Scholars Journal of Applied Medical Sciences
Abbreviated Key Title: Sch J App Med Sci
ISSN 2347-954X (Print) | ISSN 2320-6691 (Online)
Journal homepage: www.saspublishers.com

OPEN ACCESS

Gynecology & Obstetrique

Artificial Release of Childbirth Labor: Knowledge, Skills and Practices by Midwives in Five Health Districts of Lome

Akila Bassowa[1*], Baguilane Douaguibe[2], Dede Ajavon[3], Kodjo Fiagnon[1], Samadou Aboubakari[4], Koffi Akpadza[1]

[1]Departement of Gynecology and Obstetrique, Sylvanus Olympio Teatching Hospital,University of Lome, Togo
[2]Departement of Gynecology and Obstetrique, Campus Teatching Hospital,University of Lomé, Lome Togo
[3,4]Departement of Gynecology and Obstetrique, Hospital Center of Kara, University of Kara Togo

***Corresponding author:** Akila Bassowa
| **Received:** 08.03.2019 | **Accepted:** 25.03.2019 | **Published:** 30.03.2019
DOI: 10.36347/sjams.2019.v07i03.096

Abstract **Original Research Article**

Objective*:** To assess the level of knowledge of midwives in maternity wards in the five health districts of Lomé. ***Methodology: This is a prospective cross-sectional study of midwives in Sylvanus-Olympio teatching university hospital center, Campus teatching university hoepital center, regional hospital of Lomé Commune, District No. 2 and District 3 maternity wards was conducted over a period of one month (from June 1 to June 30, 2018). 65 cards were distributed and 53 were collected. ***Results:*** Artificiel release of childbirth (DAT) is one of the frequent interventions in maternity wards in the five Lomé districts; 64% of midwives in this study knew the definition of DAT, 53%, 57%, 55% knew the definition and interest of Bishop's score; the scoring parameters of the score and the interpretation of the score. The midwives who informed their patients about the risks of DAT were 30% and they performed DAT on average 06 times a week. ***Conclusion:*** Despite a frequent exercise of DAT, some points of this intervention remain little known and often neglected by midwives.

Keywords: Assess, Lomé, cross-sectional study, Sylvanus-Olympio, childbirth, midwives.

INTRODUCTION

Childbirth, which is in fact a natural phenomenon that begins at the beginning of the labor of delivery, results in the birth of the fetus and its appendages outside the maternal genital tract, is nowadays taken on the margin of the artificial induction of labor.

Artificial labor induction, a medical procedure that is a common practice in the delivery room, is defined as the set of obstetric techniques that can lead to natural birth delivery sooner than nature would have done [1, 2].

According to the High Authority of Health the artificial activation of work is defined as a medical intervention intended to artificially induce uterine contractions which cause the gradual erasure and dilation of the cervix and lead to the birth of the baby; she recommends artificial induction of labor from 37 weeks of amenorrhea. This recommendation addresses the medical and non-medical indications of an artificial induction of labor [1].

In developed countries, up to 25% of women benefit, while in developing countries, rates are generally lower but increasing [1]. In Mali, in Bamako in the gynecology and obstetrics department of the G-spot hospital, the rate of onset was 2.49% [3]; 2.31% at the University Hospital Center of Cocody in Abidjan [4]; this rate was 15% in Pakistan [5]. In France, nearly one out of five births is triggered [6].

In view of its medical indications and conditions of its realization, the artificial activation of the work makes it possible to positively influence the maternal and fetal prognosis. But there are many failures in the realization of this medical procedure as ARNAULD Marie points out in his study on the association between the body mass index and outcome of the trigger, the failure rates vary from 10% to 30%. % [7] hence the need for this study which has the general objective of assessing the level of knowledge and aptitude of midwives on the artificial induction of work in the various hospitals of the five districts of the city of Lome.

METHODS AND FRAMWORK

Our study was conducted in maternity wards of the Sylvanus Olympio University Hospital (CHU-SO), the campus CHU, the CHR-Lome Commune the district hospital No. 3 and the district hospital No. 2.

this is a prospective cross-sectional study. This study was carried out during the month of June 2018. The study population concerned the midwives practicing in the maternity hospitals of the health facilities mentioned above.

Included in this study were midwives practicing in the above-mentioned health facilities who agreed to answer the questionnaires. The data was analyzed with the software EPI INFO version 3.5.4. The results obtained were presented in the form of tables or figures.

RESULTS

Identification of the midwife

Distribution of midwives by age. 69% of midwives were between 28 and 42 years old.

