contractions of labor using a device cardiotocography (CTG) and Encouraging the mother to empty the bladder and rectum⁽²⁰⁾.

THE MIDWIFE'S DUTIES AND TASKS IN IRAQ DURING DELIVERY:

Maintaining a clean birth environment, Examination of the mother during childbirth (avoid frequent vaginal examination unless necessary) i.e. every four hours, Measuring the vital signs of the mother and checking the heartbeat of the fetus, Maintaining the perineal and vulvar disinfection and cushioning the perineal area to prevent lacerations⁽²¹⁾, Provide psychological support to the mother and encourage her constantly to facilitate childbirth (Encouraging her to breathe deeply between uterine contractions and make sure that the bladder is emptied)⁽²²⁾, delivering the placenta after signs of its separation appear, The midwife carefully examines the placenta and makes sure that its membranes are intact, and no part of it remains in the uterus, because if any part of it remains inside the uterus, it will cause bleeding or infection^(15,23),

Recording the time and day of the birth, placing the identification bracelet, and placing the newborn on the mother's breast⁽¹⁵⁾,

PROVIDE BASIC CARE TO THE NEWBORN IMMEDIATELY AFTER BIRTH THROUGH:

- Keeping the newborn warm by wrapping in a clean, soft, warm towel and drying immediately after birth and placing the baby in a state of direct skin to skin contact with the mother, cover the newborn head with a hat.
- Wipe the eyes with the two ends of the towel, each eye separately.
- Replace the wet towel with another dry.

- Evaluate the newborn's breathing during the drying process, whether he is crying or breathing normally or with difficulty, using an apgar score.
- Make sure there is no other child.
- Paws are replaced with clean ones.
- The midwife ties and cuts the umbilical cord according to the correct scientific contexts.
- The midwife places the newborn between the mother's breasts by placing direct skin-to-skin contact to assist the newborn to breastfeed as soon as he is ready⁽²⁴⁾.

THE MIDWIFE'S DUTIES AND TASKS IN IRAQ AFTER BIRTH:

Putting the newborn on his mother's breast, Resuscitation of the newborn if the newborn is not crying or breathing abnormally, Check the level of the uterus, Encourage the mother to empty the bladder, breastfeed, and use family planning methods appropriate to her health condition⁽²⁵⁾, Note the amount of secretions and blood when changing the pad, while noting the mother's condition and vital signs, especially during the first two hours of birth, Observing and recording congenital malformations of the newborn and documenting the details of birth and interventions, Organizing a birth and death certificate for a newborn.

Aims

- 1- The present study was conducted to identify demographic, social and cultural factors of 57 midwives that enrolled in the study.
- 2- assessment the Knowledge of practicing midwives in Basrah about their tasks and duties in reproductive health care before delivery, during delivery and after birth.

METHODOLOGY STUDY AREA

The research was performed in the governorate of Basrah, which is Iraq's southernmost governorate. It shares its borders with Kuwait, Iran, and Saudi Arabia. The governorate's geological landscape is dominated by vast desert plains and the Shatt al-Arab waterway, which stretches from Al-Qurnah to Basrah and then to the Arab Gulf. It has a total area of 19070 square meters, about 450 kilometers south of Baghdad's capital. It has a population of 3063059, 719653 (23.4 percent) females in reproductive age and 94711 (3.09 percent) pregnant women in 2020. The delivery services are primarily provided by the public sector, where the governorate has a wide network of health facilities. There are 10 hospitals (Al



Basrah for Maternity and children Teaching Hospital, Al Basrah Teaching Hospital, Al Faihaa Teaching Hospital, Al Mwanee Teaching Hospital in the city while Abu AL-Khasseib Public Hospital, AL-Zubair Public Hospital, AL-Qurna Public Hospital, AL-Medainah Public Hospital, Al Fao Public Hospital, Um-qasar Public Hospital in periphery of Basrah, and 7 primary health care centers with delivery rooms (Shat AL-Arab in Shat AL-Arab health district, AL-Harthah in AL-Harthah health district, AL-Dair in AL-Dair health district, ALseebah in Abu AL-Khasseib health district, Khur –Alzubair and safwan in AL-Zubair health district, and ALhuair in AL-Medainah health district). Many of these health facilities, which provide delivery services in both urban and rural areas, are located across the governorate.

Study subject

The study was performed by three researchers and lasted from January 2nd to September 30th, 2020. The doctors who administered the interviews were eligible to administer the questionnaires about the knowledge of practicing midwives about their task during Antenatal and intrapartum and postpartum period. The research included all licensed midwives employed over a three-month period from 2 January to 31 March 2020 in health care facilities with delivery services.

