



Quantification of Operative Procedures in Obstetrics and Gynecology Cases at RSU. Premagana 2021-2022

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ABSTRACT

Surgery or operative procedures are invasive actions performed to diagnose, treat diseases, injuries, or body deformities, typically involving incisions that can cause physiological changes in the body and affect other organs. Operative procedures, including in obstetrics and gynecology cases, are frequently performed as part of therapy modalities and for diagnostic purposes. The research problem focuses on the types and number of operative procedures in obstetrics and gynecology cases at RSU. Premaganain Gianyar Regency, as there has been a lack of data and research on the prevalence of such procedures. The aim of this study is to provide an overview of various types and numbers of operative procedures in obstetrics and gynecology cases at RSU. Premaganain 2021-2022. This research is a descriptive study of operative procedures in obstetrics and gynecology cases using a cross-sectional design approach. Method: Secondary data collection from medical records of operative procedures in obstetrics and gynecology cases at RSU. Premaganain 2021-2022, followed by tabulation, recapitulation, and quantification of the types and numbers. Results: Operative procedures in obstetrics and gynecology cases at RSU. Premaganain 2021-2022 include Cesarean section (CS), Cesarean section with Operative Method for Women (CS-OWM), Total Abdominal Hysterectomy (TAH), Supra Vaginal Hysterectomy (SVH), Total Vaginal Hysterectomy (TVH), Cystectomy, Salpingectomy, Salpingo-oophorectomy, Dilatation and Curettage (D&C). The dominant operative procedure in obstetrics cases is CS at 82-83%, while in gynecology cases, it is Total Abdominal Hysterectomy (TAH) at 1.3-2.2%.

Introduction

Indonesia Sehat is a health-oriented development that requires all sectors to consider the negative and positive impacts on the health of individuals, families, and communities while promoting community self-reliance in leading a healthy life. Health efforts prioritize preventive and health promotion actions without neglecting curative and rehabilitative efforts (Kemenkes RI, 2017; Bappenas RI, 2020).

One of the management efforts for

obstetrics and gynecological cases, apart from non-operative measures, is operative interventions for specific cases based on the experienced problems, medical indications, obstetrics and gynecological case diagnoses. Surgery or operative interventions involve invasive procedures to diagnose, treat diseases, injuries, or body deformities, usually performed by making incisions that can cause physiological changes in the body and affect other organs (Scholz et al., 2019). Operative interventions, including obstetrics and gynecological procedures, are frequently performed not only for

therapeutic purposes but also for diagnostic purposes. Operative interventions are part of the therapeutic modalities for obstetrics and gynecological cases (Budiana, I.N.G., 2017). According to the Ministry of Health of the Republic of Indonesia, one quality indicator for obstetric and gynecological services is the Cesarean Section rate (CSR). For educational or referral hospitals, the cesarean section rate should be $\leq 20\%$ of total deliveries per year, while for non-educational hospitals, it should be $\leq 15\%$ (Nofitasari, 2013). Gynecology refers to the study of women or the science of women, which is a branch of medical science that specifically studies and manages diseases of the female reproductive system (Hilwah N, Ghina K, 2017). Approximately 92% of women have gynecological diseases in various forms (Schuiling, K. D. & Likis, F. E., 2016). This phenomenon underlies the research problem regarding operative interventions for obstetrics and gynecological cases in the operating room of RSU. Premagana. The urgency of this research is due to the lack of data and research on the prevalence of such interventions.

According to the Ministry of Education and Culture of the Republic of Indonesia Kemendikbud RI, (2012), it is necessary to ensure alignment in efforts to improve the quantity and quality of research based on the needs at the research site. In line with RSU. Premagana, its main tasks include providing medical services, health education, research, and community service (RSU. Premagana, 2014). The goal is to provide effective and efficient individual healthcare through curative and rehabilitative services, referrals, education, training, research, and development. Based on the above problems, the research problem formulation is "What are the characteristics of operative interventions for obstetrics and gynecological cases in the operating room of RSU. Premagana in 2021-2022?" The purpose of this research

is to provide an overview of the types and quantities of operative interventions commonly performed for obstetrics and gynecological cases in the operating room of Premagana General Hospital. Additionally, this study aims to quantify the prevalence of each type of operative intervention. Through data analysis, this research is expected to provide information about the prevalence, types, and quantities of operative interventions and their characteristics. This information can serve as a basis for planning and developing obstetrics and gynecological services at RSU. Premagana and can also be a reference for further research in this field. With this foundational data, the hospital can anticipate related issues in providing supportive and ancillary services.