Distribution of midwives by level of education

87% of the sages had the license as the level of education.

Table-I: Distribution of midwives by age group

Years	(n)	(%)
23-27	10	19%
28-32	12	23%
33-37	12	23%
38-42	12	23%
43-47	2	4%
48-52	3	6%
Not indicated	2	4%
Total	53	100%

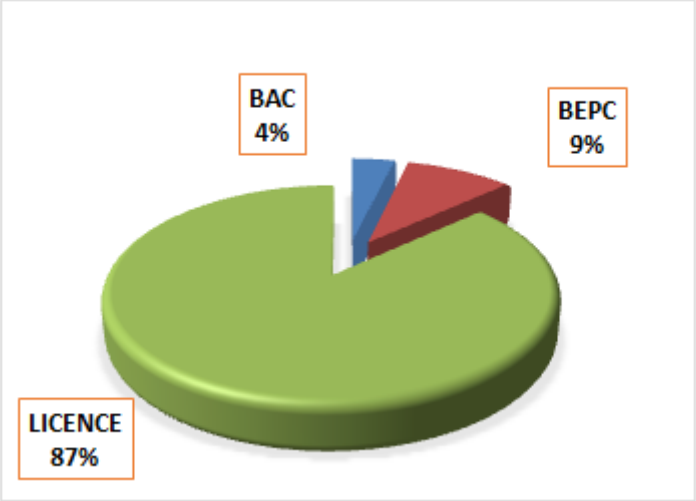

Fig-1: Distribution of midwives by level of education

Distribution of midwives according to their center of practice

Among the midwives who were. The subject of our study, 38% were on duty at CHR.

Distribution of midwives according to their professional experiences.

38% of midwives had 6 to 10 years of work experience.

Table-II: Distribution of midwives by their center of practice

	(n)	(%)
Chu*	14	26
Chr**	20	38
District N 2	17	32
District n 3	02	04
Total	53	100

Chu *:teatching university hospital chr** :regional hospital

Table-III: Distribution of midwives according to their professional experience.

(years)	(n)	(%)
1-5	15	28
6-10	20	38
11-15	11	21
16-20	04	08
21-25	02	04
26-30	01	02
Total	53	100

Knowledge of midwives on the artificial activation of work

64% of midwives knew of the interest of the DAT. Of the midwives interviewed, 72% were aware of maternal indications, 30% of midwives were aware of fetal indications of DAT, and 57% of midwives were aware of contraindications for artificial induction of labor. 53% of midwives were aware of the definition and value of Bishop's score In our study, 57% of midwives were aware of the rating parameters for Bishop's score.

Table-IV: Knowledge of midwives on the artificial activation of work

	(n)	%
Interest of the DAT*		
Good	34	64
Incomplete	10	19
Incorrect	9	17
Total	53	100
Maternal indications of DAT		
Good	34	64
Incomplete	10	19
Incorrect	09	17
Total	53	100
Fetal indications of the DAT		
Good	38	72
Incomplete	8	15
Poor	07	13
Total	53	100
Against indication to the DAT		
Good	16	30
Incomplete	26	49
Incorrect	11	21
Total	53	100
Definition and interest score Bishop		
Good	30	57%
Incomplete	18	34%
Incorrect	5	9%
Total	53	100%
Bishop's Score Rating		
Good	28	52,83
Incomplete	20	37,74
Incorrect	5	9,43
Total	53	100
Bishop score interpretation		
Good	29	54,72
Incomplete	18	33,96
Incorrect	6	11,32
Total	53	100

DAT*: Artificiel release of childbirth

Knowledge of midwives on what to do in case of an unfavorable Bishop.

Forty percent of midwives knew that caesarean section was the best practice for an unfavorable Bishop.

Distribution of midwives on their level of knowledge of maternal and fetal techniques and risks of SWD

76% of midwives were aware of the drug techniques used in an artificial induction of labor. 37.73% of midwives in our study gave an incomplete response of mechanical techniques for DAT. As for the risks of DAT, they were known only by 40% of midwives.

Table-V: Distribution of midwives according to their level of knowledge of what to do if the Bishop is unfavorable

	(n)	(%)
Cervical maturation	13	24.52
Cesarean	40	75.47
Total	53	100

Table-VI: Distribution of midwives on their level of knowledge of maternal and fetal techniques and risks of DAT

	(n)	(%)
Drug technique of DAT*		
Good	40	75,47
Incomplete	11	20,75
Poor	2	3,77
Total	53	100
Mechanical means of the DAT		
Good	18	33,96
Incomplete	20	37,73
Bad	15	28,30
Total	53	100
Maternal and fetal risks		
Good	21	40
Incomplete	15	28
Incorrect	17	32
TOTAL	53	100
Conditions to be respected before a DAT		
Good	21	40
Incomplete	14	26
Incorrect	17	32
Not specified	01	02
Total	53	100

DAT*: Artificiel release of childbirth

Patient Information on the risks of DAT

Of the midwives in our study, 36% seldom did so.

