



ISSN: 1813-1638

The Medical Journal of Tikrit University

Available online at: www.mjtu.tu.edu.iq

MJTU

The Medical Journal of
Tikrit University

Satisfaction of Post natal care Delivered to women attending Primary Health Care centers regarding quality improvement of postnatal services in Baghdad-Al Karkh district

Suhad Abd Ali Sahib¹, Ruqaya Subhi Tawfeeq²

¹MSc -community medicine student and general practitioner at Baghdad health directorate, Baghdad, Iraq

² College of Medicine, Aliraqia University, Baghdad, Iraq

Keywords: Postnatal care, satisfaction.

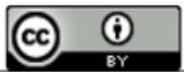
ARTICLE INFO

Article history:

Received 01/02/2026
Accepted 08/05/2026
Available online 30/06/ 2026

© 2026 TIKRIT UNIVERSITY,
COLLEGE OF MEDICINE (TUCOM).
THIS IS AN OPEN ACCESS
ARTICLE UNDER THE CC BY
LICENSE

<http://tikrit-medicine.tripod.com/id10.html>



Citation

Corresponding author E mail:
sahad.a.sahib@aliraqia.edu.iq

ABSTRACT

Background: The quality of care provided to the women and infants is a key determinant in maternal outcome and that simple change in practice can save many lives.

Aims: To identify the satisfaction of clients regarding quality improvement of postnatal services in primary health care centers within the Al-Karkh district of Baghdad.

Method: This study across sectional design study was conducted from October 2024 to May2025 which include six primary health care centers (3 family health care center and, 3 primary health care center) and four in the outskirts (1 family health, 3 primary care), and the total number of clients required during the study period was 150 mother attending postnatal care in primary health care centers, direct face-to-face interviews with all participant recruitment, structured -questionnaire forms were designed to estimate client satisfaction toward health care services during their postnatal visits.

Results: About 75% of clients were satisfied with overall post-natal care and 12% of clients were dissatisfied. Also the result shows that 13% of mothers visit was within 1st week after delivery, 45% of mothers visit was within 1-2 weeks and 42% of mothers visit was after second week postnatal. It was found that 52% of client satisfaction with baby checkups was satisfied, 24% of client satisfaction with baby checkups was neutral and 25% of client satisfaction with baby checkups was dissatisfied, The result show that 62% of clients was satisfied with support and advice on breastfeeding,30% of client was neutral with support and advice on breastfeeding and 8% of clients was dissatisfy with support and advice on breastfeeding, 75% of clients were satisfied with communication and respect from healthcare providers,19% of clients were neutral satisfied with communication and respect from healthcare providers and 6%% of clients was dissatisfied with communication and respect from healthcare providers, the result show that 35% of clients were satisfied support for family planning,25% of clients were naturally satisfied support for family planning and 39% of clients were dissatisfied support for family planning, the result show that54% of clients were satisfied with quality of counseling on contraceptive options, 33% of client were naturally satisfied with quality of counseling on contraceptive options, the result show that 35% of clients were satisfied with maternal care (wound care), 30% of clients were naturally satisfied with maternal care (wound care) and 35% of clients were dissatisfied with maternal care (wound care), the result show that 20% of knowledge of infant care was clear,36% of knowledge of infant care was neutrally clear,44% of knowledge of infant care was unclear.

Conclusion: The study highlights both strengths and critical gaps in maternal healthcare service and the importance of continuous assessment and evaluation of PNC to develop an immediate plan at the level of health departments and submitted to decision-makers in the Ministry of Health.

