ABSTRACT
The major question at the center of this study is the model for reading maternal and neonatal health problems in developing countries. On the subject, the demographic, epidemiological and statistical literature has accustomed us to a reading model based on observation and analysis at the micro-individual scale. The unit of analysis is the individual. This classic model of analysis, based on sociodemographic variables, has some effectiveness / relevance, but is still limited. It appears partial and static. In contrast to this individualistic and fixed approach, we propose a dynamic and community-based observation scale that induces the concept of "reproductive transition". The reproductive transition is defined as the transition from a high-risk situation in a community to a lower-risk situation over a sustainable period in reproductive health. Indeed, the operational approach leads us to four types of expected results that are four possible trends of sociological evolution of this reproductive health. These expected results are:
- The transition started; the problems are decreasing.
- The stationary situation; there is neither growth nor decay.
- The transition is mixed; some problems are growing, others are decreasing.
- The alarming situation; all problems have an ascending pace.
"Reproductive transition" thus appears as an innovative model for reading reproductive health problems. Its scale of observation is the community and not the individual. It thus constitutes a relevant health surveillance support for communities where maternal, neonatal and infant morbidity and mortality appear to be endemic.

Keywords
Anthropology of health, Maternal health, Neonatal health, Observation scale, Reproductive health, Transition.

Introduction
Maternal morbidity and mortality are endemic in sub-Saharan Africa. At the national level, both in Africa and abroad, several initiatives have been developed to control this situation. The following can be mentioned among other international initiatives:
• Beijing Conference in China in 1984,
• The 1994 International Conference on Population and Development in Cairo, Egypt,
• MDG 4 in 2000,
• Accelerated Reduction of Maternal Mortality in 2009, in Ethiopia,
• Etc.

As a result of these multiple actions, there have been mixed fortunes from one country to another. The 2015 results published by WHO demonstrates this with such comments as "no progress" or "little progress" [1]. African countries registered under "securing progress" are few and far between. As a result, one wonders: ‘What relevant control mechanism is to be put in place to achieve more sustainable maternal, neonatal and child health?’

This is a significant question that has led me to the hypothesis of the "reproductive transition" concept. What are epistemological foundations of this concept? What does this "reproductive
transition” concept mean? What results has it given in its experimental implementation? What scientific consequences can be drawn from it?

Methodology
Methodology concerns design of the reproductive transition.

Initial question
Let me recall my initial question: “What relevant control mechanism is to be put in place to achieve more sustainable maternal, neonatal and child health?”

Working hypothesis
From this central question, I have formulated a main hypothesis. Here it is:

“A control mechanism to be put in place for more sustainable reproductive health is a model that requires a community-scale observation, a rigorous operational definition and a dynamic analysis of the reproductive fact.”[2]

- Community-scale observation – geographically, it is a health area that covers one or more villages within a District. A health area is the smallest spatial unit according to a health administrative division. It constitutes the community-scale observation.
- Operational definition – a reproductive fact is a reality consisting at least of three dimensions: demographic dimension attested by fertility (teenage pregnancy, closeinterval pregnancy, multiple pregnancy, and pregnancy over age 35); ethnological dimension (unassisted childbirth, inadequate prenatal consultations, out-of-date neonatal vaccines) and epidemiological dimension (abortion, indirect causes and direct causes of mortality);
- Dynamic analysis – the reproductive fact of a community is never fixed. It changes; how does it change over time? Why does it change? who are actors behind the change? The collective reproductive reality in a given geographical area undergoes a law of evolution. It is important to master this law of evolution.

I have been led by this conceptualization to develop the figure 1:

| Components | Demographic Dimension | Ethological Dimension | Epidemiological Dimension |
|------------|------------------------|-----------------------|---------------------------|
| Reproductive Risk Behaviours (RRB) | Teenage pregnancy | Unassisted childbirth | - Abortion |
| Pregnancy over age 35 | Premature visits fewer than 4 | Direct medical causes | - Direct medical causes |
| Multiple pregnancy | Out-of-date neonatal vaccines | - Premature birth |

Figure 1: Reproductive Transition” basic structure [3].

Concept definition
"Reproductive transition is identified with a theory of change applied to human reproductive life. It assumes a simultaneous downward trend, over a sustainable period, risk factors in the three demographic, ethnological and epidemiological dimensions of reproductive health in a given community ”(ABE 2013, 48) [3].