Health development aims to achieve optimal health status, and to achieve this goal, the management of various resources is necessary, both by the government and the community, to provide efficient, high-quality, and affordable health services. This goal must be implemented systematically and effectively through health information management services based on quality health data and information that is well-integrated and sourced from medical records (Nopita Cahyaningrum, 2013).

Method

The research method used in this study is descriptive with a cross-sectional design approach. This study is one of the research methods conducted to obtain data from specific samples representing a specific population by collecting information from medical records of patients who underwent operative interventions for obstetrics and gynecological cases in the operating room of RSU. Premagana. The data were collected from the operating room medical records and then analyzed descriptively using tables and narratives.

The cross-sectional approach is a research

method that involves collecting data at a specific point in time from a population or sample. This method is often used in research to identify the prevalence of diseases or health conditions at a given time.

Results

The data recapitulation of the research is based on medical record data of operative interventions for obstetrics and gynecological cases in the operating room of RSU. Premagana from January 2021 to December 2022. The research findings include the types of operative interventions for obstetrics and gynecological cases, such as Cesarean Section (CS), CS with Operative Women's Methods (CS-OWM), Total Abdominal Hysterectomy (TAH), Supra Vaginal Hysterectomy (SVH), Total Vaginal Hysterectomy (TVH), Cystectomy, Salpingectomy, Salpingo-oophorectomy, and Dilatation and Curettage (D&C).

The data quantification is presented in Table 1, which shows the types and quantities of operative interventions for obstetrics and gynecological cases in the operating room of RSU. Premagana in 2021, and Table 2, which shows the types and quantities of operative interventions in 2022.

This study found (Table 1 and 2) that the majority of operative interventions for obstetrics and gynecological cases in the operating room of RSU. Premagana in 2021 and 2022 were CS, followed by CS-OWM, TAH, with D&C being the least common procedure. The percentage of CS cases was 82.8% in 2021 and 82.7% in 2022, followed by CS-OWM at 13.6% in 2021 and 12.8% in 2022. The percentage of gynecological cases in 2021 was 1.3% for TAH and 2.2% in 2022, while the lowest percentage was 0.1% for D&C in both years. CS was the most commonly performed operative intervention for obstetrics and gynecological cases at RSU.

Premagana, accounting for 82-83% of cases between 2021 and 2022.

Table 1. Types and Numbers of Operative Procedures in Obstetrics and Gynecology Cases in the Operating Room of RSU. Premagana in 2021.

OB-GYN PROCEDURE NAMES	MONTH NAMES												Mean	Median	Modus	Percentile			%	
	1	2	3	4	5	6	7	8	9	10	11	12				25	50	75		
CS	153	146	150	178	169	140	120	112	140	157	145	170	1760	148.3	14.5	-	137.25	145.5	155.25	82.8
CS-OWM	22	28	25	33	24	15	30	17	38	26	25	26	289	23.5	2.5	-	19	25	26	13.6
TAH	3	3	1	2	4	3	3	2	3	1	2	1	28	2.25	2	3	1.25	2	3	1.3
SVH	3	0	0	0	0	1	1	0	1	3	0	3	12	0.25	0	0	0	0	1	0.6
TVH	1	0	1	0	0	0	2	0	0	1	0	0	5	0.5	0	0	0	0	1	0.2
KISTEKOTOMI	1	0	1	1	1	0	1	1	2	0	1	4	13	0.83	1	1	0	1	1	0.6
SALPINGEKOTOMI	2	1	1	0	0	0	0	0	3	1	1	0	9	0.67	1	0	0	1	1	0.4
SALPINGOOFORIEK TOMI	1	0	0	0	0	1	2	0	1	3	0	0	8	0.5	0	0	0	0	1	0.4
DC	0	0	0	0	0	0	0	2	0	0	0	0	2	0.17	0	0	0	0	0	0.1
Total	186	178	179	224	198	160	159	134	168	172	174	204	2126							100

Table 2. Types and Numbers of Operative Procedures in Obstetrics and Gynecology Cases in the Operating Room of RSU. Premagana in 2022.

