



Research Article

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# An Overview of Obstetrical and Family Planning Statistics 2020 Of Teaching Hospitals of Rawalpindi Medical University Pakistan



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## Abstract

**Objectives:** To analyze obstetrical and family planning statistics 2020 of tertiary care hospitals affiliated with Rawalpindi Medical University.

**Materials & Methods:** A cross-sectional hospital data-based record of 2020 was studied during November 2021 in order to comprehend the impact of COVID pandemic on mode of deliveries and usage of family planning methods among our general public. The data was retrieved from administrators of Holy Family Hospital (HFH), Benazir Bhutto Hospital (BBH) and District Head Quarters (DHQ) Hospital through informed consent. The data was gathered pertinent to number of Spontaneous Vaginal Deliveries (SVDs), caesarean section, instrumental deliveries and use of family planning services. The data analysis was done by Microsoft Excel 2010. Trend of SVDs, caesarean sections were compared from all 3 teaching hospitals. Trend of visit to Family planning OPD of DHQ hospital was also studied.

**Results:** Of the 28,453 Spontaneous Vaginal Deliveries done in three sister hospitals, most (19,919) deliveries were carried out at Holy Family Hospital during 2020. On the other hand, 5,131 and 3,403 SVDs were done at BBH and DHQ hospital respectively. About 7,493, 3,835 and 3,835 caesarean sections were registered at HFH, BBH and DHQ hospital respectively during 2020. Instrumental deliveries accomplishment at HFH and BBH in addition to family planning services at DHQ hospital were also made available for general public during 2020 even during COVID pandemic.

**Conclusion:** Continuation of maternity care in healthcare settings is imperative to ensure wellbeing of both child and mother.

**Keywords:** Obstetrical; Family planning; Spontaneous vaginal deliveries; Caesarean section; Teaching Hospitals

**Abbreviations:** HFH: Holy Family Hospital; BBH: Benazir Bhutto Hospital; DHQ: District Head Quarters; SVDs: Spontaneous Vaginal Deliveries

## Introduction

COVID-19 pandemic has significantly impacted the capacity of healthcare systems worldwide in provision of indispensable healthcare services. Delivery of promotive, preventive and curative healthcare to the most susceptible people across the globe was substantially reduced [1]. The visit to the healthcare facilities was determined to be much less in response to SARS-CoV-2 epidemic particularly in tertiary healthcare settings [2]. Essential healthcare amenities in some of the severely hit regions were determined to be considerably shattered in response to this catastrophic pandemic [3].

Variations in mortalities amidst COVID pandemic were attributed to multiple factors like obtainability of resources, political dynamics, healthcare management, demographics of the inhabitants and their cultural aspects [4]. Most of the surgical procedures were cancelled due to prioritization of critically ill patients amid COVID pandemic; however, maternity care belonged to that category of healthcare that could not be delayed despite the COVID associated hustle and bustle [5]. Despite the confrontation with COVID related challenges, healthcare professionals across the globe worked dedicatedly to deliver safe maternity care with strict adherence to precautionary measures against SARS-

CoV-2 for their protection as well as those of patients [6]. Trivial gynecological issues were laid aside for organizing the high-risk cases properly [7].

Access of women for antenatal checkups to healthcare settings was drastically minimized due to the risk of acquiring coronavirus infection [8]. Numerous mothers during their antenatal period amidst COVID pandemic got admitted in critical care units and some even succumbed to COVID-19 [9]. The utilization of family planning services in South Asian regions of the world was substantially declined in response to COVID outbreak [10].

The present study is intended to study the statistical data pertinent to obstetrical and family planning services usage among our population who visited the 3 tertiary healthcare facilities affiliated with Rawalpindi Medical University as its teaching hospitals. This research will reflect the mode of deliveries as well as practice of family planning methods among our people during COVID pandemic. The analyzed data will enable our strategic planners to manipulate current administrative plans with an intention to avoid adverse maternity healthcare outcomes.

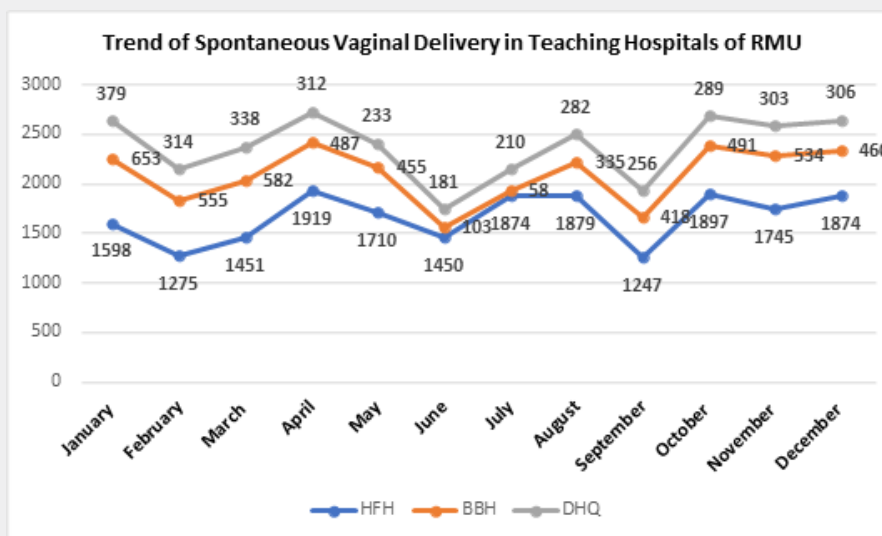
**Materials and Methods**

A cross-sectional hospital data-based study was done on 2020 annual record during November 2021 in order to comprehend