Observation relies on measurable indicators. Indicators to be taken into account in the approach are those considered risk factors, stemming from the three dimensions of the reproductive fact.

Data collection techniques
Data source: In the context of "Reproductive Transition", a midwife's "birth registry" in a maternity ward is the source of data to be collected (ABE, op cit.89-97) [2].

Observation period: "Reproductive transition" is defined as a theory of change. This aims to explain and understand the evolution of the reproductive lives of communities between T1 and Tn time.

T1 is the year considered starting point, and Tn being the last year. The time interval separating T1 and Tn lay extend over a longer or shorter period: three, five, eight, ten or fifteen years, depending on the availability of data and / or a particular objective to be achieved. In this specific context, a survey to be conducted remains retrospective in nature. Data processing follows data collection.

Data processing
Implementing "Reproductive Transition" is a process. Outcomes highlight two types of elements:
- Level of a specific problem – Being translated as an annual average;
- Trend of a specific problem – In the latter case, there are four possible results:

Initiated transition: The three risk factors of the reproductive fact (RRB, RRP, MSR Reproductive Health Morbidity) simultaneously show a decreasing systematic rate from T1 to Tn;

Static situation: The three risk factors of the reproductive fact (CPR, PGR, MSR (Reproductive Health Morbidity) simultaneously show a fixed rate from T1 to Tn;

Alarming transition: The risk factors have a predominantly increasing trend over the period T1 to Tn;

Mixed transition: Mixed transition occurs over the period T1 to Tn when:
- either ⅔ of the risk factors have a decreasing trend;
- or ⅓ of the risk factors have a static trend.

The "reproductive transition" theory stems from this variety of results of the reproductive fact over time, within different communities. The ideal form is that of the initiated transition in all three cases: RRB; RRP; and MSR (Reproductive Health Morbidity). What results did the experimental studies show?
Results

Application cases to be presented involve three geographical areas of Côte d'Ivoire, which are ADIAKE, AZAGUIE and SIKENSI, lagoon localities. I will present for these areas, reproductive behaviours, reproductive practices and maternal morbidities.

Reproductive risk behaviours (RRB)

Levels and trends over a five-year period will be examined (2008-2012).

Levels of reproductive risk behaviours

ADIAKE area: Teenage pregnancy identified as the major recurring issue in Adiaké area (Table 1).

| Health area   | Reproductive risk behaviour | Annual average (%) | Prevaling issues     |
|---------------|----------------------------|--------------------|----------------------|
|               | Teenage pregnancy          | Pregnancy overweight | Multiple pregnancy |
| Assinie France| 60.91                      | 64.72              | 63.93                | Teenage pregnancy |
| Assinie Mafin | 04.20                      | 03.35              | 03.44                | Teenage pregnancy |
| Adiégré       | 10.80                      | 09.98              | 09.49                | Teenage pregnancy |
| Assoulon      | 06.58                      | 07.52              | 06.48                | Teenage pregnancy |
| Kakoukro      | 12.03                      | 07.25              | 05.79                | Teenage pregnancy |
| Mélékoukro    | 11.58                      | 10.62              | 09.27                | Teenage pregnancy |

Finding 1: Teenage pregnancy identified as the major recurring issue in Adiaké area.

AZAGUIE area: Teenage pregnancy remains the prevailing reproductive risk behaviour in Azaguié (Table 2).

| Health area   | Reproductive risk behaviour | Annual average (%) | Prevaling issues     |
|---------------|----------------------------|--------------------|----------------------|
|               | Teenage pregnancy          | Pregnancy overweight | Multiple pregnancy |
| Achiéko      | 36.25                      | 08.75              | 07.50                | Teenage pregnancy |
| M'Bromé      | 46.08                      | 13.47              | 08.25                | Teenage pregnancy |
| Grand Yapo   | 14.65                      | 08.89              | 06.57                | Teenage pregnancy |
| Azaguié      | 08.16                      | 10.43              | 06.83                | Pregnancy overweight |

Finding 2: Teenage pregnancy remains the prevailing reproductive risk behaviour in Azaguié.