Study design

The study was cross-sectional, with in-depth interviews and questionnaires prepared by the researchers for the study's purposes. The following questions are included in the questionnaire:

Section One: personal information:

1. Age.
2. Duration of service as midwife.
3. Qualification.
4. In-service training during the last two years.
5. Place of work (Name of hospital or health centre).
6. Is work alone or with team.
7. Marital status.
8. Number of children.

Section Two : Broad roles of midwives in providing antenatal care

1. Antenatal care :
 - Takes medical history.
 - Documents previous pregnancies.
 - Assess current pregnancy.
 - Check for pre-eclampsia.
 - Check for anaemia.
 - Check for syphilis.
 - . Discus how to prepare for an emergency in pregnancy-
 - advise on facility delivery-

- . Advise on home delivery with a skilled attendant-
- . Advise on labour signs-
- . Advise on danger signs-
- . Advise on diet ,exercise ,hygiene-
- . Advise on counsel on family planning-
- . Advise on routine and follow up visits-
- . Antenatal tests and screening and explain the purpose of each test-
- . Routine blood pressure measurement-
- . Test urine for glucose and protein-
- . Feel the abdomen to see how the baby is growing-
- . write everything down in maternity notes-
- .Gives copy of maternity notes to look at ,keep, and to bring to appointments-
- .Listen to the baby's heart rate-
- .(Asks if the baby is active (fetal movement)-
- .Check baby lying in the uterus-
- .Further blood tests for Rh isoimmunisation-
- Check for any pre gestation substance abuse ,diabetes, infections and bleeding disorders.
- Check for gestational risk(incompetent cervix(cerclage), hyperemesis, premature rupture of membrane, pregnancy induced hypertension, Rh isoimmunisation.

In receiving pregnant women for labour -2

A midwife is expecting to look for:

- .PROM-
- .Preterm labour-
- .(Bleeding complication (abruption, previa-
- .Multiple gestations-
- Amniotic fluid alteration (oligohydrominus).-
- .Surgery-
- .Trauma from accident-
- .Infection affected the fetus-
- .Domestic violence-

Care during labour: -3

- .Taking brief history-
- .Taking blood pressure, pulse rate and temperature-
- .Testing urine-
- .Performing an abdominal palpation-
- .Listening to baby's heartbeat-
- .Conducting an internal examination-
- .Explain to the mother the information she gained from history and examination-
- .Sharing e mother and family with progress and management of labour-
- Give supportive care throughout labour.-
- .Advice on communication-
- .Advice on cleanliness-
- .Advice on mobility-
- .Advise on urination-
- .Eating, drinking-



- .breathing technique-
- .pain and discomfort relief-
- .birth companion-
- .respond to problems during labour and delivery-
- .fetal heart rate <120 or >160 beats\mint-
- .prolapsed cord-
- .Breech presentation-
- .stuck shoulders-
- .multiple birth-

4- Immediately postpartum care

- After birth, to measure blood pressure, to check blood loss, ensuring urine pass and assisting baby feed.
- Accompany the mother to the postnatal room.
- Be aware of potential complications (preterm labor, dystocia, post term pregnancy, fetal malposition and malpresentation, macrosomia, fetal distress, prolonged umbilical cord, amniotic fluid embolism cephalopelvic disproportion,
- Look for complication of 3rd or 4th stage of labor (ulceration 1st, 2nd, 3rd, 4th degree, urethral tear, placenta accrete, uterine rupture, retained placenta, uterine atony,
- Advice on postpartum care and hygiene.
- Counsel on nutrition.
- Counsel on birth spacing and family planning.
- Help in providing practical help and information to establish breastfeeding.
- Prepare the women for discharge.
- Instruct the mother about subsequent postnatal visits.
- Advice on danger sign.

5- Postpartum care (up to 6 weeks)

- Check for blood pressure.
- Check for anaemia.
- Check for fever or foul-smelling lochia.
- Check for urine dribbling.
- Check for pus or perineal pain.
- Check for feeling unhappy or crying easily.
- Check for vaginal discharge 4 weeks after delivery.
- Check for breast problem.
- Check for cough or breathing difficulty.

Inadequate performance can represent a flaw in the knowledge of midwives of their expected duties. Prior to the proper process of data collection, each health facility was visited. After that each facility was visited twice to complete the data, the managers were briefed on the objective essence and specifications of the data collection process. The data was gathered through direct interviews

with midwives who had been recruited by the researchers to perform the analysis. Each interview lasted between 15 and 20 minutes.

