



Research Article

Volume 26 Issue 4 - February 2024
DOI: 10.19080/JGWH.2024.26.556192

J Gynecol Women's Health

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Trend of Gynecological & Obstetric Healthcare Services Delivered at Benazir Bhutto Hospital Rawalpindi During 2022



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Submission: December 12, 2023; **Published:** February 08, 2024

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Abstract

Objectives: To analyze the trend of deliveries, ultra-sonographies and surgeries done in Gynecology and Obstetrics department of Benazir Bhutto Hospital during 2022.

Materials & Methods: A cross-sectional descriptive study was done during November 2023 to analyze the trend of gynecological and obstetric healthcare services delivered to the patients at Benazir Bhutto Hospital (BBH) Rawalpindi during 2022. Apart from gathering the data of various modes of deliveries with informed consent of hospital administrators, information was also collected about monthly trend of these deliveries, ultra-sonographies and major and minor surgeries done in Gynecology and Obstetrics operation theatre of BBH during 2022. Data was analyzed by means of Microsoft Excel 2016. Descriptive statistics were applied.

Results: Of the total 10,539 deliveries done during 2022, about 6145 and 4386 were vaginal and caesarean deliveries respectively. Only 8 were vacuum / forceps deliveries. About 31% were major operations out of 14,451 surgeries carried out in Gynecology and Obstetrics operation theatre. There was a steep fall in vaginal deliveries during September 2022. However, a slight dip in trend of caesarean sections was noted during August 2022. Thousands of ultra-sonographies were done on monthly basis.

Conclusion: Gynecology and Obstetrics related cases have markedly been managed at Benazir Bhutto Hospital.

Keywords: Gynecological; Obstetric; Forceps deliveries; Ultra-sonographies; Health for all

Abbreviations: WHO: World Health Organization; BBH: Benazir Bhutto Hospital; RMU: Rawalpindi Medical University; FGD: Focus Group Discussion

Introduction

Gynecological and obstetric services in any hospital are of paramount significance for optimal health and well-being of a mother throughout her life that also includes the provision of adequate care amidst antenatal, intra-natal and postnatal period [1]. Apart from teaching and research, tertiary healthcare facilities across the globe are also committed to ensure the best possible patient care [2]. There was drastic reduction in antenatal checkups and gynecological surgeries during COVID-19 pandemic [3]. Provision of adequate maternity care services by a healthcare

facility is substantially influenced by the community needs [4]. According to a systematic analysis by Blears EE et al gynecological and obstetric operations constituted approximately 19% of all surgical procedures carried out in studied hospitals [5]. Caesarean sections and hysterectomies were the maximally conducted surgeries in developing regions of the world [6]. Caesarean deliveries have been escalated to 50% in China and even raised to 80% in Brazil in 2010 [7]. This mounting trend of caesarean sections worldwide has also been accompanied by a raised proportion of autoimmune disorders and allergies [8].

According to World Health Organization (WHO), there is exponential growth of healthcare expenditure worldwide in comparison with the global economy [9]. Apart from constituting the main bulk of healthcare expenses, 20% of all hospital admissions are attributed to those of mothers and neonates [10]. Ultra-sonography is the most needed imaging modality for diagnosing and managing gynecological and obstetric cases and hence its utility is unnegotiable in reaching the right conclusion [11]. The present study is aimed to analyze the trend of gynecological and obstetric healthcare services delivered to the patients at Benazir Bhutto Hospital Rawalpindi during 2022 in terms of various modes of deliveries done in various set ups. Moreover, trend of ultrasounds and major / minor operations carried out are also to be determined for strategic planning in future by the policy makers in accordance with the month-wise workload of the cases.

Materials and Methods

A cross-sectional descriptive study was done during November 2023 to analyze the trend of gynecological and obstetric healthcare services delivered to the patients at Benazir Bhutto Hospital (BBH) Rawalpindi during 2022. Benazir Bhutto Hospital is a public sector tertiary healthcare facility that is also affiliated as a teaching hospital with Rawalpindi Medical University (RMU). Apart from teaching and training facilities, this hospital is well-

equipped with all essential specialized healthcare modalities for provision of state-of-the-art inpatient and outpatient services to the public [12]. Apart from gathering the data of various modes of deliveries with informed consent of hospital administrators, information was also collected about monthly trend of these deliveries, ultra-sonographies and major and minor surgeries done in Gyne / Obs operation theatre of BBH during 2022. Data was analyzed by using Microsoft Excel 2016. Descriptive statistics were applied.