INTRODUCTION

The measurement of clients' satisfaction is a common component of assessment in quality care. It is a wholly subjective assessment of the quality of health care. Evidence has suggested that care, which is less than satisfactory to the clients, is also less effective, because dissatisfaction is associated with noncompliance with treatment instructions, delay in seeking further care and poor understanding and retention of medical information (Chawani, F.S., 2009), to improve service delivery in primary health care units, there is a need to place a high priority on the clients and their level of satisfaction with the provided services. (Zara A, Taheri I, Jahromi MK., 2015), client satisfaction should be taken as a serious measurement by health experts and governments due to: satisfaction is a predictor of client's compliance with their treatment and health provider's recommendations, assessing the information to success clients; of also delivering client satisfaction has a great role in quality assurance and continuous quality improvement systems (Batbaatar, *et al.*, 2017). Women die because of complications during and following pregnancy and childbirth. Most of these complications develop during pregnancy, other complications may exist before pregnancy but are worsened during pregnancy or in postnatal period, obstetric complications such as hemorrhage, dystocia, eclampsia, sepsis and infections such as tuberculosis and HIV are the major causes of maternal deaths in developing countries (Lawrence *et al.*, 2022). To achieve health service goal that aimed at dropping maternal death, as evidences show that maternal death is high in countries where ANC and PNC coverage is low and where it has poor quality (Wenling

et al., 2024), improving client satisfaction associated with higher utilization rate to health services and better health outcome.

AIM

Identify the health services delivered to women in postnatal period and Estimate level of satisfaction of women attending PHCs during postnatal visit regarding the health care services.

SUBJECT AND METHODS

Study was conducted from October 2024 to May2025 with direct face-to-face interviews with all participant recruitment and 10 PHCCs were randomly selected from Baghdad /Al-Karkh health directorate (DOH) using cluster multistage of random sampling technique, study population will be all women attending the PHCCs to postnatal service, caregivers: working staff and provision process by the staff working in the health center: (director, medical staff and health staff), during periods when the researcher was scheduled for duty at the care facilities and the provider of services, the administrator at each PHCC was contacted in order to obtain information concerning the number of women that attended the PHCC, and to seek permission to conduct the study at the work site. A quiet place was chosen for the interviews.

INCLUSION CRITERIA

Selection of the client in the study should meet the following criteria:

- a. mother (within six weeks after delivery)
- b. clients live within the boundaries of the study location.

EXCLUSION CRITERIA

Study mothers visit the facilities but not living within the boundaries of the study location are. PNC service is provided through six days / week from 8.00 AM-2.00 PM. Every

health facility was visited weekly through the working hours; on each visit, 3-5 of caregivers and 10-15 clients were interviewed; every interview lasts about 15 minutes. These PHCCs exist in areas which differ in their socio-economic status, across sectional design attendance was chosen by systematic random sample through estimating the daily visitors and collecting the sample required.

DATA COLLECTION TOOLS

Data was collected by the researcher by structured direct interview questionnaire. The questionnaire will be filled with by the researcher through direct interview with each participant.

STATISTICAL DATA ANALYSIS

The data was coded and each questionnaire form assigned with a serial identifying number then entered by the researcher into the computer and then the data collection will be analyzed using Statistical Package for Social Science, Version 26 (SPSS program, V.26).

RESULTS

The study enrolled 130 postnatal samples were collected (55 from family health centers, 75 from primary health care centers) from 10 primary health care centers in Al-Karkh district.

1-Client Satisfaction of postnatal care regarding the mother: The data represents 130 clients and their experiences with postnatal care (PNC) regarding services delivered to them as shown in table (1)

1. Timing of the first PNC visit: The result show that 13% of mothers visit was within 1st week, 45% of mothers visit was within 1-2 weeks and 42% of mothers visit was after second week postnatal.
2. Communication and respect from healthcare providers: 75% of clients were satisfied with communication and

respect from healthcare providers,19% of clients were neutral with communication and respect from healthcare providers and 6% of clients were dissatisfied with communication and respect from healthcare providers.

3. Support and advice on breastfeeding: The result shows that 62% of clients were satisfied with support and advice on breastfeeding, 30% of client was neutral with support and advice on breastfeeding and 8% of clients were dissatisfied with support and advice on breastfeeding.

4.Satisfaction with maternal care (wound care): The results show that 35% of clients were satisfied with maternal care (wound care), 30% of clients were naturally satisfied with maternal care (wound care) and 35% of clients were dissatisfied with maternal care (wound care).

