

Effect of COVID-19 Pandemic on the Philippine General Hospital – OBGYN Residency Training Program

Marth Louie Z. Tarroza, MD¹, Sybil Lizanne R. Bravo, MD¹ and Paulo Maria Pagkatipunan, MD²

Department of Obstetrics and Gynecology – Division of Infectious Diseases, University of the Philippines-Manila, Philippine General Hospital¹

Department of Ophthalmology and Visual Sciences, University of the Philippines-Manila, Philippine General Hospital²



BACKGROUND

The COVID-19 pandemic had a major impact on the healthcare system of our country including the training of resident physicians. Studying the effects of the pandemic on residency training, in OB-GYN in particular, can help in formulating new solutions to minimize the impact of COVID-19 on the quality of the residency training program.

DESIGN

This was a cross-sectional study using mixed methods on the effect of the COVID-19 Pandemic on the PGH - Obstetrics, and Gynecology Residency Training Program. The mixed methods were composed of qualitative and quantitative methods.

METHODS

An extensive review of the kind and number of procedures done by each resident was collated and was averaged per year level during 2019, 2020, and 2021 and a comparison will be made with the minimum requirement of POGS. A survey questionnaire was directed to the training officers during the pandemic (2020 and 2021) to determine planned changes, in the training curriculum of the resident-in-training.

RESULTS

The study showed that in 2019, the residents were able to complete all of their required procedures and it was noted that in all year levels, the mean average of the procedures per resident was statistically higher compared to the minimum number given by POGS and to the cases completed during 2020-2021. The type of procedures and the minimum number of procedures were the same for pre-pandemic and during the pandemic. Rotation to other accredited hospitals, allowing transfer of technical responsibilities and extension for at least 6 months were implemented to help the residents accomplish their deficiencies. .

Table 1. Kinds and numbers of procedures for 2019, during pandemic and POGS requirement for the first-year residents (n = 46).

PROCEDURES	YEAR (mean, SD)			ANOVA (F-test)	Pairwise comparisons			POGS req (t-test)	Comparison against POGS req		
	2019 (n = 18)	2020 (n = 16)	2021 (n = 12)		2019 v 2020	2019 v 2021	2020 v 2021		2019 v POGS	2020 v POGS	2021 v POGS
Normal Spontaneous Delivery	71.33 (19.19)	38.88 (9.76)	37.33 (9.69)	<0.001	<0.001	<0.001	1.000	50	<0.001	<0.001	<0.001
Episiorrhaphy	50.22 (16.85)	28.31 (6.43)	23.42 (5.66)	<0.001	<0.001	<0.001	0.827	25	<0.001	0.057	0.354
Assisted vaginal delivery (Outlet Forceps and/or Vacuum Extraction)	11.28 (5.64)	2.81 (2.17)	0.25 (0.62)	<0.001	<0.001	<0.001	0.250	15	0.012	<0.001	<0.001
Dilatation and Curettage	20.28 (1.60)	7.19 (3.54)	6.67 (3.65)	<0.001	<0.001	<0.001	1.000	20	0.472	<0.001	<0.001

Table 2. Kinds and numbers of procedures for 2019, during pandemic and POGS requirement for the second-year residents (n = 49).