Sample size

In practice, the study covered all midwives in all facilities delivering delivery services.

Ethical consideration

There are no health concerns relevant to the study's conduct or the implementation of its anticipated findings, theoretically, no ethical problems should arise.

Data analysis and statistical methods:

Using SPSS statistical tools for Windows version 22 and Microsoft Excel 2013 Data was then entered and analyzed To generate output on all variables, descriptive statistics in form of frequencies Graphs in line charts and tables were used to show the study findings.

RESULT

This research included a total of 57 midwives: according to place of work 13(22.8%) in Al Basrah for Maternity and children Teaching Hospital, 7(12.3%) in Al Basrah Teaching Hospital, 10(17.5%) in Al Mwanee Teaching Hospital, 3(5.3%) in AL-Qurna Public Hospital, 8(14%) in AL-Zubair Public Hospital, 7(12.3%) in AL-Medainah Public Hospital, 2(3.5%) in Abu AL-Khasseib Public Hospital, 3(5.3%) in Al Faihaa Teaching Hospital and 4(7%) in Shat AL-Arab PHC. 37 (64.9%) Graduated midwifery obstetric academy and 20(35.1%) Graduated nursery school who is classified with midwifery course, according to the age 2(3.5%) less than 20, 12(21.1%) between (21-30), 12(21.1%) between (31-40), 16(28.1%) between (41-50), 15(26.3%) more than 50 with a Mean =41.1, SD= 11.8, according to duration of experience 17(29.8%) 2 years & less, 9(15.8%) 3 to 5 years, 8(14%) 6 to 10 years and 23(40.4%) 11 years & more with a Mean =12.1, SD= 12, according to team work, 6(10.5%) work alone, 1(1.8%) work with one colleague, 50(87.7%) work with Two or more colleagues, according to marital status 9(15.8%) single, 35(61.4%) married, 9(15.8%) divorced, 4(7%) widowed, according to parity 15(26.3%) have no children, 10(17.5%) have one child, 6(10.5%) have two, 3(5.3%) have three, 4(7%) have four, 11(19.3%) have five, 4(7%) have six, 4(7%) have seven children. [Table 1]



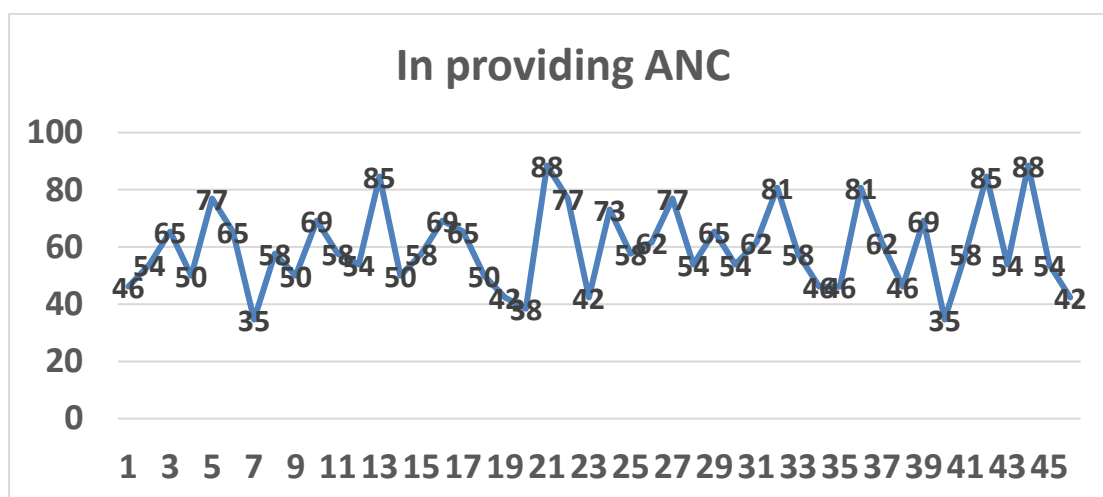
Table 1: Socio-demographic Characteristics of midwives (n=57) who participate in the study

