

DOI: <http://dx.doi.org/10.18203/2320-1770.ijrcog20201771>

Original Research Article

Socio-demographic profile and maternal-fetal prognosis of emergency caesarean section versus caesarean section programmed on scar uterus

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Received: 14 January 2020

Revised: 23 February 2020

Accepted: 29 February 2020

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ABSTRACT

Background: The objective of this study was to determine the maternal-fetal prognosis of emergency caesarean sections on the scar uterus to contribute to the reduction of maternal-fetal morbidity and mortality.

Methods: An analytical cross-sectional study of pregnant women who were observed from admission to discharge including their newborns at Panzi Reference General Hospital in gynecology and obstetrics department. The sample was comprehensive for convenience consisting of 150 deliveries by caesarean section who had previously delivered at least once by caesarean section. (In 4 months, from 01st December 2018 to 31st March 2019). A pre-established survey sheet allowed us to collect the data. For data analysis, SPSS software and Microsoft excel were used. The chi-square test was used at the 0.05 level.

Results: A total 95.2% of newborns were found to be of normal weight, their mothers were emergency cesarized but should be programmed and macrosomia was noted in 4.8%; ($p > 0.05$). In addition, 57.1% of urgent caesarean sections scheduled to be performed were performed in female children ($p < 0.05$). We note the low Apgar in 26.2% of newborns whose mothers were emergency cesarized but should be programmed; ($p < 0.05$). Afterwards, 33.3% of the emergency cesarized gestates, their newborns were transferred to neonatology with transfer reasons asphyxia light in 50%, moderate asphyxia in 28.5% and in 21.5% for the infectious risk. The neonatal prognosis at discharge, we noted two cases of neonatal deaths or 4.7% in pregnant emergency cesarized ($p > 0.05$). On the maternal side, morbidity was dominated by puerperal infections in 16.7% and uterine rupture in 2.4% in the emergency caesarean section, and no maternal deaths occurred in both groups during the study period.

Conclusions: Maternal-fetal prognosis was characterized by asphyxia, neonatal infection and two cases of neonatal death. Study did not register a maternal death but we noticed puerperal infections.

Keywords: Emergency caesarean section, Maternal-fetal prognosis, Planned cesarean section

INTRODUCTION

Caesarean section is a major obstetric intervention widely recognized as an effective means of reducing maternal and perinatal mortality.^{1,2} Like any surgery, it can lead to

maternal and neonatal complications that can increase if its use is abusive, inappropriate or not medically justified. It can compromise the prognosis of subsequent pregnancies.³ In recent decades, the frequency of caesarean section has been steadily increasing, but this

increase differs enormously from one country to another and in the same environment, from one medical institution to another.^{4,5} The reasons are multifactorial: socio-economic and cultural factors, the variation of professional practices from one hospital center to another, etc.^{6,7}

In addition, advances in surgery, anaesthesiology and blood transfusion ensure a certain safety in performing caesarean section.⁸ However, since 1985, the World Health Organization (WHO) has recommended a rate of 10 to 15% as a proportion of births in the population. Outside this range, there is a global health risk and therefore no justification.⁹ The lack of a standardized and internationally accepted classification system for comparing caesarean section rates between countries and hospitals is also one of the factors that has contributed to the low level of awareness among service managers and health professionals to the caesarean epidemic in the world.¹⁰ Since 2014, WHO has recommended the use of Robson's classification as a global standard for the evaluation, monitoring and comparison of caesarean section rates in health facilities.¹¹

Study receive women who go through the prayer rooms, women who believe that a caesarean section is a curse, women who complain about the socio-economic level and others who are forced by their husbands to give birth only by the children natural ways, and all these gestants are operated urgently in study center maternity. The objective of this study is to determine the maternal-fetal prognosis of emergency caesarean section to contribute to the reduction of maternal-fetal morbidity and mortality.

METHODS

It was a cross analytic sectional study purposes where pregnant women (delivery) were observed from admission to discharge including their newborns. The study was carried out at Panzi Reference General Hospital in the gynecology and obstetrics department. The sample was comprehensive for convenience consisting of 150 deliveries by caesarean section who had previously delivered at least once by caesarean section from 01st December 2018 to 31st March.

Dependent variable

It is the spontaneous adhesion to the LCS. Independent variables: sociodemographic parameters, obstetrical history, fetal prognosis, maternal and complications. A pre-established survey sheet allowed us to collect the data.

