

EVALUATION OF INPATIENT OBSTETRIC SERVICE QUALITY AT THE DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, PHUONG DONG GENERAL HOSPITAL IN 2024

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ABSTRACT

Objective: describe the perceptions of inpatients about the quality of services at the Department of Obstetrics and Gynecology, Phuong Dong General Hospital in 2024.

Methods: This cross-sectional descriptive study, employing both qualitative and quantitative methods, was conducted on 223 obstetric inpatients from March 2024 to September 2024.

Results: 91.0% of the inpatients evaluated the service quality as satisfactory. The satisfaction rates for specific aspects were as follows: 96.0% for reliability, 96.9% for responsiveness, 99.1% for assurance, 95.5% for empathy, and 97.3% for tangibility.

Conclusion: The high level of satisfaction with obstetric service quality suggests that further efforts are needed to enhance and sustain the quality of services in the future.

Keywords: Evaluation; Service quality; SERVPERF; Obstetrics.

1. INTRODUCTION

Hospitals play a crucial role in providing healthcare services to the population. Therefore, evaluating patient perceptions of service quality (SQ) is essential. In Vietnam, the Ministry of Health has issued Circular No. 19/2013/TT-BYT guiding the management of obstetric service quality in hospitals. Hospital quality is evaluated annually, and a quality management system is developed within the hospital [1]. Medical service quality can be assessed using various tools, with the SERVPERF scale developed by Cronin Jr. and Taylor (1992) using only perception components to evaluate SQ [2]. At Phuong Dong General Hospital, the Department of Obstetrics and Gynecology is a key department that has received substantial attention and investment. Therefore, evaluating the perceptions of postnatal inpatients regarding the medical services at this department is essential. This evaluation provides a basis for the hospital's leadership to understand the perceptions of inpatients and identify any remaining issues to develop plans for enhancing the obstetric services. Based on this context, we conducted the study: "Evaluation of Inpatient Obstetric Service Quality at the Department of Obstetrics and Gynecology, Phuong Dong General Hospital in 2024" to assess the perceptions of obstetric inpatients regarding the quality of services

and to contribute to the future development of the department.

2. STUDY METHODS

2.1. Study design: This is a cross-sectional descriptive study combining both quantitative and qualitative methods.

2.2. Study duration and location: The study was conducted at the Department of Obstetrics and Gynecology, Phuong Dong General Hospital from March 2024 to September 2024.

2.3. Study population: The study included women who delivered via vaginal birth or cesarean section and were hospitalized in the Department of Obstetrics and Gynecology, meeting the following inclusion criteria:

1. Women who were not inpatients in other departments of the hospital;
2. Women who were not hospital staff members or relatives/acquaintances of hospital staff
3. Women who were Vietnamese, capable of reading, listening, and understanding Vietnamese, and able to

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respond to interview questions.

2.4. Sample size and sampling: The sample size for estimating a proportion is calculated as follows:

$$n = Z_{1-\alpha/2}^2 \times \frac{p \times (1 - p)}{d^2}$$

In which:

n: number of patients (required sample size);

α : significance level (chosen $\alpha = 0.05$ for a 95% confidence level, $Z_{1-\alpha/2} = 1.96$);

$p = 0.933$ (The proportion of women who rated medical service quality as good is 93.3%, based on a 2022 study by Tran Thi Thuy Hang evaluating inpatient service quality at the Department of Obstetrics and Gynecology, Hanh Phuc International Hospital, Binh Duong province) [3];

$d = 0.04$ (desired margin of error).

The minimum required sample size is $n = 150$ patients, and the actual sample size selected was 223 patients.

2.5. Study variables

- Independent variables: Demographic characteristics of the patients, including age, residence, marital status, education level, occupation, and income.

- Dependent variables: The quality of obstetric services, evaluated using the SERVPERF scale, includes five dimensions and 22 sub-items:

+ Reliability: Trust in the hospital's service quality.

+ Responsiveness: The responsiveness of healthcare staff to the legitimate needs of patients.

+ Assurance: The professional competence of healthcare staff.

+ Empathy: The caring attitude of healthcare staff.

+ Tangibility: The physical environment experienced by patients.

Service quality variables were rated on a 5-point Likert scale, with 1 being "very poor" and 5 being "very good." The Likert scale has an interval value of $(\max - \min)/n = (5 - 1)/5 = 0.8$ points. Based on the mean score, service quality was categorized into five groups following the method used by Tran Thuy Nhung in evaluating service quality at Vinh Long Medical Center in 2018 [4]:

- From 1.00 to 1.80: very poor;
- From 1.81 to 2.60: poor;
- From 2.61 to 3.40: average;

- From 3.41 to 4.20: good;

- From 4.21 to 5.00: very good.