OB-GYN PROCEDURE NAMES	MONTH NAMES												Mean	Median	Modus	Percentile			%	
	1	2	3	4	5	6	7	8	9	10	11	12				25	50	75		
CS	120	124	104	104	121	122	120	101	87	126	122	120	1371	114.08	120	120	104	121	122	82.7%
CS-OWM	15	19	16	21	17	19	25	21	25	14	19	17	212	17.42	17	17	15	17	19	12.8%
TAH	1	1	1	3	5	2	3	9	2	1	1	1	36	2.25	2	3	1	2	3	2.2%
SVH	1	0	1	2	0	0	0	1	1	1	1	1	9	0.67	1	1	0	1	1	0.5%
TVH	0	0	0	0	0	0	2	0	0	0	0	0	2	0.17	0	0	0	0	0	0.1%
KISTEKOTOMI	0	1	3	3	0	2	0	1	1	2	0	1	14	1.08	1	1	0	1	2	0.8%
SALPINGEKOTOMI	1	0	1	0	1	0	0	1	0	2	1	0	6	0.42	0	0	0	1	0	0.4%
SALPINGOOFORIEK TOMI	0	1	1	2	0	0	0	0	0	0	0	1	5	0.42	0	0	0	0	1	0.3%
DC	0	0	0	0	0	0	1	0	1	0	0	0	2	0.17	0	0	0	0	0	0.1%
Total	138	148	128	137	144	145	151	134	107	146	138	141	1657							100

Discussion

Based on Tables 1 and 2, the number of operative procedures for obstetrics and gynecological cases in the operating room of RSU. Premagana in 2021-2022 was dominated by Cesarean Section (CS) procedures, followed by CS with Operative Women's Methods (CS-OWM) and Total Abdominal Hysterectomy (TAH), with the smallest number of cases being Dilatation and Curettage (DC). The operative interventions for obstetrics and gynecological cases in the operating room of RSU. Premagana in 2021-2022 were predominantly CS procedures, ranging from 82-83%. The percentage of operative interventions for obstetrics and gynecological cases from January to December 2021 was dominated by CS procedures at 82.8%, followed by CS-OWM at 13.6%, and the least common operative procedure was DC at 0.1%. Similarly, from January to December 2022, CS procedures dominated at 82.7%, followed by CS-OWM at 12.8%, and the percentage of gynecological cases in 2021 was 1.3% for TAH and 2.2% in 2022, with DC being the lowest at 0.1%.

In another study conducted by Adam Gyedu et al. (2019), the rate of CS procedures was found to be 7.2%, indicating inadequate access to obstetric care. The CTR rate of 0.27 indicates an overall inadequate surgical capacity. These

measures, along with estimates of procedure distribution based on hospital levels, provide useful baseline data to support efforts to improve surgical capacity in Ghana and similar countries. According to the study by Elizabeth E.B. et al. (2020), a systematic review and meta-analysis of obstetric and gynecological (OB/GYN) procedures of value in low-resource settings, the provision of surgical care can be improved by defining the most needed procedures, including many obstetric and gynecological procedures, especially cesarean section and hysterectomy. Similarly, a study by Sallie S.O. et al. (2010) found a decrease in the rate of inpatient obstetric and gynecological procedures from 1979 to 2006. The rate of inpatient obstetric and gynecological procedures has declined over time but still accounts for a significant portion of inpatient surgical procedures for women in the United States.

Conclusion

1. The types of operative interventions for obstetrics and gynecological cases in the operating room of RSU. Premagana include: CS, CS-OWM, TAH, SVH, Cystectomy, Salpingectomy, Salpingo-oophorectomy, and DC.
2. The number of operative interventions for obstetrics cases in the operating room of RSU. Premagana in 2021-2022 was dominated by CS, followed by CS-OWM, while gynecological cases were dominated by TAH.
3. The mean number of CS procedures was 146.3 in 2021 and 114.08 in 2022, while for CS-OWM, it was 23.5 in 2021 and 17.42 in 2022, and for TAH, it was 2.25 in 2021-2022.
4. The median number of CS procedures was 145 in 2021 and 120 in 2022.
5. The mode values were 3 for TAH, 1 for Cystectomy in 2021, and 120 for CS, 17 for CS-OWM, 1 for TAH, 1 for SVH, and 1 for Cystectomy in 2022.
6. The percentage of operative interventions for obstetrics cases was 82.8% in 2021 and 82.7% in 2022, while the percentage of TAH procedures for gynecological cases was 1.3-2.2%, with the lowest being DC at 0.1%.

Recommendations

To obtain a comprehensive, accurate, and in-depth interpretation of the assessment within a broader context, the distribution of data that tends to be symmetric in several operative procedures should consider other factors that influence the types (patterns) and numbers (frequency) of operative interventions for obstetrics and gynecological cases, such as demographic factors, risk factors, and clinical factors.

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