Statistical analysis

For data analysis, SPSS software and Microsoft excel were used. The chi-square test was used at a threshold of 0.05.

RESULTS

With regard to the Table 1, it appears that the average age of parturients cesarized in emergency was 28.87 ± 6.34 years versus 28.00 ± 7.09 years in scheduled cesarized, (p value=0.333). Study also note that most of the 77.3% of urgently needed emergency mothers came from the ibanda health zone and 16.5% came from the Kadutu health zone, (p <0.05). Study observe that 62.9% of emergency caesarean parturients had a secondary level of education and 8.2% without a level of education (p <0.05).

These results also point out that the majority of 68.0% of women who had emergency caesareans were Protestant (p >0.05). The majority of 99.0% of emergency cesarized parturients were married, with a significant association (p <0.05).

The results in the Table 2 show that 36.6% of caesareans were performed in normal emergencies, 35.3% were scheduled caesarean section and 28.1% were emergency caesarean but should normally be scheduled.

In light of the Table 3, study note that 85.7% of emergency cesarized did not perform the ANC1 and 83.3% the ANC2, 23.8% the ANC3 and 83.3% for the ANC4. There is a significant association between the performance of ANC and the type of CBS (p <0.05). It also appears that half or 50% of emergency-type pregnant women did not do ultrasound in the 3rd trimester of the year. Pregnancy and delivery plan was developed in only 21.4% of cases (p <0.05).

In the Table 4, iterative caesareans account for 76.1%, vicious presentations 16.6%, macrosomial 4.7%, laparotomy for uterine rupture or 2.3% in the emergency caesarean section and Iterative caesareans account for 83% in the group of scheduled caesareans.

These results show that the majority is 95.2% of new-borns with a normal weight, their mothers were emergency cesarized but should be programmed and macrosomia in 4.8%; the association is not significant (p >0.05). In addition, we note that 57.1% of urgent caesarean sections that should be scheduled, were performed in female children, (p <0.05). Regarding Apgar, study note the low Apgar in 26.2% of new-borns whose mothers were emergency cesarized but should be programmed; (p <0.05).

Next, we must also point out that in 33.3% of emergency cesarized, their new-borns were transferred to neonatology with 50% asphyxiation as a reason for transfer, moderate asphyxia in 28.5% and in 21.5% for the infectious risk. With regard to neonatal prognosis at discharge, we note two cases of neonatal death, i.e. 4.7% among emergency-responders (p >0.05).

Table 1: Sociodemographic profile of births by type of caesarean.

Variables	Total (n=150)	Emergencies (n=97)	Scheduled (n=53)	p value
Mean±SD	28.56±6.60	28.87±6.34	28.00±7.09	
Age of pregnant (years)				
19	12 (8.0%)	5 (5.2%)	7 (13.2%)	0.333
20-29	67 (44.7%)	44 (45.4%)	23 (43.4%)	
30-39	66 (44.0%)	45 (46.4%)	21 (39.6%)	
≥40	5 (3.3%)	3 (3.1%)	2 (3.8%)	
Address				
Other (out of town)	16 (10.7%)	5 (5.2%)	11 (20.8%)	0.022
Bagira	2 (1.3%)	1 (1.0%)	1 (1.9%)	
Ibanda	111 (74.0%)	75 (77.3%)	36 (67.9%)	
Kadutu	21 (14.0%)	16 (16.5%)	5 (9.4%)	
Level of study				
Illiterate	21 (14.0%)	8 (8.2%)	13 (24.5%)	0.017
Primary	19 (12.7%)	16 (16.5%)	3 (5.7%)	
Secondary	90 (60.0%)	61 (62.9%)	29 (54.7%)	
University	20 (13.3%)	12 (12.4%)	8 (15.1%)	
Profession				
Pupil/student	3 (2.0%)	3 (3.1%)	0 (0.0%)	0.445
Official	14 (9.3%)	7 (7.2%)	7 (13.2%)	
Household	117 (78.0%)	75 (77.3%)	42 (79.2%)	
Informal sector	16 (10.7%)	12 (12.4%)	4 (7.5%)	
Religion				
Other	6 (4.0%)	3 (3.1%)	3 (5.7%)	0.328
Catholic	37 (24.7%)	28 (28.8%)	9 (17.0%)	
Muslim	1 (0.7%)	0 (0.0%)	1 (1.9%)	
Protestant	106 (70.7%)	66 (68.0%)	40 (75.5%)	
Civil status				
Single	6 (4.0%)	1 (1.0%)	5 (9.4%)	0.012
Married	144 (96.0%)	96 (99.0%)	48 (90.6%)	

Table 2: Distribution of censored pregnancy by LSC.