Results

Of the total 10,539 deliveries carried out in Gynecology & Obstetrics department of Benazir Bhutto Hospital Rawalpindi during 2022, most (6145) were vaginal deliveries as shown below in Figure 1. Trend of all deliveries carried out in Accident & Emergency department and labour room is depicted below in Figures 2a, 2b and 2c. Ultra sonographies done in Gynecology and Obstetrics OPD of BBH are shown below with the greatest number of ultrasounds being carried out during August and September 2022 (Figure 3). Of the total 14451 operations related to Gynecology and Obstetrics carried out in operation theatre, about 4449 (31%) were major operations. Frequency of both major and minor operations steeply dropped down during November 2022 as depicted below in Figure 4.

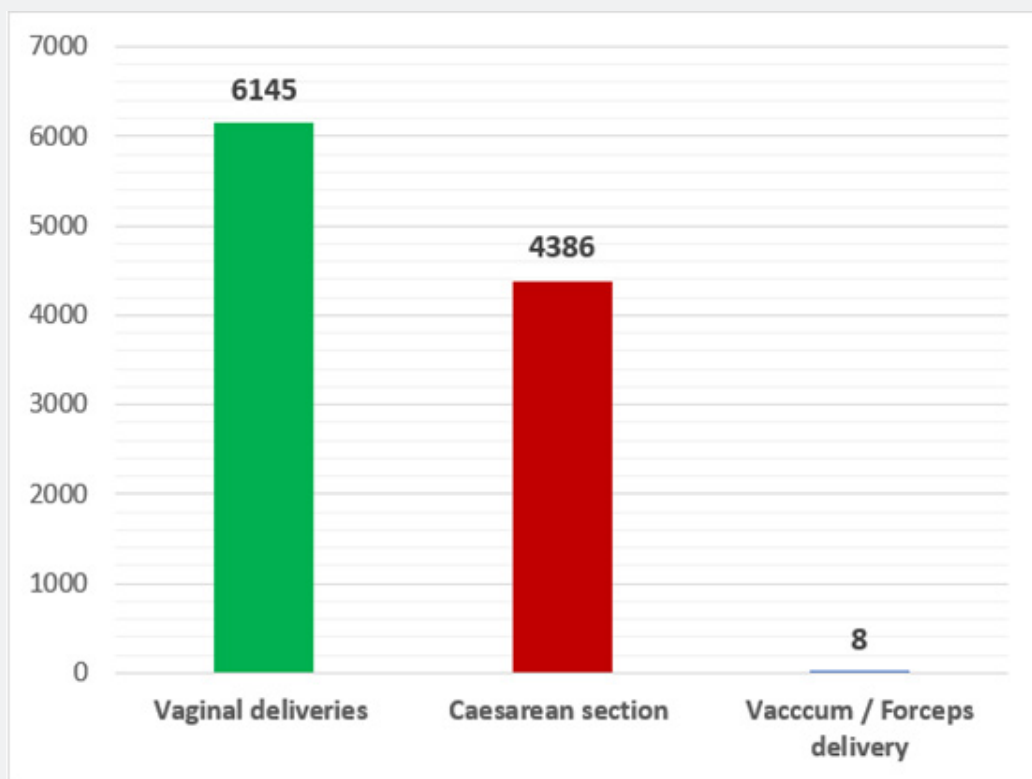


Figure 1: Different mode of deliveries at BBH during 2022.