The mean score for each dimension = Total score of all questions in that dimension divided by the number of questions. The overall mean score = Total score of all questions divided by the total number of questions. The total quality score: 22 sub-items, with a minimum of 22 points and a maximum of 110 points, with a cut-off score of 88 points. Service quality was classified into two groups: <88 points (not meeting quality standards) and ≥ 88 points (meeting quality standards).

2.6. Data processing: Data were collected using self-administered questionnaires based on the SERVPERF scale. Data entry was performed using epidata 3.1, and data were analyzed using SPSS 23.0.

2.7. Ethical considerations: Participants voluntarily agreed to participate in the study and had the right to withdraw without affecting their treatment outcomes. All information provided by participants was kept confidential and used only for research purposes, not shared with anyone outside the research team.

3. RESEARCH RESULTS

3.1. General information about the study subjects

The study was conducted at the Obstetrics Department of Phuong Dong General Hospital, focusing on postpartum women. The age of the participants was concentrated in two groups: 18–30 years old and 31–40 years old, accounting for 66.4% and 31.4% of the subjects, respectively. These ages fall within the reproductive age group. The majority of the women lived in rural areas, accounting for 63.7%, while 36.3% resided in urban areas. All 223 participants in the study were married. Most of the participants had a university degree or higher, making up 55.2%, while those with a vocational or college education accounted for 32.7%, and the remaining participants had completed high school. The majority of the women worked as office employees (47.5%).

Most women who gave birth at the Obstetrics Department of Phuong Dong General Hospital used health insurance, with a usage rate of 91.0%. The majority of participants already had children, with only 27.4% being first-time mothers. A significant proportion of the participants (72.6%) had previously given birth at Phuong Dong General Hospital. Women who had previously given birth at Phuong Dong General Hospital had a better experience compared to those who were giving birth there for the first time ($p < 0.05$). Other reasons for choosing the hospital were also noted.

3.2. Women’s evaluation of healthcare service quality at Phuong Dong General Hospital

Table 1. Quality of Healthcare Services in the Obstetrics Department at Phuong Dong General Hospital

Aspect	Service Quality				Mean ± SD
	Not Satisfactory		Satisfactory		
	n	%	n	%	
Trustworthiness	9	4.0	214	96.0	4,37 ± 0,42
Responsiveness	7	3.1	216	96.9	4,45 ± 0,52
Assurance	2	0.9	221	99.1	4,47 ± 0,42
Empathy	10	4.5	213	95.5	4,40 ± 0,47
Tangibility	6	2.7	217	97.3	4,48 ± 0,48
Overall	20	9.0	203	91.0	4,41 ± 0,35

Remarks: The quality of services provided by the Obstetrics Department was rated highest in the "tangibility" aspect, with a score of 4.48/5, followed by "assurance" with 4.47/5, and "responsiveness" with 4.45/5. The lowest-rated aspect was "empathy," scoring 4.4/5.

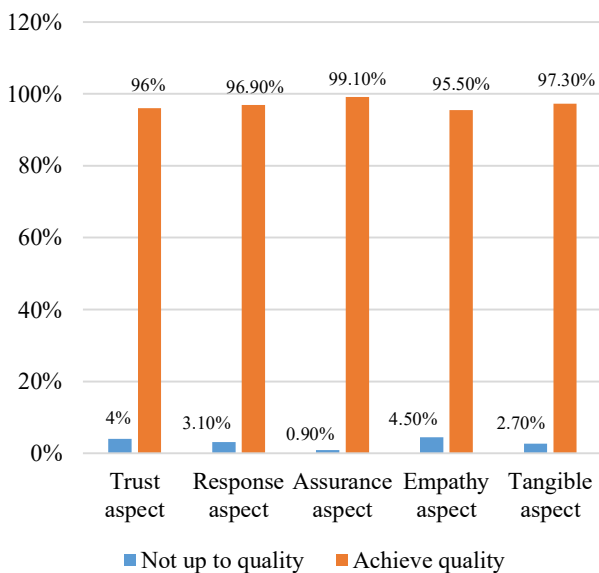


Figure 1. Overview of Obstetric Service Quality Across 5 Aspects

Remarks: The overall satisfaction rate among postpartum women regarding the quality of services at the Obstetrics Department of Phuong Dong General Hospital was 91%. In most aspects, the satisfaction rate exceeded 95%, with the highest rated being "assurance," at 99.1%, and the lowest rated being "empathy," at 95.5%.