Variables (types of caesarean section)	Effective (n=150)	%
Elective caesarean	53	35.3%
Emergency caesarean (normal)	55	36.6%
Emergency C-section that should be programmed	42	28.1%

Table 3: Obstetrical history of emergency cesarized pregnant women.

Settings		Scheduled (n=53)	Emergencies (n=42)	p value
ANC1	Yes	22 (58.5%)	6 (14.3%)	0.000
	No	31 (41.5%)	36 (85.7%)	
ANC2	Yes	35 (47.2%)	7 (16.7%)	0.000
	No	28 (52.8%)	35 (83.3%)	
ANC3	Yes	29 (54.7%)	32 (76.2%)	0.030
	No	24 (45.3%)	10 (23.8%)	
ANC4	Yes	53 (100%)	7 (16.7%)	0.000
	No	0 (0.0%)	35 (83.3%)	
3rd trimester ultrasonography				
Yes		40 (75.5%)	21 (50.0%)	0.010
No		13 (24.5%)	21 (50.0%)	
Completed delivery plan				
Yes		53 (100%)	9 (21.4%)	0.000
No		0 (0.0%)	33 (78.6%)	

Table 4: Current indications for caesareans.

Scheduled	Programme (n=53)	%	Emergency room	(n=42)	%
Iterative	44	(83.0%)	Iterative	32	(76.1%)
Vicious presentation	5	(9.4%)	Vicious presentation	7	(16.6%)
Prophylactic	2	(3.7%)	Macrosomia	2	(4.7%)
Convenience	1	(1.8%)	Laparotomy (RU)	1	(2.3%)
Pre-eclampsia (RCIU)	1	(1.8%)	-	-	-

Table 5: Fetal prognosis by caesarean section.

Variables	Programmed (n=53)	Emergencies (n=42)	p value
Weight of new-borns			
Low weight	1 (1.9%)	0 (0.0%)	0.967
Normal	43 (98.1%)	40 (95.2%)	
Macrosomic	0 (0.0%)	2 (4.8%)	
Sex of new-borns			
Female	22 (41.5%)	16 (42.9%)	0.884
Male	31 (58.5%)	24 (57.1%)	
Apgar at birth			
Low	1 (1.9%)	11 (26.2%)	0.000
Normal	52 (98.1%)	31 (73.8%)	
Transfer to neonatology			
No	52 (98.1%)	28 (66.7%)	0.000
Yes	1 (1.9%)	14 (33.3%)	
Reasons for neonatology transfer (n=15)			
Light asphyxia and (IUGR)	1 (100%)	7 (50.0%)	0.000
Moderate asphyxia	0 (0.0%)	4 (28.5%)	
Prematurity	0 (0.0%)	0 (0.0%)	
Infectious risk	0 (0.0%)	3 (21.5%)	
Stay in neonatology (n=15)			
Within 24 hours	1 (100%)	7 (50.0%)	0.349
More than 24 hours	0 (0.0%)	7 (50.0%)	
Neonatal prognosis at the exit			
Good	53 (100%)	40 (95.2%)	0.110
Deceased	0 (0.0%)	2 (4.7%)	

Table 6: Maternal prognosis by caesarean section.

Variables	Programmed (n=53)	Emergencies (n=42)	p value
Complications during delivery labor			
Any	53 (100%)	34 (80.9%)	0.000
UR	0 (0.0%)	1 (2.4%)	
AFD	0 (0.0%)	7 (16.6%)	
Complications during the caesarean section			
Any	50 (94.3%)	37 (88.0%)	0.278
Anaesthetics	1 (1.9%)	1 (2.4%)	
Placental abnormalities	2 (3.8%)	2 (4.8%)	
Circular cord 2x and shoulder strap	0 (0.0%)	1 (2.4%)	
Hemorrhage	0 (0.0%)	1 (2.4%)	
Postpartum complications			
Any	53 (100%)	35 (83.3%)	0.000
pelvic inflammatory disease	0 (0.0%)	1 (2.4%)	
Endometritis	0 (0.0%)	2 (4.8%)	
Parietal infection	0 (0.0%)	4 (9.5%)	

Regarding complications during labor, we noted that 16.6% of emergency cesarized but expected to be scheduled presented acute fetal distress (AFD) and 2.4% uterine rupture. It also appears for complications during LCS, in 4.8% study noted placental abnormalities. Study note that the complications are statistically associated with the type of caesarean section ($p < 0.05$).

