

Obstetrical Complications in Adolescent a Fousseyni Daou Hospital in Kayes

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Abstract

Original Research Article

Introduction: Teenage pregnancy is a high-risk pregnancy due to age, special circumstances including first pregnancy, low social status, low educational status and unwanted pregnancy. The goal was to study obstetric complications in adolescent girls at the HOSPITAL FOUSSEYNI DAOU DE KAYES. **Methodology:** This was a prospective, descriptive prospective study on obstetric complications in adolescents conducted at Fousseyni Daou Hospital in Kayes from January 01, 2018 to December 31, 2018. It had focused on adolescent girls who were pregnant, in labour or received in the aftermath of diapers who had a pathology or complications during the gravido-postpartum period. Data were collected from obstetric record, the birthing register, the operating record registry, the post-abortion care registry and maternal death audit reports. **Results:** During our study we recorded 1009 patients, 335 were adolescent girls who had an obstetric complication or a frequency of 33,20%. The 18-19 age group was the most represented with a frequency of 50.5%. 60.3% of adolescent girls gave birth by caesarean section. The main obstetric complications found were postpartum hemorrhage with a frequency of 37.8%, eclampsia with a frequency of 31.9% and acute fetal suffering with a frequency of 20, 2%. **Conclusion:** Adolescence is a very fragile time in a woman's life. This period exposes him to multiple complications which may have repercussions on the functioning of his body in the future.

Keywords: Adolescent girl, Obstetric complications, Maternal-fetal prognosis, Hospital, Kayes.

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INTRODUCTION

Adolescence is a period of life that has long been ignored as well as its specific health needs. According to the World Health Organization (WHO), the term refers to people aged 10 to 19. It is a period of physical, psychic and social maturation that extends between childhood and adults [1]. There are one billion adolescents worldwide, 85% of whom live in developing countries [2]. This population is estimated at 22.6% in Mali [3]. In sub-Saharan Africa and specifically in Mali, the situation of teenage pregnancy is more complex because, when it occurs within a household, it is a factor of prosperity. Worldwide, more than 14 million teenage girls give birth each year. Although these births occur in all societies, 12.8 million, or more than 90% take place in developing countries [1]. In Mali 40-42% of girls give birth before the age of 18 [3]. Teenage pregnancy is a high-risk pregnancy due to age (body immaturity), special

circumstances including first pregnancy, low social status, low educational attainable status and unwanted pregnancy [1, 4, 5]. Indeed, it is in this age group that the morbidity and mortality rate is higher, as evidenced by several studies [6,7]. Adolescent girls aged 15 to 19 are twice as likely to die during childbirth as women aged 20 to 29. For girls under the age of 15, the risk is fivefold [6].

MATERIALS AND METHODS

This was a prospective, descriptive prospective study on obstetric complications in adolescents conducted in the obstetric gynecology department of FOUSSEYNI DAOU DE KAYES Hospital from January 01, 2018 to December 31 2018. The Kayes region is located in western Mali. It covers an area of 120760 km² and has 2665000 inhabitants. FOUSSEYNI DAOU HOSPITAL IN KAYES is a public hospital of 2nd reference with a capacity of about

160 beds divided between the services of medicine and medical specialties, gynecology-obstetrics, pediatrics, emergency, surgery and anesthesia-resuscitation. Data were collected from obstetric records, delivery registry, operating report registry, post-abortion care registry and maternal death audit reports. The study looked at adolescent girls who were pregnant, in labour or received from diapers who had a pathology or complications during the gravido-postpartum period in the obstetric gynecology department of the FOUSSEYNI DAOU DE KAYES hospital. The data was entered and analyzed with the French SPSS version 20 softwares. The word processing was done using Microsoft office 2013 software. Ethically, the identity of each patient has remained confidential. The study was conducted with the informed consent of patients or their parents. A code has been assigned to each teenage girl.

RESULTS

During our study period we recorded 335 cases of obstetric complications in adolescent girls out of a total of 1009 adolescent girls admitted to the obstetrics and gynecology department of fousseyni Daou Hospital in Kayes, a frequency of 33.20%.

Table-I: Patient Breakdown by Age Group

Age range	Effective	%
13-15 years old	36	10,7
16-17 years old	130	38,8
18-19 years old	169	50,5
Total	335	100

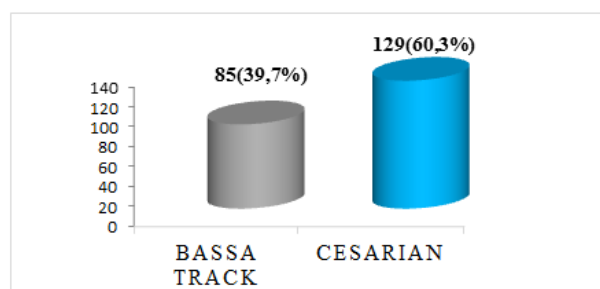


Fig-1: Distribution of patients by hospital delivery route

Table-II: Breakdown of Complications during Pregnancy

During pregnancy	Effective	%
Threat of abortion/abortion	20	12,7
Severe pre-eclampsia	18	11,5
Anemia on pregnancy	27	17,2
Extra-uterine pregnancy	4	2,5
Molar Pregnancy	2	1,3
Malaria on pregnancy	8	5,1
Placenta previa	9	5,7
Threat of pre-delayed delivery	4	2,5
Eclampsia pre partum	50	31,9
retroplacental hematoma	12	7,6