SIKENSI area: Multiple pregnancy appears as the reproductive risk behaviour in Sikensi district (Table 3).

| Health area   | Reproductive risk behaviour | Annual average (%) | Prevaling issues     |
|---------------|----------------------------|--------------------|----------------------|
|               | Teenage pregnancy          | Pregnancy overweight | Multiple pregnancy |
| Bakoumou B   | 09.80                      | 06.89              | 07.48                | Teenage pregnancy |
| Bécedi       | 04.71                      | 03.22              | 06.81                | Multiple Pregnancy |
| Elbou        | 07.99                      | 07.87              | 08.49                | Multiple Pregnancy |
| Gomoni       | 01.06                      | 0.81               | 25.74                | Multiple Pregnancy |
| Sahnuyé      | 09.64                      | 08.65              | 13.12                | Multiple Pregnancy |
| Sikensi      | 10.22                      | 07.88              | 07.22                | Teenage pregnancy |
| Yaobou       | 08.87                      | 06.84              | 10.91                | Multiple Pregnancy |

Finding 3: Multiple pregnancy appears as the reproductive risk behaviour in Sikensi district.

Reproductive risk behaviour trends

ADIAKE area: Of the six health areas in ADIAKE area, five present an alarming trend in terms of reproductive risk behaviours (Table 4).

| Health areas | Reproductive risk behaviour | Annual average (%) | Prevaling issues     |
|--------------|----------------------------|--------------------|----------------------|
| Assinie France | Teenage pregnancy         | Pregnancy overweight | Multiple pregnancy |
| Assinie Mafin | Teenage pregnancy         | Pregnancy overweight | Multiple pregnancy |
| Adiégré       | Teenage pregnancy         | Pregnancy overweight | Multiple pregnancy |
| Assoulon      | Teenage pregnancy         | Pregnancy overweight | Multiple pregnancy |
| Kakoukro      | Teenage pregnancy         | Pregnancy overweight | Multiple pregnancy |
| Mélékoukro    | Teenage pregnancy         | Pregnancy overweight | Multiple pregnancy |

Finding 4: Of the six health areas in ADIAKE area, five present an alarming trend in terms of reproductive risk behaviours.

AZAGUIE area: Of the four health areas in AZAGUIE area, two show a mixed trend and two others show an alarming trend in reproductive risk behaviours (Table 5).

| Health areas | Reproductive risk behaviour | Annual average (%) | Prevaling issues     |
|--------------|----------------------------|--------------------|----------------------|
| Achiéko      | Static pace                | Downward pace      | Downward pace        |
| M'Bromé      | Upward pace                | Upward pace        | Upward pace          |
| Grand Yapo   | Upward pace                | Downward pace      | Downward pace        |
| Azaguié      | Upward pace                | Upward pace        | Upward pace          |

Finding 5: Of the four health areas in AZAGUIE area, two show a mixed trend and two others show an alarming trend in reproductive risk behaviours.

SIKENSI area: The configuration of SIKENSI gives one case of transition trend; three cases of mixed trend and three cases of alarming trend (Table 6).

| Health areas | Reproductive risk behaviour | Annual average (%) | Prevaling issues     |
|--------------|----------------------------|--------------------|----------------------|
| Bakoumou B   | Downward pace              | Downward pace      | Downward pace        |
| Bécedi       | Downward pace              | Downward pace      | Downward pace        |
| Elbou        | Downward pace              | Downward pace      | Downward pace        |
| Gomoni       | Downward pace              | Downward pace      | Downward pace        |
| Sahnuyé      | Downward pace              | Downward pace      | Downward pace        |
| Sikensi      | Upward pace                | Upward pace        | Upward pace          |
| Yaobou       | Upward pace                | Upward pace        | Upward pace          |

Finding 6: The configuration of SIKENSI gives one case of transition trend; three cases of mixed trend and three cases of alarming trend.

Partial Conclusion 1

This analysis shows that reproductive risk behaviours (RRB) do not appear uniform between zones. Moreover, even if apparently,
there are common prevailing issues, the situations do not have the same extent (ex: Assinie Mafia and Mbromé).

**Reproductive Risk Practices (RRP)**

Levels and trends will be analysed over a five-year period.