DISCUSSION

Frequency of emergency cesarean section on scar uterus

In this series, the emergency cesarean section rate was 44.2% and the caesarean section was 55.8%. These results are different from those found in several randomized studies showing the prevalence of emergency Caesarean section compared to scheduled cesarean section. Faye D et al who found the predominance of emergency caesarean section in 70% of cases, Traoré and al, found 91.40% of cases against 8.60% of scheduled cesareans, Rowaily found 67% of urgent cases against 33% of scheduled cases.¹²⁻¹⁴ This low rate in this series excludes all caesarean sections on uterus scarred having previously benefited from a uterine test in study center maternity.

Sociodemographic profile of cesareans made in emergencies

In this study, it appears that the average age of the emergency cesarized parturients was 28.87 ± 6.34 years as standard deviation versus 28.00 ± 7.09 years in the programmed cesarized, (p value=0.333), study results are close to the other authors, Raha Maroyi.¹⁵

In 2016, Yaich P et al, Benzouina S et al, study results are explained by the fact that it is the sexually active age group in which many women prefer to have children.^{16,17} Regarding the level of study, study observe that 62.9% of parturient cesarized emergency, and 54.7% of cesareans programmed had a secondary level of study. These results are identical to those of Maroyi R.¹⁵ Foumane P et al and Mbungu MR et al, who found that the majority of cesarean deliveries had a secondary level of education.^{18,19} On the other hand, study results are different from those found by Benzouina S et al, and Traoré et al, cited by Raha M in his study on multicatricial uterus in Mali, found a predominance of out-of-school women versus those with secondary education.¹⁷

In this series, housewives were the majority in 77.3% of cases. Study results are close to those found by Mbungu MR et al and those of Alexis Y et al.^{19,20} Study results could be explained by the fact that the household is the main activity of women, but also by the fact that most women were out of school therefore having no professional activity to carry out.

Study also note that 99.0% of emergency parturient mothers were married and only 1% single, the gestational status is statistically related to the type of caesarean section. Study results are close to those found by Amani M et al, according to the author 92.7% are married.²¹ This result would be justified by the fact that the city of Bukavu is considered city of many marriages.

Obstetric history of emergency caesarean pregnancy

In this study, noticed 83.3% of the caesareans in emergency caesareans whose delivery should be scheduled did not make the ANC4 called the consultation of the ninth month against 100% in the group of the planned caesareans although study noted ANC intermediaries this study follow-ups in the group of scheduled cesareans, ANC3, ANC2, ANC1 performed respectively in 54.7%, 47.2% and 58.5%. There is a significant association between the achievement of ANC and the type of LCS ($p < 0.05$).

Study results agree with those of Maroy R, had found that only 18.7% of patients with uterine multi-scarring respected 4 ANCs against 81.3% who did not do ANC4 which remains a challenge to be met to improve the maternal-fetal prognosis.¹⁵ Stud results are similar to those of Baldé IS who found in his study on the evaluation of the quality of the last prenatal consultation of a peripheral maternity hospital in Conakry that the frequency of the last ANC was 28.2%.²² This proves that so far study ANCs have suffered from quality and it suggests that in view of these realities, the need for good follow-up of women. In this series, all women operated on in emergencies for which their cesarean section should be scheduled already presented a risk for their pregnancy and these pregnant women should follow ANC by a gynecologist-obstetrician according to the recommendations of follow-up B of HAS France.²³

Samaké BM et al, had shown that women who gave less than 4 antenatal consultations were more likely to have a complication with OR=1.87 (1.10-3.17) hence the importance of good follow-up of Numerous and high quality ANCs to reduce the risks during childbirth and in the postpartum period.²⁴ Quality prenatal consultation is one of the three pillars of the fight against maternal and neonatal morbidity and mortality, and its importance is well established.²⁵ They were thus the main lever modified in the WHO recommendations of November 2016, with now eight minimum visits recommended, within the framework of the last development objectives (ODDs).²⁶