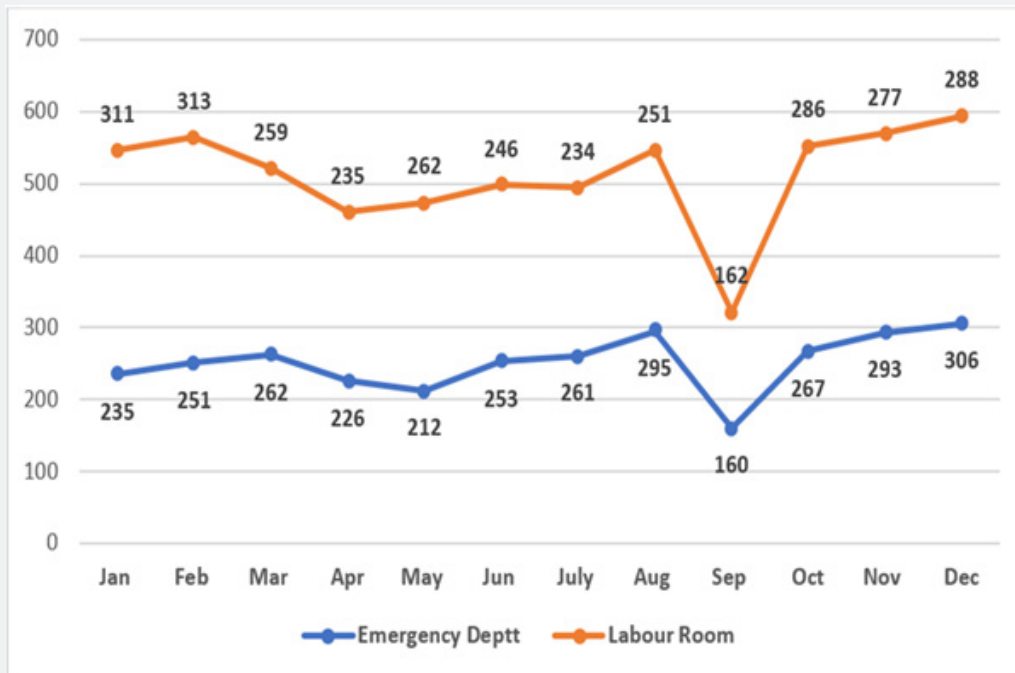


Figure 2a: Trend of vaginal deliveries done during 2022 at BBH.

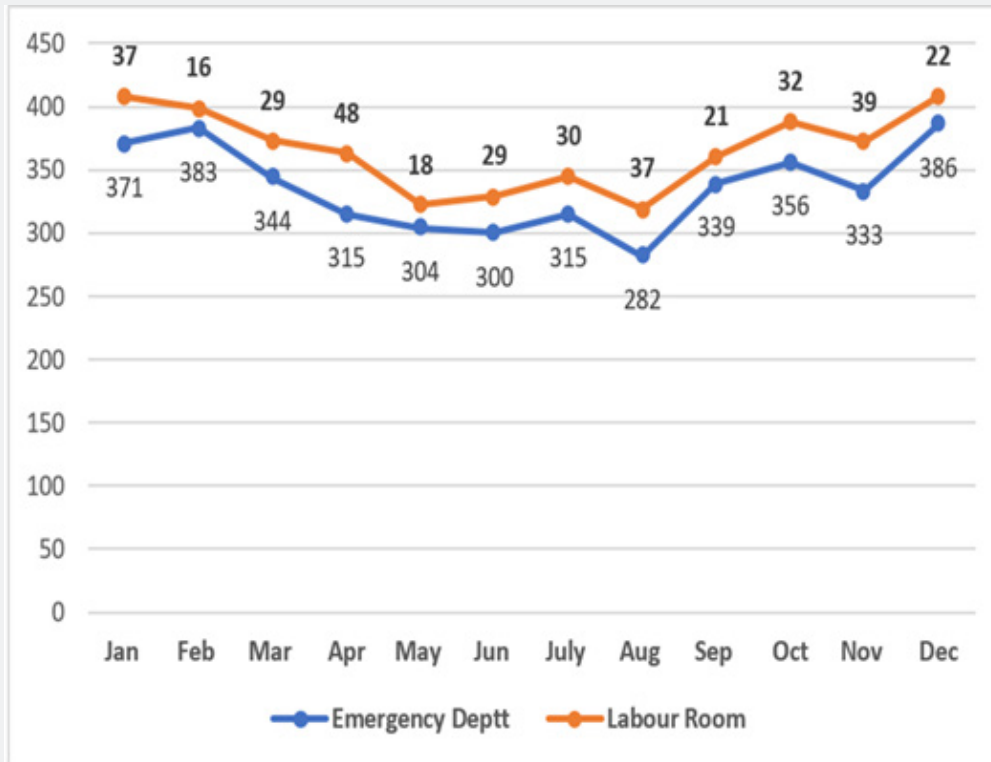


Figure 2b: Trend of Caesarean sections done in labour room and Emergency department of BBH.