the impact of COVID pandemic on mode of deliveries and usage of family planning methods among our general public. The data was retrieved from administrators of Holy Family Hospital (HFH), Benazir Bhutto Hospital (BBH) and District Head Quarters (DHQ) Hospital through informed consent. These 3 tertiary care hospitals namely HFH, BBH and DHQ hospital constitute the teaching hospitals of RMU with bed strength of 1000, 739 and 510 respectively. These hospitals are well-equipped with all facilities deemed necessary for provision of healthcare amenities pertinent to all specialties and sub-specialties in addition to Telemedicine services [11]. The data was gathered pertinent to number of Spontaneous Vaginal Deliveries (SVDs), caesarean section, instrumental deliveries and use of family planning services. The data analysis was done by Microsoft Excel 2010. Trend of SVDs, caesarean sections was compared from all 3 teaching hospitals. Trend of visit to Family planning OPD of DHQ hospital by our patients during 2020 was also deliberated.

**Result**

About 19,919, 5,131 and 3,403 Spontaneous Vaginal Deliveries (SVDs) were done at Holy Family Hospital, Benazir Bhutto Hospital and DHQ Hospital respectively. Trend of SVDs in all the 3 tertiary care facilities during 2020 is depicted below in Figure 1.



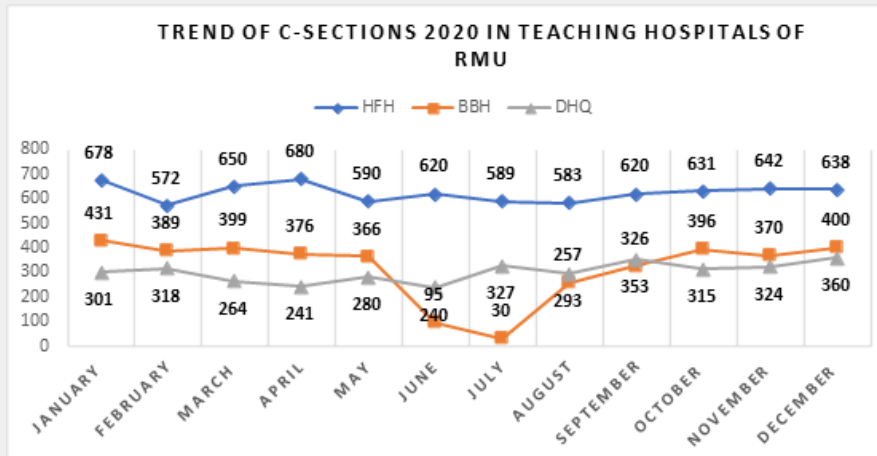
**Figure 1:** About 19,919, 5,131 and 3,403 Spontaneous Vaginal Deliveries (SVDs) were done at Holy Family Hospital, Benazir Bhutto Hospital and DHQ Hospital respectively. Trend of SVDs in all the 3 tertiary care facilities during 2020 is depicted in Figure 1.

Of the total 14,944 caesarean sections done in all 3 tertiary level healthcare centers affiliated with RMU, highest frequency (7,493) was reported at HFH followed by 3,835 at BBH and 3,616 at DHQ hospital Rawalpindi as reflected below in Figure 2.

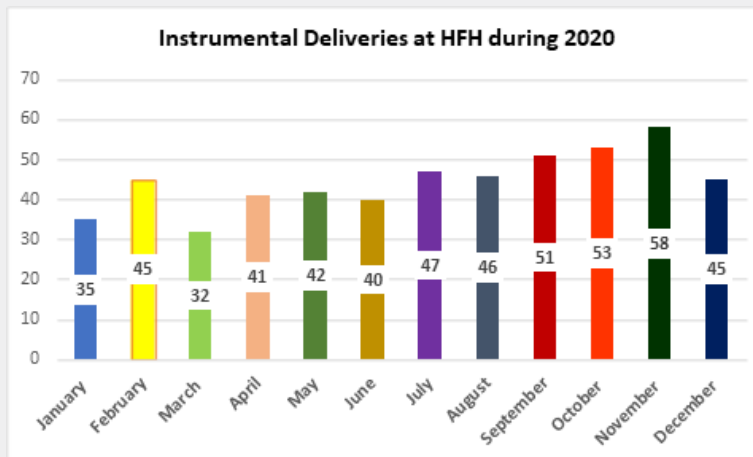
Only 8 instrumental deliveries were done at BBH while approximately 535 instrumental (Forceps / Vacuum) deliveries

were carried out at HFH during 2020 with greatest propensity during November 2020 as shown below in Figure 3.