Traoré et al, as Aboubakari et al, feel that not performing the ANC has contributed to the increased rate of emergency caesarean section in their studies and the poor maternal-fetal prognosis.^{27,28} In this study, the delivery plan was developed in only 21.4% of cases ($p < 0.05$) and in 78.6% the delivery plan was not developed, which proves that the quality of ANC in this environment

remains to be improved, but improving maternal and fetal prognosis requires quality prenatal consultations to screen for pregnancies at risk of HAS.²³

Study results differ from those found in the literature, Ole SB et al, reported that among pregnant women followed in prenatal consultations, the route of delivery was not indicated in 33.73% of women who were parturient.²⁹ I.S. Balde made the same constant on prenatal consultations: the prognosis for childbirth was never asked or mentioned in ANC in the health book. As a result, some pregnant women, who could have benefited either from a prophylactic cesarean or from a labor trial, were evacuated in disaster for an obstetric rescue intervention, often after prolonged and laborious work in peripheral maternities or birthing homes.²² Alongside routine ANC, an updated approach to prenatal care called refocused ANC or focused ANC, which is defined as the total medical care a woman receives during pregnancy, helping to ensure that she and her newborn survive healthy pregnancy and childbirth.³⁰ It emphasizes the quality of the ANCs rather than their number.

Regarding the current indications for current cesareans, the indications were dominated by iterative cesareans in 83% and 76.1% respectively in the group of scheduled and emergency cesareans. These results are different from those found by Cisse CT et al, who found 30-40% of iterative indications, study results are explained by the high number of multi-registry uterus although the pelvis was normal but also the bicatricial uteri at unfavorable obstetric conditions.³¹

The compulsory indications found on scar uterus are the same as for these authors: a foeto-pelvic disproportion, a dystocic presentation, a multicatricic uterus, a body scar, a history of uterine rupture, an associated pathological condition at high maternal and/or fetal risk.³²⁻³⁴ Study department receives a large number of women with previous cesarean sections done elsewhere with as pejorative elements: lack of information on the previous indications, the type and quality of the uterine scar, all these elements lead us to iterative cesareans after sometimes two cesareans.

Neonatal morbidity and mortality according to types of cesarean section the results of this study show that the majority of newborns in the two groups had a normal weight (95.2% in the group of emergency cesareans and 98.1% in the group of scheduled cesareans, the association was not not significant. Study results are similar to those of other authors.^{17,35}

Study noted 2 cases of fetal macrosomia in the group of emergency cesareans, A review of the literature on the attempt of labor delivery in a scar uterus proves an increase in the rate of ruptures in women with scar uterus and without a history of vaginal delivery with newborns whose weight was greater than or equal to 4000 g.³⁶ The male sex was predominant in this study for the two

groups of scheduled and urgent cesareans of 58.5% and 57.1% respectively, Benzouina S and Beena D et al, found no difference for the two sexes in their studies.^{17,37} Study results are close because the difference was not statistically significant. For the Apgar score, the poor Apgar score was associated with emergency cesareans in 26.2% of cases compared to 1.9% of cases in the group of scheduled cesareans, the difference was statistically significant; ($p < 0.05$). Study results are close to those of Soukayna B et al who found in both groups the fetal morbidity was 28.2%, and of this percentage 90.36% concern the group of cesarean sections performed in emergency versus 9.64% in the groups of scheduled cesareans or electives, morbidity mainly linked to perinatal asphyxia, Elvedi-Gasparovic, had also found that in the group of scheduled cesareans, the newborn had a considerably better Apgar score than in the group of emergency cesareans.^{17,38} Sima Ole B et al reported the same results: Apgar was 8.33 ± 1.8 (7-10) when the cesarean was scheduled and 5.33 ± 0.5 (0-7) when it was done during work.²⁹

However, study results differ from those found by other authors in their studies such as: Subedi A et al, found 100% of good score of Apgar in the group of scheduled cesareans and 98.3% in the group of emergency cesareans, for this author the difference was not statistically significant.³⁹ In the study by Schindu P et al, 11.4% of emergencies and 9.8% of cases in the group of scheduled cesareans had a poor perinatal prognosis, but this finding was not statistically significant.⁴⁰

The explanations in this study would be linked to this increase in cesarean sections performed in emergencies, because pregnant women preferred to start labor at home or in a low level structure to attempt vaginal delivery without any fetal monitoring or surveillance poor and this could explain this poor Apgar score of newborns whose mothers belonged to the group of emergency cesareans. Regarding the transfer of newborns to the neonatal unit, we must also note that 33.3% of newborns were transferred to neonatology with the main reason for transfer being mild asphyxiation in 50%, asphyxiation moderate in 28.5% and in 21.5% for the risk of infection in the group of emergency cesareans, compared to the group of scheduled cesareans where only one newborn was transferred to neonatology for mild asphyxia and IUGR, the difference was statistically significant. In addition, it should be noted that the stay in neonatology was more than 24 hours in half of the cases, i.e. 50%.