Monitoring after induction of work

87% of midwives monitored parturients after induction of labor.

Table-VII: Distribution of midwives in relation to information given to patients

	(n)	(%)
Each time	16	30
Never	04	08
Some times	14	26
Rarely	**19**	**36**
Total	53	100

Table-VIII: Distribution of midwives on surveillance after induction of labor.

	(n)	(%)
Yes	46	87
No	05	09
Not specified	02	04
Total	53	100

Practice of artificial induction of work by midwives

Midwives very often perform the artificial induction of work on average 06 (six) times the DAT per week, of which 04 successes and 02 failures on average.

DISCUSSION

Difficulty and bias of the study

During our study, we faced some difficulties related to:

- To the refusal of some midwives to answer the questionnaires
- The unavailability of some midwives.

Strengths and weaknesses of the study

Strengths

This study highlighted some of the shortcomings of midwives in the knowledge and skills of midwives in the practice of initiating work.

Weaknesses

This study would benefit from being cross-cutting in terms of all midwives throughout the country. This would help to understand the extent of the problem.

Socio demographic characteristics

Number of midwives surveyed

In total, there were 81 state midwives practicing in the maternity hospitals of CHU SO, CHU Campus; CHR LC; District No. 2 and No. 3. A total of 65 survey cards were distributed and 53 cards were suitably completed and therefore usable.

Age

In this study, 69% of midwives were aged between 28 and 42 years old. The average age of midwives was 35 years with extremes between 23 and 52 years old

Professional experience

In this series, 20 or 38% of the midwives had professional experience of between 6 and 10 years.

Knowledge of midwives on the artificial activation of work

On average, 64% of midwives were familiar with the definition and interests related to DAT were known in 18%. In the course of our study, 72% were familiar with the maternal indications of the DAT. This could be due to the fact that 38% of midwives interviewed had at least 10 years of professional experience and would regularly practice DAT.

In this study, 26 midwives or a 49% rate are not fully aware of fetal indications. The high proportion in our study could be explained by the fact that in Togo the duration of the professional exercise is greater than or equal to 20 years, the midwife is removed from the block, the delivery room and is transferred to services such as antenatal care, family planning, childbirth and pathological pregnancy. 57% of the midwives had a good knowledge of the indications of DAT and this is explained by the existence of well established protocols displayed in the centers that were the subject of our study.

Bishop's score

52.82% of midwives were aware of the definition and 56.60% of the scoring parameters. These rates are due to the display of the pelvic index table of the Bishop's score in the delivery rooms. This rate on knowledge deserves to be emphasized, especially since most authors agree that during the induction of labor, the Bishop's score is one of the essential parameters of the prognosis of the patient. Vaginal delivery [8-10]. On average, 54.72% of midwives had good knowledge of the interpretation of Bishop's score. Mariam DOLO in Mali, in Bamako in 2010 in her study on the use of misoprostol in the maternity center of the reference center of the commune V estimates that this score not only allows to make the prognosis of the trigger but also to guide the choice of the appropriate method [8]. 75.47% of midwives used caesarean section with an unfavorable Bishop score versus 24.52% who had cervical ripening.

Methods and techniques for a DAT

40% of midwives (75.47%) were aware of the techniques that should be used in an artificial induction of work. The high level of knowledge of the drugs used in the induction of work is explained by the fact that among these five centers taken into account by the study there are reference centers. And through the health policy of securing essential medicines, the Family Health Division provides these centers with free of charge these products in order to guarantee the health of the population through the provision of quality care services.

Patient Information on DAT

With regard to informing patients about the artificial induction of labor, 19 midwives (36%) rarely gave it against 16 midwives, or 30% who gave it each time. This state of things would be explained by:

- lack of team time;
- Pregnant women are often sufficiently informed about the trigger especially of convenience; the latter is based on the relationship of trust between midwives and their patients
- Overwork, lack of staff and working conditions.

Midwives practice of SWD

The majority of midwives (77%) often performed DAT and averaged 06 DAT per week including 04 successes and 02 failures. In general, the frequency of onset is very variable from one region to another and even from one health facility to another [11]. In the year 2000 this rate was 20.3% in France 6. This difference between European and developing

countries in terms of induction of work could be explained by the large number of DATs for convenience In these countries.