Characteristic	N (%)
a- Place of work	
Al Basrah for Maternity and children Teaching Hospital	13(22.8%)
Al Basrah Teaching Hospital	7(12.3%)
Al Mwanee Teaching Hospital	10(17.5%)
AL-Qurna Public Hospital	3(5.3%)
AL-Zubair Public Hospital	8(14%)
AL-Medainah Public Hospital	7(12.3%)
Abu AL-Khasseib Public Hospital	2(3.5%)
Al Faihaa Teaching Hospital	3(5.3%)
Shat AL-Arab PHC	4(7%)
Total	57(100%)
b- academic qualification	
Graduated midwifery & obstetric academy	37(64.9%)
Graduated nursery school who is classified with midwifery course	20(35.1%)
Total	100%
c- team work	
alone	6(10.5%)
one colleague	1(1.8%)
Two or more	50(87.7%)
Total	57(100%)
d-age interval	
less20	2(3.5%)
21-30	12(21.1%)
31-40	12(21.1%)
41-50	16(28.1%)
more50	15(26.3%)
Total	57(100%)
e- duration of experience	
2&less	17(29.8%)
3 to5	9(15.8%)
6 to 10	8(14%)
11 &more	23(40.4%)
Total	57(100%)
f- marital status	
single	9(15.8%)
married	35(61.4%)
divorced	9(15.8%)
widowed	4(7%)
Total	57(100%)
g- according to parity	
0	15(26.3%)
1	10(17.5%)
2	6(10.5%)
3	3(5.3%)
4	4(7%)



5	11(19.3%)
6	4(7%)
7	4(7%)
Total	57(100%)

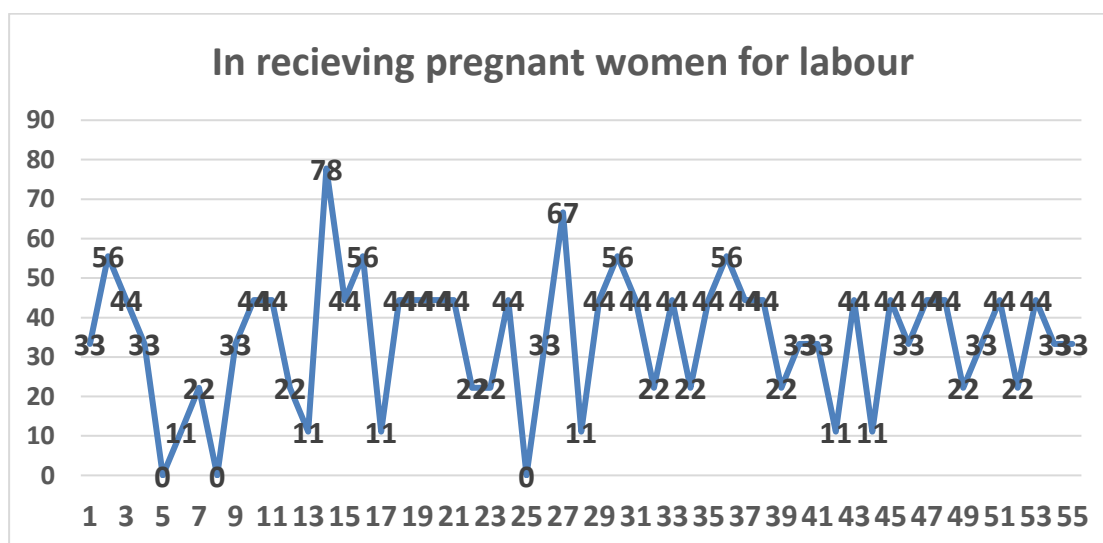
Graph 1: distribution of knowledge score in providing ANC



The mean score on the practice questions related to antenatal care was 15.5(59.9%), (SD 5.43). The highest score was 23(88.5%)and the lowest score was

9(34.6%). Graph 1 shows the distribution of the total score on 26 antenatal care practice questions amongst the participants.