4. DISCUSSION

4.1. Service Quality in the Trustworthiness Aspect

The satisfaction rate for this aspect was 96.0%, with an average score of 4.37 ± 0.42 . This result was higher than the study conducted by Nguyen Thi Nhan at Kien An Hospital - Hai Phong in 2023, which reported a 76.0% satisfaction rate, but slightly lower than Tran Ha Diem's study at Mekong Maternity Hospital in 2019, which found a rate of 96.1% [5,6], though the difference was negligible. In subcategories of this aspect, a very small percentage of participants rated poorly the performance of healthcare workers in fulfilling promises made during consultations, willingness to share and support, and administrative/clinical errors, with corresponding rates of 0.4%, 0.9%, and 0.9%. While these rates were minimal, they indicated existing shortcomings in the Obstetrics Department at Phuong Dong General Hospital.

4.2. Service Quality in the Responsiveness Aspect

The satisfaction rate for responsiveness was 96.9%, with an average score of 4.45 ± 0.52 . This result is higher than similar studies by Nguyen Thi Nhan, Tran Thi Thuy Hang, Le Thi Hanh Trang, and Tran Ha Diem [5-8]. The detailed evaluation of subcategories within this aspect revealed even higher satisfaction rates than in the trustworthiness aspect. Healthcare workers left a strong positive impression on postpartum women by providing quick daily care services, responding promptly to requests, and clearly explaining processes. However, due to the department being divided into two separate floors, the delayed response in service delivery and longer communication times may have affected the experiences of women undergoing natural childbirth.

4.3. Service Quality in the Assurance Aspect

This was the highest-rated aspect, with a satisfaction rate of 99.1% and an average score of 4.47 ± 0.42 , higher than in other studies [5-8]. This indicated that the postpartum women at Phuong Dong General Hospital felt a high level of safety and assurance from the medical team. The experienced doctors, with solid expertise and professional knowledge, fostered a sense of trust. However, due to the high workload and work pressure, the friendliness and openness of the staff were not fully reflected in patient satisfaction. Although only one woman expressed dissatisfaction, the "domino effect" could increase this number, requiring the hospital to implement measures to address this issue.

4.4. Service Quality in the Empathy Aspect

This aspect had the lowest satisfaction rate, at 95.5%, with an average score of 4.40 ± 0.47 . However, the overall rating of empathy in this study was still higher than other studies involving similar subjects [5-8]. The positive perception of empathy was reflected in the friendliness, openness, and attentiveness of the healthcare staff. The hospital staff should continue to



enhance these strengths to connect emotionally with patients. To achieve the highest service quality, in addition to setting clear care objectives, the healthcare staff should address concerns in a timely manner, plan appropriate care, and understand patients' emotional and psychological needs. This approach would boost patient satisfaction with hospital services.

4.5. Service Quality in the Tangibility Aspect

The satisfaction rate for tangibility was 97.3%, with an average score of 4.48 ± 0.48 . This result was higher than the study conducted by Tran Thi Thuy Hang, where 81.2% of postpartum women rated the tangibility aspect positively [7], and higher than Le Thi Hanh Trang's study on women receiving prenatal care, with a rating of 95.2% [8]. Differences in the tangibility aspect between studies might stem from better infrastructure in private hospitals compared to public hospitals.

4.6. Overall Service Quality

The overall quality of medical services, as rated by postpartum women, was 91.0%, with an average score of 4.41 ± 0.35 . The highest-rated aspect was "assurance" (99.1%), followed by "tangibility" (97.3%). This result was significantly higher than Nguyen Thi Nhan's 2023 study at Kien An Hospital - Hai Phong, where 65.2% of postpartum women rated service quality as satisfactory, with an average score of 4.3 ± 0.5 points. In her study, satisfaction with the five aspects ranged from 58.8% to 78.9% [5]. Tran Thi Thuy Hang's study showed a 93.3% satisfaction rate (average score: 4.27 ± 0.18), with ratings of individual aspects ranging from 81.2% to 100% [3]. Le Thi Hanh Trang's study indicated that 94.0% of women attending prenatal care rated service quality highly [8]. The findings of this study are similar to those of Le Thi Hanh Trang and Tran Thi Thuy Hang, and higher than those of Nguyen Thi Nhan. This suggested that private hospitals are perceived to provide better service quality than public hospitals.

5. CONCLUSION

The research findings indicate that the overall assessment of obstetric service quality at Phuong Dong General Hospital was rated as satisfactory by 91.0% of postpartum women. Specifically, satisfaction rates were 96.0% for "trustworthiness," 96.9% for "responsiveness," 99.1% for "assurance," 95.5% for "empathy," and 97.3% for "tangibility." To further enhance obstetric service quality in the future, hospital leadership should maintain and expand the maternity

ward's infrastructure, particularly the waiting rooms. Additional soft skills training for staff in communication is also recommended to provide a more professional level of patient care. Furthermore, informational materials such as leaflets, posters, and banners should be made available to improve accessibility to information for postpartum women.

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