**Levels of reproductive risk practices**

**ADIAKE area:** Inadequate PN are revealed as the prevailing collective issue in Adiake area (Table 7).

**Table 7:** Variation in the level of reproductive risk practices Unassisted childbirth; Out-of-date vaccines; Inadequate Prenatal Consultations (CPN);

| Health areas | Reprod. Risk practices | Annual average (%) | Prevaling issues |
|--------------|------------------------|--------------------|------------------|
| Assinie France | Unassisted childbirth | 26.65 | 37.04 | 44.69 | Inadequate Prenatal Consultations |
| Assinie Mafia | Out-of-date vaccines | 25.53 | 14.32 | 42.39 | Inadequate Prenatal Consultations |
| Adiaké | Inadequate Prenatal Consultations | Assomlan | 15.25 | 12.99 | 61.69 |
| Kakoukro | Inadequate Prenatal Consultations | Méleckoukro | 21.19 | 28.91 | 49 |
| | Inadequate Prenatal Consultations | 15.63 | 18.35 | 76.65 |
| 25.49 | 21.04 | 49.17 |

**Finding 7:** Inadequate PN are revealed as the prevailing collective issue in Adiake area.

**AZAGUIE area:** CPN inadequacy accounts for the prevailing major issue in Azaguié (Table 8).

**Table 8:** Variation in the level of reproductive risk practices.

| Health areas | Reprod. Risk practices | Annual average (%) | Prevaling issues |
|--------------|------------------------|--------------------|------------------|
| Achiéko | Unassisted childbirth | 35.83 | 16.66 | 11.25 | Unassisted childbirth |
| M'Bromé | Out-of-date vaccines | 45.55 | 01.48 | 67.60 | Inadequate Prenatal Consultations |
| Grand Yapo | Inadequate Prenatal Consultations | Azaguié | 08.52 | 09.96 | 29.37 |
| | Inadequate Prenatal Consultations | 22.15 | 10.16 | 54.41 |

**Finding 8:** CPN inadequacy accounts for the prevailing major issue in Azaguié.

**SIKENSI area:** "Insufficient CPNs" are the major recurring problem in SIKENSI area (Table 9).

**Reproductive risk practices trends**

**SIKENSI area:** Six health areas are divided fairly among three trends: two cases of initiated trend; two cases of mixed trend and two cases of alarming trend (Table 10).

**Table 10:** Trends in reproductive risk practices.

| Reprod. Risk practices | Health areas | Unassisted childbirth | Out-of-date vaccines | Inadequate Prenatal Consultations | Evolution trends |
|------------------------|--------------|-----------------------|----------------------|----------------------------------|-----------------|
| Assinie France | Downward pace | Upward pace | Upward pace | Alarming trend |
| Assinie Mafia | Downward pace | Downward pace | Downward pace | Transition trend |
| Adiaké | Upward pace | Downward pace | Downward pace | Mixed trend |
| Assomlan | Downward pace | Downward pace | Upward pace | Mixed trend |
| Kakoukro | Downward pace | Downward pace | Downward pace | Transition trend |
| Méleckoukro | Upward pace | Upward pace | Upward pace | Alarming trend |

**Finding 10:** Six health areas are divided fairly among three trends: two cases of initiated trend; two cases of mixed trend and two cases of alarming trend.

**AZAGUIE area:** Four health areas are distributed as follows: two cases of initiated trend; one case of mixed trend; and one case of alarming trend (Table 11).

**Table 11:** Reproductive risk practice trends.

| Reprod. Risk practices | Health areas | Unassisted childbirth | Out-of-date vaccines | Inadequate Prenatal Consultations | Evolution trends |
|------------------------|--------------|-----------------------|----------------------|----------------------------------|-----------------|
| Assinie France | Downward pace | Upward pace | Upward pace | Alarming trend |
| Assinie Mafia | Downward pace | Downward pace | Downward pace | Transition trend |
| Adiaké | Upward pace | Downward pace | Downward pace | Mixed trend |
| Assomlan | Downward pace | Downward pace | Upward pace | Mixed trend |
| Kakoukro | Downward pace | Downward pace | Downward pace | Transition trend |
| Méleckoukro | Upward pace | Upward pace | Upward pace | Alarming trend |

**Finding 11:** Four health areas are distributed as follows: two cases of initiated trend; one case of mixed trend; and one case of alarming trend.

**SIKENSI area:** Health areas are divided into the following trends: one case of initiated trend; three cases of mixed trend; and three cases of alarming trend (Table 12).