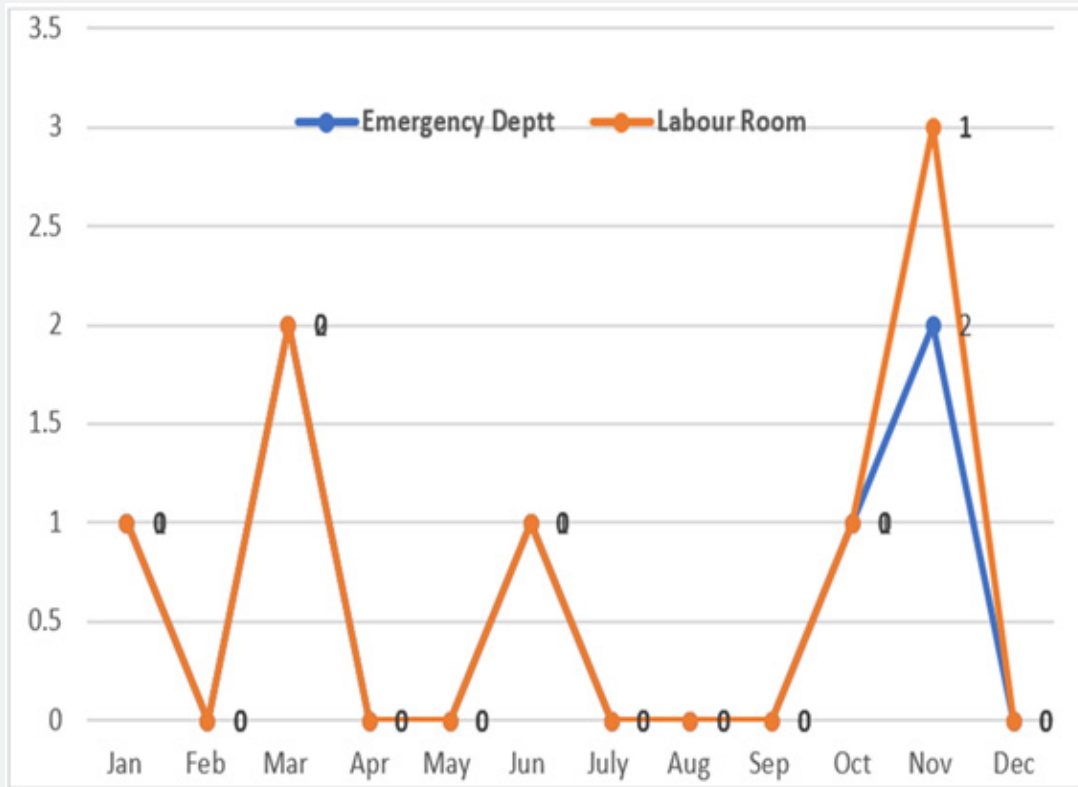


Figure 2c: Trend of forceps / vacuum deliveries done in various set ups at BBH during 2022.