PROCEDURES	YEAR (mean, SD)			ANOVA (F-test)	Pairwise comparisons			POGS req (t-test)	Comparison against POGS req		
	2019 (n = 18)	2020 (n = 18)	2021 (n=13)		2019 v 2020	2019 v 2021	2020 v 2021		2019 v POGS	2020 v POGS	2021 v POGS
Normal Spontaneous Delivery	67.89 (13.03)	73.39 (19.28)	59.31 (13.99)	0.061	NA	NA	NA	50 + 20	0.501	0.466	0.017
Episiorrhaphy	47.78 (11.55)	51.39 (16.37)	41.15 (8.89)	0.106	NA	NA	NA	25 + 10	<0.001	0.001	0.028
Assisted vaginal delivery (Outlet Forceps and/or Vacuum Extraction)	16.17 (3.45)	13.17 (6.04)	4.54 (3.13)	<0.001	0.157	<0.001	<0.001	15	0.170	0.215	<0.001
Dilatation and Curettage	34.50 (1.42)	20.78 (4.97)	7.62 (2.96)	<0.001	<0.001	<0.001	<0.001	20 + 20	<0.001	<0.001	<0.001
Manual Extraction of Placenta	3.33 (0.49)	1.11 (0.32)	0.31 (0.63)	<0.001	<0.001	<0.001	<0.001	3	0.010	<0.001	<0.001
Cesarean Section	62.11 (14.64)	29.39 (7.51)	30.92 (8.81)	<0.001	<0.001	<0.001	1.000	10	<0.001	<0.001	<0.001
Adnexal Surgery	10.28 (3.18)	4.44 (2.23)	2.46 (1.90)	<0.001	<0.001	<0.001	0.114	8	<0.001	<0.001	<0.001

Table 3. Kinds and numbers of procedures for 2019, during pandemic and POGS requirement for the third-year residents (n = 46)

PROCEDURES	YEAR (mean, SD)			ANOVA (F-test)	Pairwise comparisons			POGS req (t-test)	Comparison against POGS req		
	2019 (n=10)	2020 (n=18)	2021 (n=18)		2019 v 2020	2019 v 2021	2020 v 2021		2019 v POGS	2020 v POGS	2021 v POGS
Normal Spontaneous Delivery	86.30 (15.71)	86.89 (15.23)	79.89 (16.70)	0.376	NA	NA	NA	50 + 20	0.010	<0.001	0.022
Episiorrhaphy	62.60 (12.66)	50.67 (9.58)	56.89 (13.66)	0.045	0.046	0.700	0.379	25 + 10	<0.001	<0.001	<0.001
Assisted vaginal delivery (Outlet Forceps and/or Vacuum Extraction)	19.40 (6.10)	16.34 (3.72)	15.72 (5.68)	0.199	NA	NA	NA	15	0.048	0.040	0.596
Dilatation and Curettage	39.80 (1.75)	34.83 (5.76)	22.44 (1.42)	<0.001	0.006	<0.001	<0.001	20 + 20	0.726	0.001	<0.001
Manual Extraction of Placenta	3.60 (0.70)	3.33 (0.69)	2.22 (0.43)	<0.001	0.736	<0.001	<0.001	3	0.024	0.055	<0.001
Cesarean Section	86.50 (12.77)	77.34 (16.42)	61.38 (11.27)	<0.001	0.371	<0.001	0.002	10 + 20	<0.001	<0.001	<0.001
Adnexal Surgery	15.90 (5.74)	12.00 (4.23)	9.83 (3.18)	0.003	0.072	0.002	0.394	7 + 8	0.632	0.008	<0.001
Breech Delivery (vaginal or during CS)	7.70 (6.04)	13.22 (3.08)	8.33 (3.63)	0.001	0.004	1.000	0.002	3	0.036	<0.001	<0.001
Abdominal Hysterectomy	10.60 (5.17)	0.83 (0.62)	1.83 (2.15)	<0.001	<0.001	<0.001	0.845	5	0.008	<0.001	<0.001
Vaginal Hysterectomy	0.60 (0.62)	0.00 (0.00)	0.06 (0.24)	<0.001	<0.001	<0.001	1.000	1	0.037	NA	<0.001
Cesarean or Post-partum Hysterectomy	0.20 (0.42)	0.00 (0.00)	0.06 (0.24)	0.124	NA	NA	NA	1	<0.001	NA	<0.001
Evacuation of H. mole	3.70 (1.70)	2.39 (1.46)	1.60 (0.79)	0.001	0.043	<0.001	0.140	1	0.001	0.001	0.015
Identification, Isolation and Ligation of Uterine Arteries	0.40 (0.84)	0.00 (0.00)	0.00 (0.00)	0.022	0.036	0.036	1.000	1	0.051	NA	NA
Identification of Hypogastric Arteries	0.00 (0.00)	0.00 (0.00)	0.06 (0.24)	0.469	NA	NA	NA	3	NA	NA	<0.001