During pregnancy	Effective	%
prematurized rupture of membranes	3	2
Total	157	100

Table-III: Breakdown of Complications During Work

In the course of work	Effective	%
Lack of commitment	9	7,8
Generally retreci basin	16	14
Foeto-pelvic disproportion	10	8,7
Stationary dilation	1	0,9
Eclampsia per partum	15	13,2
Retro-placental hematoma	3	2,6
Acute fetal suffering	23	20,2
Introducing the shoulder	2	1,8
Macrosomia	6	5,3
Scarring uterus and boundary pelvis	5	4,4
Seat at Primigeste	12	10,5
Placenta previa covering	1	0,9
Failed labour test	7	6,1
reduced intergenetic interval on scarring uterus	2	1,8
Cord procidence	2	1,8
Total	114	100

Table-IV: Breakdown of Complications in Diaper Suites

Layer Suites	Effective	%
Endometritis	6	9,4
Post partum haemorrhage	24	37,5
Post partum psychosis	3	4,7
Post partum eclampsia	31	48,4
Total	64	100

Table-V: Distribution by Maternal Prognosis

Maternalprognosis	Effective	%
Healing	331	98,8
Deceased	4	1,2
Total	335	100

Table-VI: Distribution of Newborns by State at Birth

Newborn status	Effective	%
Living	183	85,5
Fresh stillborn	30	14
Stillborn macerated	1	0,5
Total	214	100

DISCUSSION

In our study of 1,009 adolescent girls admitted during the period, 335 had obstetric complications, representing a frequency of 33.2%. This result is higher than that of Sanogo M.M [9] who found a frequency of 12.11% in 2009 at the Reference Health Center of commune VI in Bamako. Our rate of obstetric

emergencies in adolescents is higher than the literature, so Eyenda D [10]. Had found a rate of 9, 93% and Bussière M [11]. A rate of 11.4%. In sub-Saharan Africa, adolescent obstetric emergencies are an important part of hospital activity due to early marriages, early motherhood and early sexuality among adolescent girls who are culturally encouraged or accepted in our societies. In Senegal Traoré N'Diaye A. [12], in a study on the statistical and epidemiological assessment of obstetric and gynecological emergencies at the Chu Aristide le Dantec in Dakar in 1989, reports that the 10-19 age group accounted for 15.75% of admissions. In Burkina Faso, Thiéba B et al. [13], in a 6-month prospective study on obstetric emergencies in the 10-19 year old had found that teenage girls accounted for 10.57% of admissions in 2000 to the maternity hospital yalgado Ouedraogo Ouagadougou. On the other hand in the same maternity in 1993 Zanré YZ [14]. Had found a higher rate of 16.7% of adolescent girls on all obstetric emergency room admissions. Early pregnancies are very common in developing countries. The frequency of complications during pregnancy, childbirth and in the aftermath of adolescent diapers is still the subject of debate. In our study the age group 18-19 years was the most represented with a frequency of 50.5%. Our result is slightly higher than that of Sanogo MM [9]. Which had found a frequency frequency of 50, 3%. On the other hand, very young adolescent girls (13-15 years) were the least represented with a frequency of 10.7%. This could be explained by the low practice of sexual activity and or by the generally anovulatory cycles during this period. Caesarean section was the delivery route in 60, 3% of adolescent girls. Our result is significantly higher than those of Diallo A [16]. Who had found a frequency of 21.73% and Traoré B [40]. Who had found a frequency of 21.04%. Our high rate of caesarean section can be explained by poor follow-up of teenage pregnancy on the one hand and by the high frequency of pelvic abnormalities on the other hand during this period. In our study the eclampsia of the pretum was the major complication with 50 cases or a frequency of 31.9%, followed by anemia with 27 cases either a frequency of 17, 2% and the threatened abortion /abortion with 20 cases or a frequency of 12, 7%. The high frequency of these different complications could be explained either by not carrying out antenatal consultations, or by the poor quality of antenatal consultations because it is during antenatal visits that these different pathologies can be detected and treated to avoid the appearance of complications. During labour acute fetal suffering was the most common complication with 23 cases with a frequency of 20.2% followed by mechanical dystocia (usually immature shrunk) with 16 cases or a frequency of 14% and pre partum eclampsia 15 cases or a frequency of 13.2%. These respective frequencies are higher than those of Diallo OH [15]. Which found 13, 38%, 10, 83% and 8,92% respectively. In the aftermath of diapers postpartum eclampsia was the most observed