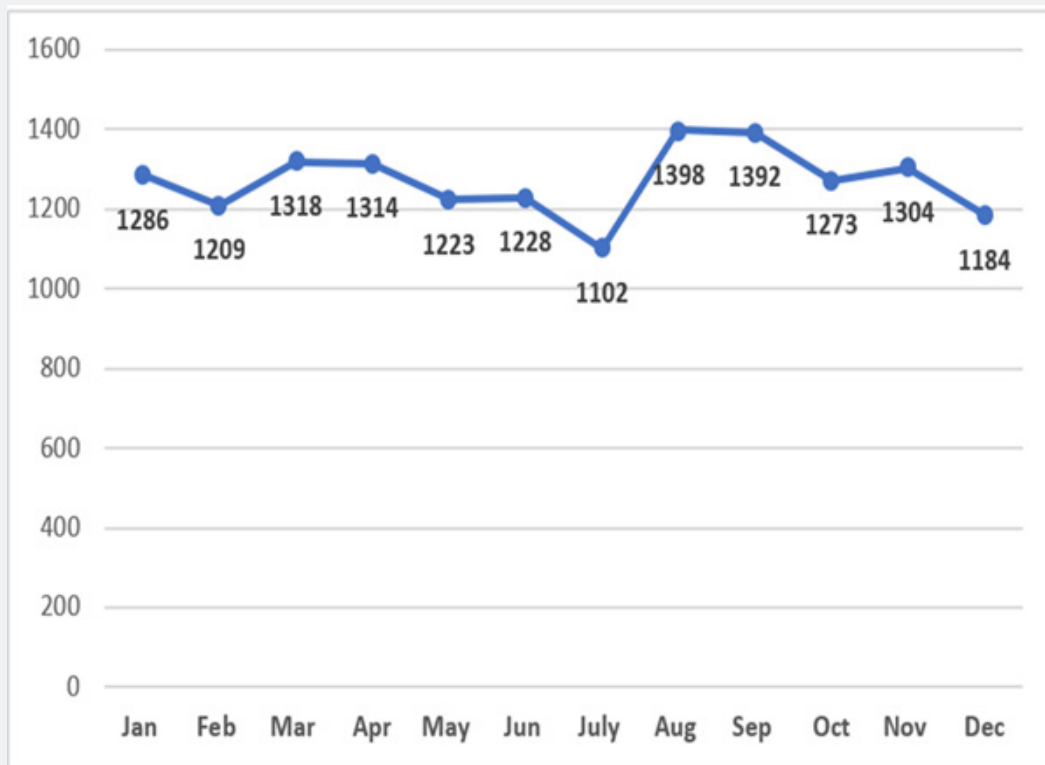


Figure 3: Trend of ultra-sonographies in Gyne/Obs OPD of BBH during 2022.

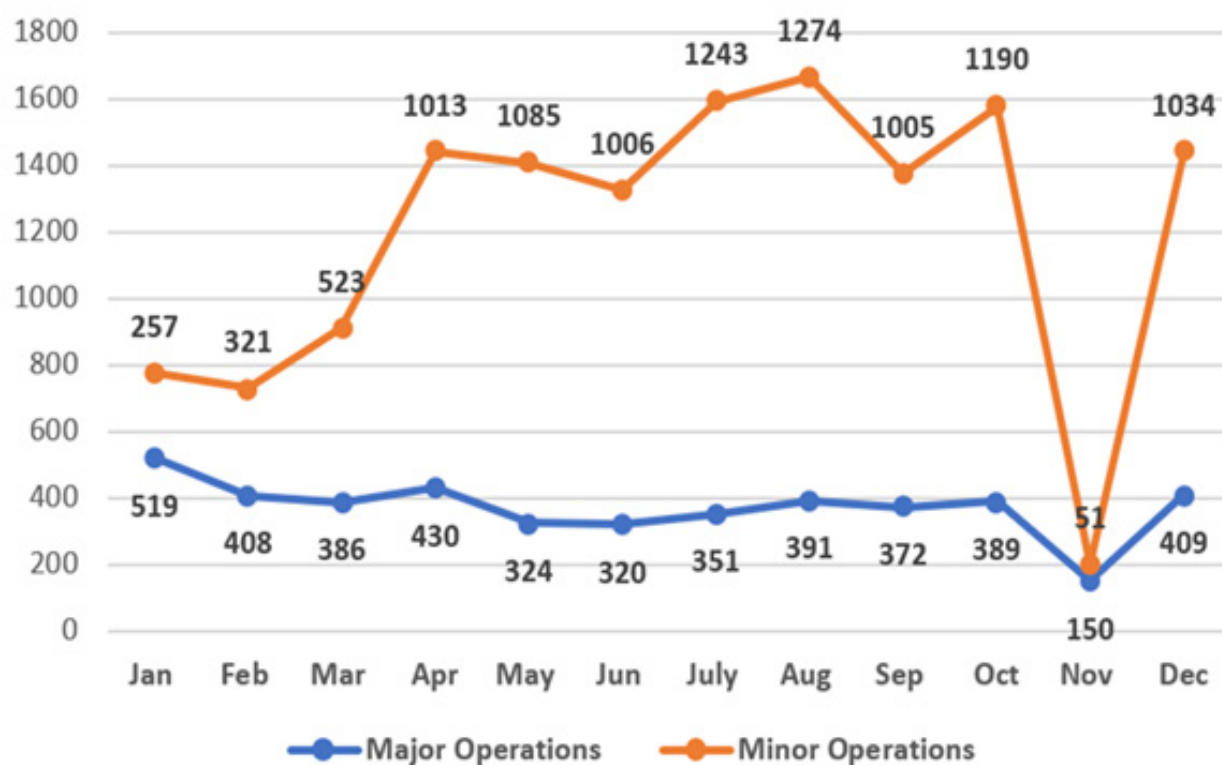


Figure 4: Trend of major and minor operations at BBH during 2022.