Table 4. Kinds and numbers of procedures for 2019, during pandemic and POGS requirement for the fourth-year residents (n = 35)

PROCEDURES	YEAR (mean, SD)			ANOVA (F-test)	Pairwise comparisons			POGS req (t-test)	Comparison against POGS req		
	2019 (n = 7)	2020 (n = 10)	2021 (n = 18)		2019 v 2020	2019 v 2021	2020 v 2021		2019 v POGS	2020 v POGS	2021 v POGS
Normal Spontaneous Delivery	84.57 (12.73)	85.40 (10.73)	87.39 (14.92)	0.871	NA	NA	NA	50 + 20	0.023	0.001	<0.001
Episiorrhaphy	60.71 (17.16)	61.90 (14.53)	50.33 (9.39)	0.048	1.000	0.228	0.083	25 + 10	0.007	<0.001	<0.001
Assisted vaginal delivery (Outlet Forceps and/or Vacuum Extraction)	32.43 (9.90)	22.20 (7.39)	17.94 (3.19)	<0.001	0.007	<0.001	0.283	15	0.004	0.013	0.001
Dilatation and Curettage	40.43 (0.79)	40.30 (0.48)	40.28 (0.46)	0.820	NA	NA	NA	20 + 20	0.200	0.081	0.020
Manual Extraction of Placenta	4.29 (0.49)	3.90 (0.99)	3.33 (0.69)	0.018	0.926	0.024	0.200	3	<0.001	0.019	0.055
Cesarean Section	135.43 (24.78)	93.90 (18.21)	84.61 (15.81)	<0.001	<0.001	<0.001	0.634	10 + 20	<0.001	<0.001	<0.001
Adnexal Surgery	31.57 (7.76)	20.60 (3.98)	16.67 (4.37)	<0.001	<0.001	<0.001	0.176	7 + 8	0.001	0.002	0.124
Breech Delivery (vaginal or during CS)	26.29 (9.36)	15.80 (2.39)	13.28 (3.44)	<0.001	<0.001	<0.001	0.612	3 + 7	0.001	<0.001	<0.001
Abdominal Hysterectomy	54.57 (11.54)	24.10 (6.21)	14.28 (1.84)	<0.001	<0.001	<0.001	0.001	5 + 5	<0.001	<0.001	<0.001
Vaginal Hysterectomy	9.71 (4.46)	3.30 (0.48)	2.17 (0.51)	<0.001	<0.001	<0.001	0.472	1 + 2	0.002	<0.001	<0.001
Cesarean or Post-partum Hysterectomy	2.57 (0.79)	1.80 (0.63)	0.94 (0.42)	<0.001	0.028	<0.001	0.002	1	0.002	0.003	0.579
Evacuation of H. mole	5.43 (1.90)	3.70 (1.70)	2.94 (1.26)	0.004	0.885	0.003	0.657	1	0.001	0.001	<0.001
Identification, Isolation and Ligation of Uterine Arteries	3.43 (0.79)	3.30 (0.48)	1.50 (0.62)	<0.001	1.000	<0.001	<0.001	1 + 2	<0.001	<0.001	0.003
Identification of Hypogastric Arteries	3.86 (1.46)	4.20 (1.14)	2.28 (0.75)	<0.001	1.000	0.005	<0.001	3	0.172	0.009	0.001
Abdominal Myomectomy	3.43 (0.98)	2.40 (0.70)	1.50 (0.71)	<0.001	0.030	<0.001	0.016	2	0.008	0.104	0.008

CONCLUSION

The COVID-19 pandemic imposed a major negative impact on OB-GYN residency training. In terms of their surgical competencies, compared to pre-pandemic years, residents-in-training were given and exposed to a very limited number and type of cases. This was reflected in the number of cases they have accomplished. Several adjustments were done to ensure that the residents were receiving the best training and to guarantee that the institution can cope up with the deficiency in surgical procedures and still bring out quality training and education to the graduates of the residency training program.