complication with 31 cases with a frequency of 48. 4%, followed by postpartum hemorrhage with 24 cases or a frequency of 37, 5% and endometritis with 6 cases or a frequency of 9, 4%. The risk of maternal death during pregnancy, childbirth and childbirth evokes a tragedy when this event occurs in a teenager who has her whole life in front of her. During our study we recorded 4 maternal deaths, representing a maternal mortality rate of 1.2%. This rate is significantly lower than that of Coulibaly F [19]. Who had found a maternal death rate of 12% among adolescent girls under the age of 18. These deaths could be attributed to the lack of resuscitation and intensive care services as well as the lack of a blood transfusion centre in the Kayes region as these different deaths occurred either in the context of eclampsia or the hemorrhage of the complicated postpartum of severe anaemia. We also recorded 31 cases of stillborn or a frequency of 14, 5%. Of these 31 cases, 30 were fresh stillbirths (14%) and 1 was a stillborn macerated or 0.5%. This stillbirth rate is higher than Libbey J [18]. Who had found a rate of 7, 1% and Dembélé S [8]. Who had found a rate of 5.2%. This high rate of stillbirth could be explained by the failure or poor quality of antenatal consultations to be due to the lack of access of adolescent girls to health facilities during pregnancy, low socio-economic status, non-schooling and lack of desire for pregnancy.

CONCLUSION

Adolescence is a very fragile period in a woman's life, this period exposes her to risks and multiple obstetric complications that can have a huge impact on the functioning of her body in the future. These different complications can occur during pregnancy, labour or in the aftermath of diapers. The main complications observed during our study were postpartum hemorrhage with a frequency of 37.8%, eclampsia with a frequency of 31. 9% and fetal suffering with a frequency of 20, 2%. These various obstetric complications are related to the immaturity of the adolescent's body during the gravido-postpartum period and socio-economic factors.

REFERENCES

1. WHO. Adolescent health and development: the key to the future. 61st ed. Geneva; 1995.
2. Noble J, Cover G, Manciaux M. Youth in the World. Paris; 1996.
3. EDS V. Planning and Statistics Cell. Ministry of Health, National Directorate of Statistics and Computer Science Ministry of Economy, Industry and Trade. Bamako – Mali; 2012.
4. Hamada H, Zaki A, Nejjiar H, Filali A, Chraibi C, Bezard R. Pregnancy and childbirth in adolescent girls under the age of 16 at the Orangers maternity ward, Rabat, Morocco. About 311 cases. J Gynecol Obstet Biol Reprod. 2004;(33) :607- 14.
5. Anta Tal D, Issakha D, Francis G, Jean Pierre D. Prognostic factors of complications of pregnancy

- and childbirth in adolescents and their newborns in Senegal. French-language study and research papers / Health. Nov 2001;11(4):221-8.
6. Reynold H, Wright K, Olukoya A, Neelofur-kan D. Adolescent Maternal Care Optic'Jeune, Reproductive Health and HIV/AIDS Serial publication. 2004;(11):1 - 4.
 7. Carles G, Jacquelin X, Raynal P. Pregnancy and childbirth in adolescent girls under the age of 16 study of 150 cases in French Guiana. *JGyn Obst Biol Reprod.* 1998;27(5):508- 13.
 8. Dembélé S. Adolescent childbirth at the Dioila Reference Health Centre [Medicine Thesis No77]. [Bamako-Mali]: FMPOS; 2009.
 9. Sanogo M. Teenage delivery at the reference health centre of commune VI [Medicine Thesis 45]. [Bamako-Mali]: FMPOS. 2012.
 10. Eyenda Dooh A. Pregnancy and teen delivery: About 464 cases recorded at the Lagoon maternity hospital in Cotonou [Medicine Thesis 892]. [Cotonou]: Cotonou; 2000.
 11. Bussière M. Maternity activity in Marrakech (Morocco) from 1527 files [Medicine thesis]. [Paris]: Creteil; 1982.
 12. Traore N'diaye A. Statistical and epidemiological assessment of obstetric and gynecological emergencies at the CHU-YO. Aristide Le Dantec. [Medicine Thesis No6]. [Dakar]: Cheich Anta Diop; 1991.
 13. Thieba B, Ouédraogo A, Ouattara T, Akontionga M, Lankoande J, Koné B. Adolescents and gynaecological-obstetric emergencies of the maternity hospital of the CHU-YO in Ouagadougou. *Burkina Med*; 2001.
 14. Zanré Y. Evaluation of the quality of care in the obstetrics and gynecological department of the CHU-YO [Medicine Thesis No. 13]. [Ouagadougou]: Ouagadougou; 1993.
 15. Diallo O. Gyneco - adolescent obstetrical emergencies at the Reference Health Centre of Commune V of Bamako District [Medicine Thesis No. 13]. [Bamako-Mali]:FMPOS; 2008.
 16. Diallo A. Adolescent birth at the commune VI reference health centre [Medicine Thesis No. 146]. [Bamako-Mali]: FMPOS; 2013.
 17. Traore B. Teenage giving-up at the maternity ward of the Ségou-Mali Regional Hospital Centre. *Black Africa.* 10. Bamako-Mali; 449-54.
 18. Libbey J. Maternofoetal prognosis. 2007; Available on: www.john-libbey-eurotext.fr
 19. Coulibaly F. Qualitative study of the causes of maternal mortality in Bamako in the case of 25 clinical cases [Medicine Thesis No.40]. [Bamako-Mali]:FMPOS; 1995.