Ugwe E et al, reports similar results for emergency cesareans, 27% mild asphyxia, 21% moderate asphyxia and 11.9% severe asphyxia, however study results are different in the group of scheduled cesareans in which we noted 1 case of mild asphyxiation with intra uterine growth retardation (IUGR).⁴¹ Ayano B et al, had found in their study that 18.6% of newborns admitted to the neonatal service in the group of cesarean sections performed in emergency.⁴² With regard to the neonatal

prognosis at discharge, study noted two cases of neonatal death, i.e. 4.7% in pregnant cesareans in emergency and no case of death in the group of scheduled cesareans ($p > 0.05$). Study results are similar to those of Ugwe E, who found 3.9% perinatal death in the group of emergency cesareans and no case of perinatal death for scheduled cesareans.⁴¹ Study results differ from those reported by London MB et al who found respectively 0.08% in the group of emergency cesareans and 0.05% in the group of scheduled cesareans with a $p=0.19$.³⁵ Perinatal mortality is the most feared event. The attempted vaginal way leads to neonatal excess mortality with a rate of 110 to 129 against 11 to 60 deaths per 100,000 births for scheduled cesareans, an OR of 11.6 ($p=0.02$).⁴³

Maternal morbidity and mortality of caesarean sections performed in emergency or complications

In this series, we noted that maternal morbidity was dominated by puerperal infections and uterine rupture in 16.7% and 2.4% respectively. Cyr Espérance in his study, he had found that maternal morbidity was more linked to the frequency of dehiscence's of the uterine scar was 1% and that of uterine rupture was 0.8%.⁴⁴ It also emerges with regard to complications during cesarean section, in 4.8% we noted placental anomalies, a case of hemorrhage, a case of procidence of the cord. We noted that the complications are statistically associated with the type of cesarean section. Scheller A et al in his study: comparison of the rate of complications after primary, secondary and emergency cesarean section in 1992, reports a significant proportion of complications in the group of caesarean sections performed in emergency, complications dominated by significant blood loss.⁴⁵

In this series study found that complications in the postpartum period were significant in the group of caesarean sections performed in emergencies dominated by parietal infections, endometritis and pelvi peritonitis, compared to scheduled cesarean sections, the difference was statistically significant ($p < 0.05$). Other authors have found results similar to ours: postoperative morbidity was more pronounced in patients who had an emergency cesarean than in those who had a scheduled cesarean. The difference was statistically significant ($p < 0.001$), Ugwe E et al, in his work reported 7.6% of parietal infection in the group of cesareans made in emergencies against 1.4% for scheduled cesareans, Kathryn E et al.^{39,41,46} In 2019 also found in his study that the risk of having a puerperal infection was significant during cesarean after attempting the vaginal route than in scheduled cesarean, London MB et al.³⁵ In 2004 reported that the complication that dominated the postpartum period was endometritis in the group of caesarean sections performed in an emergency after attempted vaginal delivery. In this work, we did not record maternal deaths in the two groups during the study period, we justify this by the immediate and adequate management by cesarean section of those parturients who came in emergency when their cesarean section should be scheduled. And thus, prevent

the dramatic complications of maternal mortality. EO V Ugwe et al, reported different but close results from this study, 0.1% and 0.6% of maternal death respectively in the group of scheduled cesareans and emergency cesareans.⁴¹ Dembélé A et al, also did not report maternal death in their work, which is consistent with this study results.^{47,48}

CONCLUSION

At the end of this study, study note that the maternal-fetal prognosis was good in the group of scheduled caesarean sections compared to emergency caesarean sections where the fetal prognosis was marked by cases of death from suffocation, and the maternal prognosis dominated by surgical site infections and puerperal infections.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Shalamba ME, Nabintu M, Ngeleza NO, Omar M, Murhula MJ, Mukengere MD. Socio-demographic profile and maternal-fetal prognosis of emergency caesarean section versus caesarean section programmed on scar uterus. *Int J Reprod Contracept Obstet Gynecol* 2020;9:1864-72.