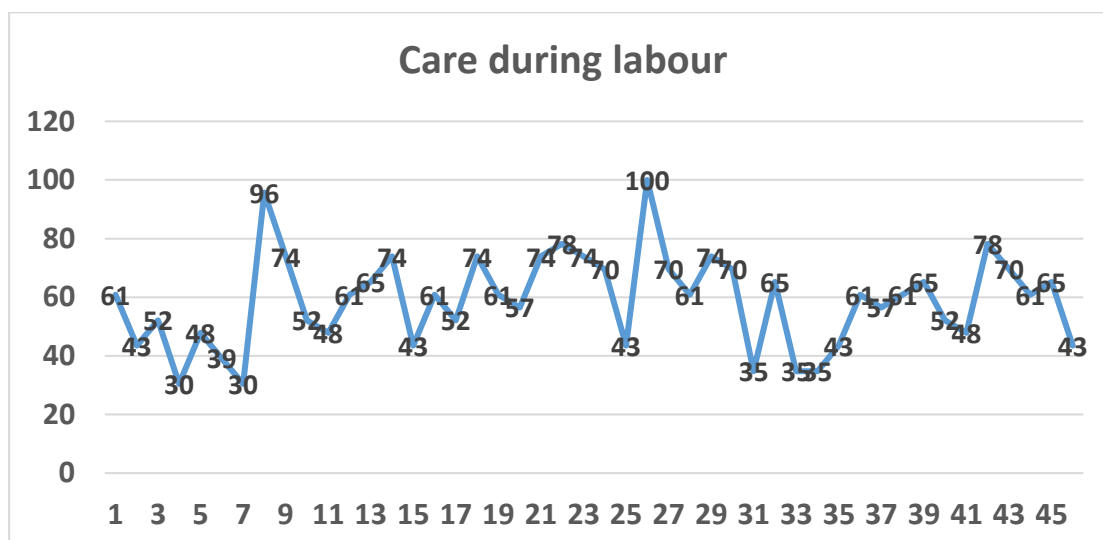
Graph 2: distribution of knowledge score in receiving pregnant women for labour :



The mean score on the practice questions related to receiving pregnant women for labour 3.1 (34.5%),(SD 1.5). The highest score was 7(77.8%) and the lowest

score was Lowest= 0(0%).Graph 2 shows the distribution of the total score on 9 questions in receiving pregnant women for labour amongst the participants.

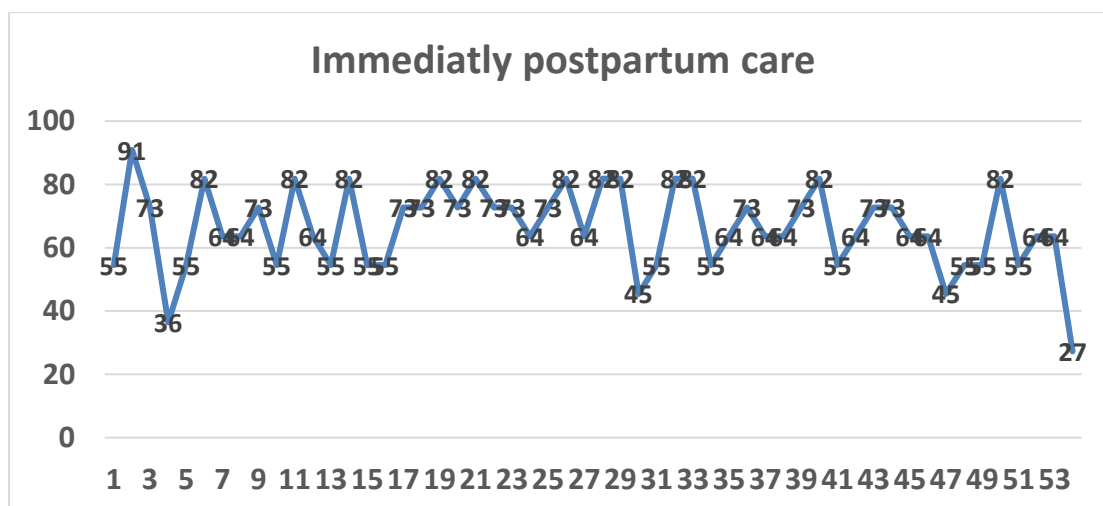
Graph 3: distribution of knowledge score in care during labour:



The mean score on the practice questions related care during labour 13.5 (58.9%) , (SD 3.6). The highest Graph 3 shows the distribution of the total score on 23 questions about care during labour amongst the participants.

score was 23(100%) and the lowest score was Lowest= 7(30.4%).