5. Overall satisfaction with PNC:75% of clients were satisfied with overall PNC,13% of clients were neutrally satisfied with overall PNC and 12% of clients were dissatisfied with overall PNC. (figure 1)

6. Availability of support for family planning: The results show that 35% of clients were satisfied with support for family planning,25% of clients were naturally satisfied with support for family planning and 39% of clients were dissatisfied with support for family planning.

7. Quality of counseling on contraceptive options: The results show that54% of clients were satisfied with quality of counseling on contraceptive options, 33% of client were naturally satisfied with quality of counseling on contraceptive options and 13% of clients were dissatisfied with quality of counseling on contraceptive options.

2-knowledge delivered to clients during postnatal period, as shown in table (2)

1. Knowledge of infant care (bathing, diapering, feeding): The result shows that 20% of knowledge of infant care was clear, 36% of knowledge of infant care was neutrally clear, 44% of knowledge of infant care was unclear.

2- Knowledge with baby checkups (vaccination, growth monitoring): The result show that 52% of client satisfaction with baby checkups was satisfied, 24% of client satisfaction with baby checkups was neutral and 25% of client satisfaction with baby checkups was dissatisfied.

DISCUSSION

In the current study we find that delay in receiving postnatal checkup that only 13% of mothers received a PNC checkup within the first week, as WHO guidelines recommend at least four postpartum visits at 24 hours, day 3, 2 weeks, and 6 weeks (Adams *et al.*, 2023) and delayed care increases the risk of complications such as infections and postpartum hemorrhage, also the results highlight both strengths and significant gaps in postnatal care (PNC) services that two third satisfaction with communication and respect from providers reflects strong interpersonal care, consistent with findings from a study in Ethiopia where respectful communication was a key determinant of maternal satisfaction (Ayalew *et al.*, 2021). However, newborn checkup and vaccination satisfaction showed half of the clients were satisfied, while 25% expressed dissatisfaction, aligning with studies indicating service inconsistencies and long waiting times in public facilities (Basha, G.W., 2019). Although more than half were satisfied with breastfeeding support, third neutrality may indicate that counseling is too generalized. WHO emphasizes breastfeeding guidance as essential for early child health with low satisfaction

family planning counseling. Furthermore, the poor clarity on infant care knowledge (only 20% clear) and split responses on maternal wound care suggest inconsistent education and follow-up, pointing to the need for structured home visits or improved discharge counseling, while 75% of mothers reported satisfaction with PNC, these gaps in education, counseling, and maternal support services highlight the need for more comprehensive, equitable, and client-centered postnatal programs, the higher satisfaction rate in Family PHC is likely due to a combination of continuity of care, personalized interactions and organizational structure, which refer to availability of medical and health staff in Family PHC and this will providing the service smoothly without delay, the availability of medical staff in Family Primary Health Care (PHC) centers is a critical factor influencing patient satisfaction and care quality, research indicates that Family PHC centers often have more consistent staffing levels compared to general PHC centers, which can lead to better patient experiences, a study conducted in Basra, Iraq, found that general non-family medicine PHC centers had a higher number of families per doctor, ranging from 916 to 2,655, exceeding the Iraqi Ministry of Health standards. In contrast, family medicine centers had fewer families per doctor, with daily patient loads of 24 to 30, aligning more closely with recommended staffing levels, additionally, these centers reported better availability of essential facilities, such as doctor's rooms and nursing rooms, compared to non-family medicine centers (Hussein *et al.*, 2017), also in our study show more than half of clients in Family PHC expressed satisfaction with waiting times, compared to only 32% in general PHC centers.

In the current study we find that statistically significant association between overall satisfaction levels and satisfaction with specific services such as baby checkups, vaccinations, and growth monitoring ($P = 0.002$). This result suggests that caregivers feel about individual services is strongly related to their overall satisfaction with child healthcare, caregivers who reported being satisfied with baby checkups, vaccinations, and growth monitoring were also significantly more likely to express overall satisfaction. Specifically, 52 out of 67 caregivers who reported satisfaction with individual services also indicated high overall satisfaction. Conversely, among those who expressed dissatisfaction with the services, a substantial proportion also reported dissatisfaction with the overall care. These findings are consistent with previous studies that emphasize the critical role of service-specific experiences in shaping caregivers' perceptions of healthcare quality, found that caregiver satisfaction was closely linked to the availability and perceived quality of individual services, such as immunization and growth monitoring, in Ethiopian health centers (Beshir, *et al.*, 2022).