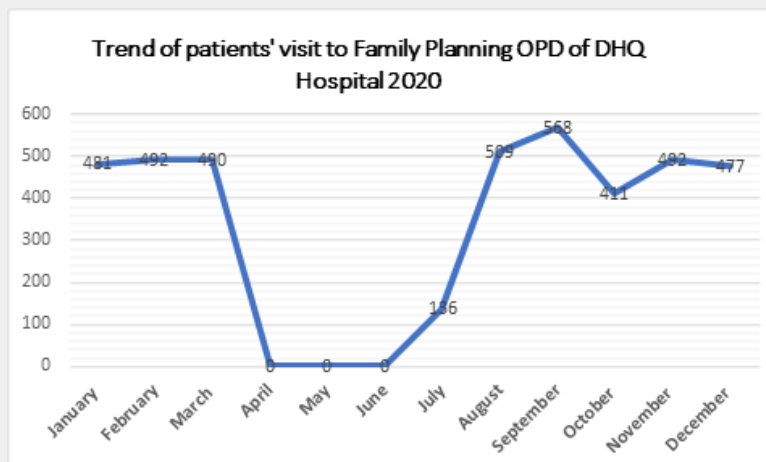
About 4056 patients visited Family Planning OPD of DHQ Hospital during 2020 with highest propensity in September 2020 as revealed below in Figure 4.



**Figure 2:** Of the total 14,944 caesarean sections done in all 3 tertiary level healthcare centers affiliated with RMU, highest frequency (7,493) was reported at HFH followed by 3,835 at BBH and 3,616 at DHQ hospital Rawalpindi as reflected in Figure 2.



**Figure 3:** Only 8 instrumental deliveries were done at BBH while approximately 535 instrumental (Forceps / Vacuum) deliveries were carried out at HFH during 2020 with greatest propensity during November 2020 as shown in Figure 3.



**Figure 4:** About 4056 patients visited Family Planning OPD of DHQ Hospital during 2020 with highest propensity in September 2020 as revealed in Figure 4.

## Discussion

WHO dispensed ample recommendations for antenatal care as well as delivery with objectives to ensure adequate health and well-being of mother and fetus or newborn. These guidelines also encompassed the healthcare professionals including MNCH workers, general practitioners and academic staff [12]. Pregnant ladies were determined to be at relatively high risk of developing severe COVID associated symptoms; however, there were certain variations in guidelines furnished for labour, delivery and breastfeeding practices among coronavirus infected patients [13].

In current study, family planning services were steadily availed by our public before the onset of COVID pandemic. There was complete shutdown of contraceptives' provision from April-June 2020 (Figure 4). This shutdown was basically attributed to nationwide lockdown imposition in Pakistan from 1<sup>st</sup> April 2020 in response to COVID-19 outbreak which was later extended till 2<sup>nd</sup> week of May [14]. Likewise, research by Roy N et al among populates of Bangladesh revealed about 23% decline in contraceptive usage among newly married 15-49 years old women than that was in pre-pandemic era [15]. Similarly, West African Ebola virus epidemic (2013-2016) also led to substantial diminution of contraceptive practices among inhabitants of Liberia and Sierra Leone [16].

Majority of the expecting mothers were also found to be deprived of antenatal care due to lockdown scenario in Jordan despite their medical ailments and pregnancy related complications [17]. Emerging and re-emerging infections have made our life quite unpredictable by making the whole world susceptible to them [18]. Our policy makers should emphasize the need for continuity of healthcare practices rationally in response to disease outbreaks by ample emergency preparedness.

Spontaneous vaginal deliveries during 2020 were comparatively more frequent in our tertiary care hospitals than those of caesarean sections. But still C-sections were relatively more; however, sharp dip in propensity of vaginal deliveries was observed during June and September 2020 (Figure 2). Some hospitals of UK denied the patients' request for childbirth through caesarean section amidst COVID pandemic that was reasonably misappropriate [19]. However, NICE guidelines [20] and law [21] were determined to be very supportive in the context of mother's choice for childbirth. Every woman has a right to make informed choice about her childbirth in collaboration with her caregivers; even she has autonomy to deliver baby in position of her own choice [22]. WHO also suggests to give priority to women's preference for mode of childbirth while considering obstetric indications [12].

The present study also reflects the data pertinent to instrumental deliveries that were carried out maximally at Holy Family Hospital amidst COVID pandemic. Strict adherence of healthcare workforce to preventive approaches against COVID-19 is imperative in the context of maternity care; however, Green Top

guidelines issued for assisted vaginal birth do not suggest any change in pre-COVID assisted vaginal birth practices [23]. Maternal health during pregnancy should be given due consideration and their warning signs should aptly be managed as mothers have pivotal role in development and growth of their unborn children.

## Conclusion and Recommendations

Regular medical care of mothers during pregnancy is essential for promoting safe childbirth. Swift provision of maternal and child healthcare should always be ensured during disease outbreaks by adequate surveillance and emergency preparedness.

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