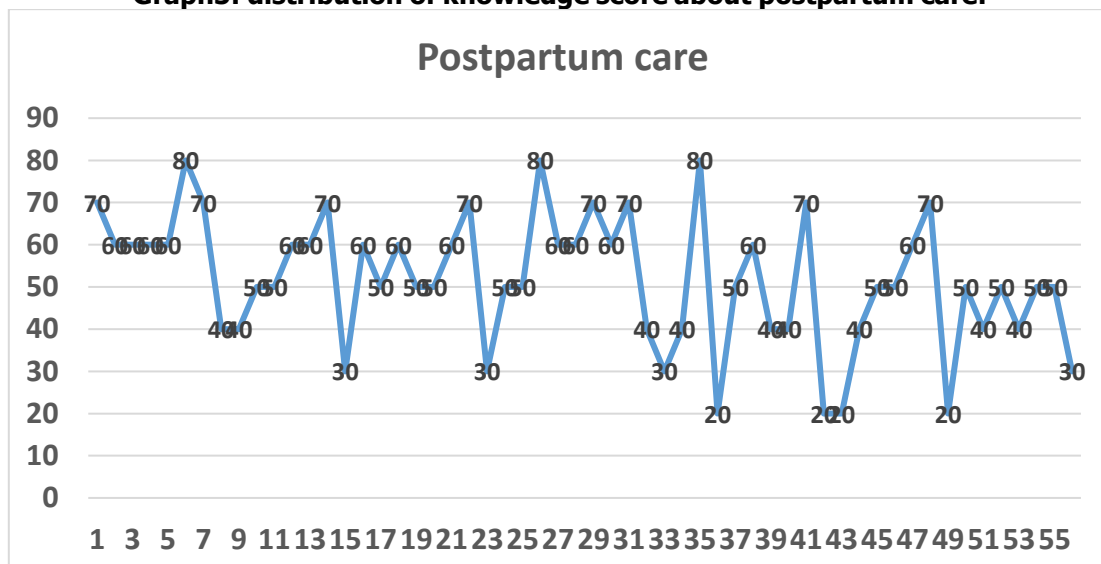
Graph 4: distribution of knowledge score about immediate postpartum care:



The mean score on the practice questions related to immediate postpartum care 7.3(66.3%), SD 1.4. The highest score was 10(90.9%)and the lowest score was Lowest= 3(27.3%)

Graph 4shows the distribution of the total score on 11 questions immediate postpartum care amongst the participants.

Graph5: distribution of knowledge score about postpartum care:



The mean score on the practice questions related to postpartum care 5.2(51.8%), SD 1.6. The highest score was 8(80%) and the lowest score was Lowest= 2(20%) Graph 5 shows the distribution of the total score on 10 questions postpartum care amongst the participants.

DISCUSSION

Our research has shown that the majority of the participant midwives was working in the center hospitals, about two third of them were Graduated from midwifery & obstetric academy & most of them working within team of 2 or more ,The mean age was 41.1 years old and There was variation in terms of years of work mean for duration of work as the mean was 12 years with SD =12.

The research results mean score of providing ANC was (n=15.5,59.9%) This indicates that about 40% of the participants do not have enough knowledge on providing antenatal care. This was concomitant with the result of a study done by Muzeya F. 2015 ⁽²⁶⁾ that was performed in at Thaba-Tseka district in Lesotho that found knowledge levels of nurse-midwives on obstetric care are still gaps in ANC.

Only (34.5%) of the participants have good knowledge on receiving pregnant women for labor & The mean score for the knowledge about care during labor was (13.5 ,58.9%), so more than third of them have poor knowledge.

These research results agree with other studies that showed evidence of ineffective practices during labour and delivery among healthcare workers (CondeAgudelo, Rosas-Bermudze & Gulmezoglu 2008:1554).⁽²⁷⁾

Another study shows that birth is not managed according to the guidelines in most cases. Women feel

that care is adequate, although some women report mistreatment. ⁽²⁸⁾

Also the results show more than two thirds have good knowledge about immediate postpartum care.

This results were concomitant with a study conducted in Cambodia which found that healthcare professionals including nurses, midwives and doctors' practices were not all the time consistent with evidence-based criteria (Dawson, Homer & Whelan). ⁽²⁹⁾

There have been serious efforts over the past several decades to review effective interventions to improve maternal and childbirth outcomes. So from these analyses the WHO concluded that providing skilled care at every birth has an essential interventional role to decrease maternal and perinatal morbidity and mortality. Without availability of a health provider with specific midwifery skills and competencies, particularly lifesaving skills, international goals for maternal and newborn health cannot be reached. ⁽³⁰⁾

A study show that The midwife has a very important role in consulting and training the mothers and their support to the pregnant mothers have crucial role for positive labor experience and the midwives' communication skill preserves the safety and enhance toleration of pain of normal labor ⁽³¹⁾

A systematic review reveals a low quality evidence on effectiveness of communication training of maternity care staff on maternal and child outcome. ⁽³²⁾

CONCLUSION

- 1- The study show evidence of ineffective practices during labour and delivery among healthcare workers.



- 2- the results show more than two thirds have good knowledge about immediate postpartum care.

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Author's contribution: ALABRAHIM Maisaa conceived and designed the study. ALABRAHIM Maisaa and ALRamdhan Jinan performed data collection. Al-Abboodi Huda analyzed the data. Al-Abboodi Huda and ALABRAHIM Maisaa interpreted the data. ALABRAHIM Maisaa and ALRamdhan Jinan wrote and revised the manuscript. All authors read and approved the final manuscript.