This implies that service-specific experiences, particularly in essential child health components such as vaccinations and growth monitoring, play a critical role in shaping overall perceptions of care quality. Dissatisfaction in any of these domains may negatively influence general satisfaction, indicating that these services are central to caregiver expectations and experiences. This is supported by previous research, which emphasizes that satisfaction with individual health services—such as immunization, checkups, and developmental monitoring—is closely tied to caregivers' willingness to continue using

health services the World Health Organization (2018) identifies the quality and consistency of these services as key elements in improving trust and satisfaction with child healthcare systems (Duke, T., 2018).

CONCLUSION

This study highlights both strengths and critical gaps in postnatal and pediatric care services. While most mothers expressed satisfaction with interpersonal aspects such as communication and provider respect, significant delays in receiving postnatal checkups—particularly within the first week—deviate from WHO recommendations and increase risks of postpartum complications. Satisfaction with specific services such as newborn checkups, vaccinations, and breastfeeding support was moderate, with a notable proportion of mothers expressing dissatisfaction or neutrality, indicating service inconsistencies and possible deficiencies in targeted counseling.

RECOMMENDATIONS

1. Emphasis on the ministry of health to establish an education-awareness program about the importance of continuity of care and increase emphasis on postnatal care education before delivery.
2. Identify weaknesses in primary health care centers and service providers, and an immediate plan is developed at the level of health departments and submitted to decision-makers in the Ministry of Health.

ETHICAL APPROVAL

According to the Declaration of Helsinki (World Medical Association, 2025) this study was conducted therefore prior to data collection, an official permission was obtained from al-Karkh health directorate

and managers of PHCCs to facilitate data collection from PHCCs.

- The study protocol was reviewed and ethical clearance with initial approval and official permission to conduct the study have been obtained by the Scientific and Ethical Committee in the Department of Family and Community Medicine/College of Medicine/Al-Iraqia University.
- An official permission for data collection was obtained from The Iraqi Ministry of Health/ Baghdad/Al-Karkh Health Directorate which gave us authorization before the study could be carried out with order.
- An official permission was obtained from the health sector and managers of PHCCs before interviewing and collecting data according to the questionnaire information to the participant.
- Informal verbal consent with each participant regarding the aim of this study was obtained before data collection.
- After ensuring the guarantee of data confidentiality and explanation the study purpose to the participant therefore the participant was made aware of the voluntary nature of the process, their right to withdraw at any moment and informed that all personal information used for sake of this study were kept confidential; they would not be identified by name but by an identification by codes only.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

REFERENCES

1. Adams, Y.J., Miller, M.L., Agbenyo, J.S., Ehla, E.E. and Clinton, G.A., 2023. Postpartum care needs assessment: women's understanding of postpartum care, practices, barriers, and educational needs. *BMC pregnancy and childbirth*, 23(1), p.502.
2. -Ayalew, M.M., Nebeb, G.T., Bizuneh, M.M. and Dagne, A.H., 2021. Women's satisfaction and its associated factors with antenatal care services at public health facilities: a cross-sectional study. *International Journal of Women's Health*, pp.279-286.
3. -Basha, G.W., 2019. Factors affecting the utilization of a minimum of four antenatal care services in Ethiopia. *Obstetrics and gynecology international*, 2019(1), p.5036783.
4. -Batbaatar, E., Dorjdagva, J., Luvsannyam, A., Savino, M. M., & Amenta, P. (2017). Determinants of patient satisfaction: A systematic review. *Perspectives in Public Health*, 137(2), 89–101.
5. -Beshir, M., Tilahun, T., Hordofa, D.F., Abera, G., Tesfaye, W., Daba, K.T., Workineh, N., Woldeyesus, S.N., Debela, T.F. and Yesuf, E.A., 2022. Caregiver satisfaction and its associated factors in pediatric wards of Jimma University Medical Center, Southwest Ethiopia. *BMC Health Services Research*, 22(1), p.1058.
6. - Chawani, F.S., 2009. *Patient satisfaction with nursing care: a meta synthesis* (Doctoral dissertation, University of the Witwatersrand).
7. -Duke, T., 2018. New WHO standards for improving the quality of healthcare for children and adolescents. *Archives of Disease in Childhood*, 103(7), pp.625-627.
8. -Hussein, R.A., Mahmoud, R.A. and AL-Hamadi, N.Q., 2017. A