Discussion

Vaginal deliveries done during 2022 at BBH were 6145 while caesarean sections were 4386. About 8 forceps or vacuum deliveries have also been reported. A study done in Indian public and private hospitals revealed drastic rise in the frequency of caesarean sections in private hospitals than those of public healthcare setting during 2005-2016 [13]. Exponential rise in caesarean deliveries has been reported in developing regions of the world [14] and steady rise has also been recognized among urban residents of Vietnam [15]. A systematic and comprehensive analysis by Leon T et al in six countries elucidated the linkage of raised caesarean rates with higher socioeconomic status [16]. Although there is one Gynecology & Obstetrics unit at BBH, but being a public sector teaching hospital on main Murree Road of Rawalpindi there is much departmental faculty like qualified consultants, postgraduate trainees and medical officers in addition to nursing and paramedical staff that are destined to manage the elective as well as emergency cases. However, multiple factors are known to influence the occurrence of caesarean delivery medically [17]. One of the reasons for comparatively less caesarean deliveries at a public sector hospital might be the fixed income by the health department of the government to the employees. However, Focus Group Discussion (FGD) to dig out the contributing factors can prove beneficial in providing a deeper insight into all aspects of

the scenario.

Total 8 forceps or vacuum deliveries have been done in Gynecology and Obstetrics department of BBH during 2022 that is substantially low in magnitude that those of caesarean or vaginal deliveries (Figure 1). Although forceps deliveries have been identified with risk to maternal or fetal well-being; yet being a teaching hospital it is of paramount significance for postgraduate trainees to acquire such competencies [18]. A study by Kozak LJ et al illustrated almost 13% reduction in forceps delivery in United States during 1990-2000 [19]. A study carried out over a period of 2 years in a teaching hospital concluded that forceps delivery should reasonably be done for minimizing the caesarean section rate though with extreme caution considering the well-being of mother as well as fetus [20]. There should be capacity building activities for obstetricians to get competent enough for successful execution of forceps delivery in teaching hospitals. Such educational sessions in teaching hospitals are imperative as they are fundamentals of postgraduate training. However, such deliveries should be done with substantial care and minimal trauma to the mother as well as fetus for getting positive outcome.

Out of 14, 451 surgeries done in Gynecology and Obstetrics operation theatre during 2022, almost 31% were major procedures while rest of the 69% were minor surgeries. Having equipped with all essential equipment and staff for operations, gynecology and

obstetrics surgeries at Benazir Bhutto Hospital are primarily done by the respective consultants. The surgical coverage for hospitals in United States with low birth volume is sometimes provided by general surgeons with assistance of family physicians [21]. Of the total 18,158 surgeries done in other surgical disciplines at BBH, about 79.6% operations were related to Obstetrics and Gynecology. A comprehensive analysis in healthcare facilities of United States over a period of 27 years elucidated decline in gynecology and obstetrics procedures over time but still constituted a substantial share of all surgical procedures [22]. General public might have prioritized BBH for gynecology and obstetrics associated treatments due to easy accessibility, cost-effectiveness of services and significant consultants that is indispensable to serve the purpose of "Health for All" slogan raised in Alma Ata declaration in 1978.

Conclusion

Gynecology and Obstetrics related cases have substantially been diagnosed and treated at Benazir Bhutto Hospital. Society can further be benefited by enhancement of maternity care services if all delivery modalities are incorporated for adequate postgraduate training of future doctors.

Source of Funding: The authors received no financial support for the research, authorship and or publication of this article.

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DOI: [10.19080/JGWH.2024.26.556192](https://doi.org/10.19080/JGWH.2024.26.556192)

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