REFERENCES

1. Kumakech E, Anathan J, Udho S, Auma AG, Atuhaire I, Nsubuga AG, Ahaisibwe B. Graduate Midwifery Education in Uganda Aiming to Improve Maternal and Newborn Health Outcomes. *Ann Glob Health*. 2020 May 21;86(1):52.
2. Kortekaas JC, Bruinsma A, Keulen JKJ, Vandenbussche FPHA, van Dillen J, de Miranda E. Management of late-term pregnancy in midwifery- and obstetrician-led care. *BMC Pregnancy Childbirth*. 2019 May 22;19(1):181.
3. O'Connor S, Zhang M, Trout KK, Snibsoer AK. Co-production in nursing and midwifery education: A systematic review of the literature. *Nurse Educ Today*. 2021 Jul;102:104900.
4. O'Connor S, Daly CS, MacArthur J, Borglin G, Booth RG. Podcasting in nursing and midwifery education: An integrative review. *Nurse Educ Pract*. 2020 Aug;47:102827. .
5. Pollock D, Davies EL, Peters MDJ, Tricco AC, Alexander L, McInerney P, Godfrey CM, Khalil H, Munn Z. Undertaking a scoping review: A practical guide for nursing and midwifery students, clinicians, researchers, and academics. *J Adv Nurs*. 2021 Apr;77(4):2102-2113.
6. Nove A, Moyo NT, Bokosi M, Garg S. The Midwifery Services Framework: The process of implementation. *Midwifery*. 2018 Mar;58:96-101.
7. Forster DA, McLachlan HL, Davey MA, Biro MA, Farrell T, Gold L, Flood M, Shafiei T, Waldenström U. Continuity of care by a primary midwife (caseload midwifery) increases women's satisfaction with antenatal, intrapartum and postpartum care: results from the COSMOS randomised controlled trial. *BMC Pregnancy Childbirth*. 2016 Feb 3;16:28. doi: 10.1186/s12884-016-0798-y. PMID: 26841782; PMCID: PMC4739100.
8. MacDougall C, Johnston K. Client experiences of expertise in midwifery care in New Brunswick, Canada. *Midwifery*. 2022 Feb;105:103227.
9. Buchan J, Campbell J, McCarthy C. Optimizing the contributions of nursing and midwifery workforces: #Protect, #Invest, #Together. *Hum Resour Health*. 2021 Mar 2;19(1):26.
10. Symon A, Pringle J, Cheyne H, Downe S, Hundley V, Lee E, Lynn F, McFadden A, McNeill J, Renfrew MJ, Ross-Davie M, van Teijlingen E, Whitford H, Alderdice F. Midwifery-led antenatal care models: mapping a systematic review to an evidence-based quality framework to identify key components and characteristics of care. *BMC Pregnancy Childbirth*. 2016 Jul 19;16(1):168.
11. Peters M, Kolip P, Schäfers R. A theory of the aims and objectives of midwifery practice: A theory synthesis. *Midwifery*. 2020 May;84:102653..
12. Khatun M, Akter P, Yunus S, Alam K, Pedersen C, Byrskog U, Erlandsson K. Challenges to implement evidence-based midwifery care in Bangladesh. An interview study with medical doctors mentoring health care providers. *Sex Reprod Healthc*. 2022 Mar;31:100692..
13. Ricchi A, Gemellaro G, Menichini D, Molinazzi MT, Infante R, Banchelli F, Artioli G, Foà C, Neri I. Evaluation of midwifery students' satisfaction with regards to clinical internship. *Acta Biomed*. 2020 Jun 20;91(6-S):118-124.
14. Dawson AJ, Nkowane AM, Whelan A. Approaches to improving the contribution of the nursing and midwifery workforce to increasing universal access to primary health care for vulnerable populations: a systematic review. *Hum Resour Health*. 2015 Dec 18;13:97..
15. Alareaby Z, Khadham FK, sadoon SA. An introductory work guide for service providers in obstetrics, gynecology and neonatology units in Iraq. 2018.
16. Lehan E, Leahy-Warren P, O'Riordan C, Savage E, Drennan J, O'Tuathaigh C, O'Connor M, Corrigan M, Burke F, Hayes M, Lynch H, Sahm L, Heffernan E, O'Keeffe E, Blake C,