comparative study to evaluate Primary Health Care centers with family and non-family Medicine doctors in Basra. *Int. J. Multidiscip. Curr. Res*, 5, pp.1-9.

9. - Lawrence, E.R., Klein, T.J. and Beyuo, T.K., 2022. Maternal mortality in low and middle-income countries. *Obstetrics and Gynecology Clinics*, 49(4), pp.713-733.
10. - World Medical Association, 2025. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human participants. *JAMA*, 333(1), pp.71-74.
11. -Wenling, H., Jiangli, D., Aiqun, H., Wei, Z., Huanqing, H. and Sidi, C., 2024. Analysis of the relationship between the quality of antenatal care and the incidence of preterm birth and low birth weight. *BMC Public Health*, 24(1), p.3134.
12. - Zara A, Taheri I, Jahromi MK. Clients' Satisfaction with Primary Health Care in Jahrom: A Cross-Sectional Study on Iranian Health Centers *Int.J.Curr.Microbiol.App.Sci*.2015.4(3) : 84-89

TABLES

Table 1. Client Satisfaction of postnatal care regarding the mother

variable	Category	Coun t	%
Timing.of.1st.PN C	Within 1st week	17	13 %
	1-2 week	59	45 %
	>2 week	55	42 %
Support and advice Breastfeeding	Satisfied	81	62 %
	Neutral	39	30 %
	Dissatisfie d	10	8%
Communication and Respect from healthcare provider	Satisfied	97	75 %
	Neutral	25	19 %
	Dissatisfie d	8	6%
Overall satisfaction with PNC	Satisfied	97	75 %
	Neutral	17	13 %
	Dissatisfie d	16	12 %
	Satisfied	46	35 %

Availability of support for family planning	Neutral	33	25 %
	Dissatisfied	51	39 %
Quality of counselling on contraceptive option	Satisfied	70	54 %
	Neutral	43	33 %
	Dissatisfied	17	13 %
Satisfaction with maternal care wound care	Satisfied	46	35 %
	Neutral	39	30 %
	Dissatisfied	45	35 %

FIGURES

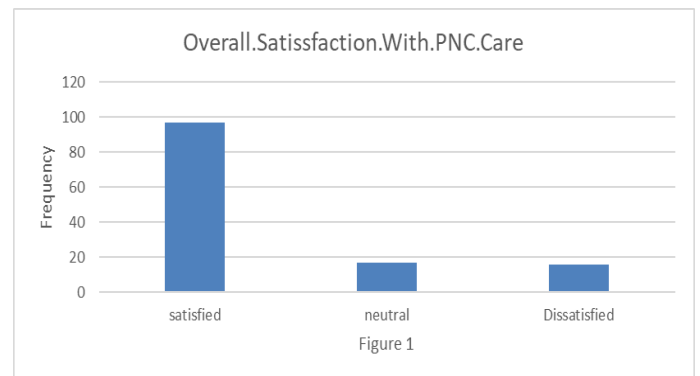


Figure 1. overall satisfaction with postnatal care

Table 2. Client Satisfaction of postnatal care regarding the baby

variable	category	count	%
Knowledge of infant care bathing, diapering and feeding	Clear	26	20%
	Neutral	47	36%
	Unclear	57	44%
Satisfaction with baby check up, vaccination and growth monitoring	Satisfied	67	52%
	Neutral	31	24%
	Dissatisfied	32	25%