CONCLUSION

Our study has shown that the artificial induction of labor is a common practice in maternity hospitals in the 05 health districts of Lomé. Despite its frequency in obstetrical practice, artificial disruption remains partially known by midwives because of its numerous counter indications and conditions to be respected before its implementation, and the procedures to be followed in case of special or risky pregnancies. It should also be noted that due to lack of time and insufficient staffing, midwives do not inform women about the risk of DAT. They should inform the patients about the available methods and put on the available methods and put a balance of advantage and the disadvantages of the different methods.

REFERENCES

1. High Authority of Health. Artificial release of labor from 37 weeks of amenorrhea. Nanterre: Olivier Meignen, April. 2008.
2. Blandine Poitel Childbirth Scheduling: Sirens of All-Power. Bpoitel (at) yahoo.fr. 2000.
3. Mamadou Sangaré. Artificial delivery of labor in the Gynecology and Obstetrics Department of G Bamako Hospital (about 110 cases). Thesis Med. Bko. 2001; 96:56.
4. Tankaoua T J-C. Artificial delivery of labor: methods, indications and results about 150 cases collected at the CHU of Cocody. Memory of gynecology and obstetrics, Abidjan. 1996.
5. Diakaria Diallo. Artificial delivery of labor: predictive criteria for success and maternal-fetal prognosis Memory of gyneco-obstetrics Bamako. 2009.
6. Association of Computer Users in Pediatrics, Obstetrics and Gynecology. Lyon: INSET, coordination center. 2004.
7. Marie Arnould. Artificial release of work: study of the association between IMC and the outcome of the outbreak.2014.
8. Mariam Dolo. Artificial release of child labor: use of misoprostol in the maternity center of the reference center of commune V. Thesis Med. Bamako. 2010.
9. Berland M. Artificial delivery of labor: Encyclical. Med Chir (Elsevier, Paris), obstetrics. 1997.
10. Robert Merger, Jean Levy, Jean Melchior. Precis of obstetrics 6th edition, Masson, Paris. 2003.
11. Cabrol D, PONS J-C, Goffinet F Treaty of obstetrics. Ed Flammarion.2005; 11(54) :781-786
12. Caeymaex L, Speranza M, Vasilescu C, Danan C, Bourrat MM, Garel M, Jousselme C. Living with a crucial decision: a qualitative study of parental narratives three years after the loss of their newborn in the NICU. PLoS One. 2011 Dec 14;6(12):e28633.
13. Doctor Benchimol. Bishop's score. Paris: Dr. Yehouda Benchimol, June. 2008.
14. World Health Organization. WHO recommendations for the prevention and treatment of postpartum haemorrhage. World Health Organization; 2012.
15. Magnin G. Artificial delivery of labor: In J Lansac; G Body, eds. Practice of childbirth, 2nd edition SIMEP, Paris. 1992:245-261.
16. Berland M. Physiology of spontaneous labor induction Encyclical. Med Editions Techniques (Paris-France); obstetrics. 1995.
17. Abirached F, Haddad B, Garnier A, Cabrol D. Artificial release of term labor: In: E Papernik, D. Cabrol, J-C Pons, eds. Obstetrics, Paris: Medicine sciences Flammation. 1995: 1117-1129.
18. Kouam L; Kamdoum Mayo J, Shasha W, Ngassa P. The induced work: conditions of success and causes of failure, a prospective study of 162 cases. Review Fr Gynecol obstet. 1993; 88 (4): 243-250.
19. Cabrol. D. Techniques of the artificial activation of the work. In: Tournaire M. Updates in Gynecology and Obstetrics. 1995.
20. Petrovic Barbitch M, Gnisci A, Marcelli M, Guidicelli B, Cravello L. Cervical maturation by repeated use of the intravaginal dinoprostone device.. Gynecology Obst. 2013 41: 346-350
21. Baev OR, Rumyantseva VP, Tysyachnyu OV, Kozlova OA, Sukhikh GT. Outcomes of mifepristone usage for cervical ripening and induction of labour in full-term pregnancy. Randomized controlled trial. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2017 Oct 1;217:144-9.
22. Mazoumi C, Provensal M, Ménard J-P, Heckenroth H, Guidicelli B, Gamerre M, Bretelle F. Use of the vaginal device Propess in the artificial activation of work: efficiency and safety. Gynéco Obstet & Fert. 2006 ; 34: 489-492.