- Horgan F, Hegarty J. Evidence-based practice education for healthcare professions: an expert view. *BMJ Evid Based Med.* 2019 Jun;24(3):103-108.
17. Manalai P, Currie S, Jafari M, Ansari N, Tappis H, Atiqzai F, Kim YM, van Roosmalen J, Stekelenburg J. Quality of pre-service midwifery education in public and private midwifery schools in Afghanistan: a cross sectional survey. *BMC Med Educ.* 2022 Jan 16;22(1):39.
18. Shabila, N.P., Ahmed, H.M. & Yasin, M.Y. Women's views and experiences of antenatal care in Iraq: a Q methodology study. *BMC Pregnancy Childbirth* 14, 43 (2014). <https://doi.org/10.1186/1471-2393-14-43>
19. Ahmed, H. M. (2015). Post episiotomy care instructions among midwives in Kurdistan region, Iraq. *Zanco Journal of Medical Sciences (Zanco J Med Sci)*, 19(2), 1005–1010. <https://doi.org/10.15218/zjms.2015.0024>
20. Jamil Piro, T., Ghiyasvandian, S., & Salsali, M. (2015). Iraqi Nurses' Perspectives on Safety Issues in Maternity Services. *Nursing and midwifery studies*, 4(3), e29529.
21. 21-Pedersen TH, Berger-Estilita J, Signer S, Bonsen DEZ, Cignacco E, Greif R. Attitudes towards interprofessionalism among midwife students after hybrid-simulation: A prospective cohort study. *Nurse Educ Today.* 2021 May;100:104872. doi: 10.1016/j.nedt.2021.104872. Epub 2021 Mar 17. PMID: 33756176.
22. Jackie Hartley, My experience working as a midwife in Iraq in a humanitarian field hospital, *Women and Birth*, Volume 31, Supplement 1, 2018, Page S25, ISSN 1871-5192.
23. Piro J, Ghiyasvandian T, Salsali S, Iraqi Nurses' Perspectives on Safety Issues in Maternity Services 4, 2015, 10.17795/nmsjournal29529.
24. Walker SH, Hooks C, Blake D. The views of postnatal women and midwives on midwives providing contraceptive advice and methods: a mixed method concurrent study. *BMC Pregnancy Childbirth.* 2021;21(1):411. Published 2021 Jun 2. doi:10.1186/s12884-021-03895-2
25. Ida Lyckestam Thelin, Ingela Lundgren, Evelyn Hermansson, Midwives' lived experience of caring during childbirth – a phenomenological study, *Sexual & Reproductive Healthcare*, Volume 5, Issue 3, 2014, Pages 113-118, ISSN 1877-5756.
26. F Muzeya – 2015 Knowledge, attitudes and practices of nurse-midwives related to obstetric care at Thaba-Tseka district in Lesotho.
27. Conde-Agudelo A, Rosas-Bermudez A, Gülmezoglu A M Evidence-based intrapartum care in Cali, Colombia: a quantitative and qualitative study PMID: 19035991 DOI: 10.1111/j.1471-0528.2008.01930.x
28. Assessment of the implementation of the model of integrated and humanised midwifery health services in Chile.
29. Dawson ,Nkowane, Whelan Approaches to improving the contribution of the nursing and midwifery workforce to increasing universal access to primary health care for vulnerable populations: a systematic review. 8 Dec 2015, 13:97 DOI: 10.1186/s12960-015-0096-1 PMID: 26684471 PMCID: PMC4683743
30. Binfa L, Pantoja L, Ortiz J, Gurovich M, Cavada G, Foster J. Midwifery. 2016 Apr;35:53-61. doi: 10.1016/j.midw.2016.01.018. Epub 2016 Feb 8. PMID: 27060401
31. World health organization. Strengthening midwifery toolkit <https://www.who.int/publications/i/item/9789241501965> 11 February 2011.
32. Somayeh Khorshidi, Mehdi Pourasghar, Jamshid Yazdani-Charati, Marjan Ahmad Shirvani Effect of workshop training on midwives' communication skills and maternal satisfaction in maternity block Farideh Rezaei-Abhari, *JMNS* 2019 | Volume : 6 | Issue : 4 | Page : 157-163
33. Chang YS, Coxon K, Portela AG, et al.. Interventions to support effective communication between maternity care staff and women in labour: A mixed-methods systematic review. *Midwifery.* 2018;59:4–16. as cited [PMC free article] [PubMed] [Google Scholar] Renfrew MJ, McFadden A, Bastos MH, et al.. Midwifery and quality care: findings from a new evidence-informed framework for maternal and new-born care. *Lancet.* 2014;384(9948):1129–1145. [PubMed] [Google Scholar]