**Table 12:** Reproductive risk practice trends.

| Reprod. Risk practices | Health areas | Unassisted childbirth | Out-of-date vaccines | Inadequate Prenatal Consultations | Evolution trends |
|------------------------|--------------|-----------------------|----------------------|----------------------------------|-----------------|
| Bakoum B | Upward pace | Downward pace | Downward pace | Mixed trend |
| Bécdi | Downward pace | Downward pace | Downward pace | Transition trend |
| Elbou | Upward pace | Upward pace | Upward pace | Alarming trend |
| Gomon | Upward pace | Upward pace | Upward pace | Alarming trend |
| Sahuyé | Downward pace | Downward pace | Upward pace | Mixed trend |
| Sikensi | Downward pace | Upward pace | Upward pace | Mixed trend |
| Yaouo | Upward pace | Upward pace | Upward pace | Alarming trend |

**Finding 9:** "Insufficient CPNs" are the major recurring problem in
Table 12: Reproductive risk practices trends in health areas.

**Finding 12:** Health areas are divided into the following trends: one case of initiated trend; three cases of mixed trend; and three cases of alarming trend.

**Partial Conclusion 2**

In the three lagoon observation areas in Côte d’Ivoire, the non-compliance with official Prenatal consultations norms constitutes the prevailing attitude of mothers. However, reproductive practices evolution trends are far from being uniform. This evolution has a very heterogeneous configuration from one area to another.

**Maternal morbidities**

Levels and trends over a five-year period will be examined.

**Levels of maternal morbidities**

**ADIACHE area:** Complications (direct causes) prevail even though diseases (indirect causes) during pregnancy are present in terms of maternal morbidities in Adiaké (Table 13).

**Table 13**: Variation in the level of maternal health problems in ADIACHE area in 2008-2012.

| Aire sanitaire | Maternal morbidity | Annual average (%) | Prevalence issues |
|---------------|--------------------|---------------------|-------------------|
|               | Abortions greater than 1 | Direct causes (complications) | Indirect causes (diseases) |
| Assinie France | 13.44 | 05.12 | 23.76 | Indirect causes |
| Assinie Mafia | 09.42 | 10.28 | 05.80 | Direct causes |
| Adiaké | 11.64 | 15.34 | 0.11 | Direct causes |
| Assomal | 10.93 | 16.53 | 03.58 | Direct causes |
| Kalakou | 07.26 | 21.36 | Not determined | Direct causes |
| Mélékoum | 13.09 | 02.97 | 43.26 | Direct causes |

**Finding 13:** Complications (direct causes) prevail even though diseases (indirect causes) during pregnancy are present in terms of maternal morbidities in Adiaké.

**AZAGUIÉ area:** Morbidity issues are characterised by abortions and diseases during pregnancy (Table 14).

**Table 14**: Variation in the level of maternal health issues.

| Aire sanitaire | Maternal morbidities | Moyenne annuelle (%) | Prevalence issues |
|---------------|----------------------|----------------------|-------------------|
|               | Abortions greater than 1 | Causes directes | Causes indirectes |
| Achiéko | 11.25 | 6.66 | 23.75 | Indirect causes |
| M’Bromé | 26.02 | 4.24 | 0.20 | Abortion |
| Grand Yapo | 12.83 | 09.83 | 0.75 | Abortions |
| Azaguié | 11.71 | 24.90 | 18.60 | Direct causes |

**Finding 14:** Morbidity issues are characterised by abortions during pregnancy in Azaguié area.

**SIKENSI area:** Diseases associated with pregnancy appear be consistent in the area of Sikensi.

**Maternal morbidity trends**

**ADIACHE area:** The result of changes in maternal health seems heterogeneous in Adiaké area, yet only one health area tends to be improving (Table 16).

**Table 16**: Reproductive health issues in health areas.

| Maternal morbidity | Abortions greater than 1 | Causes directes | Causes indirectes | Evolution trends |
|--------------------|--------------------------|-----------------|-------------------|-----------------|
| Assinie France | Downward pace | Downward pace | Upward pace | Mixed trend |
| Assinie Mafia | Downward pace | Upward pace | Upward pace | Alarming trend |
| Adiaké | Downward pace | Downward pace | Upward pace | Mixed trend |
| Assomal | Downward pace | Downward pace | Downward pace | Transition trend |
| Kalakou | Upward pace | Downward pace | Static pace | Mixed trend |
| Mélékoum | Downward pace | Downward pace | Downward pace | Transition trend |

**Finding 16:** The result of changes in maternal health seems heterogeneous in Adiaké area, yet only one health area tends to be improving.

**AZAGUIÉ area:** Mixed trend prevails in the situation of maternal health in Azaguié area, yet, a health area is an exception in the positive sense (Table 17).

**Table 17**: Reproductive health issues in health areas.

| Maternal morbidity |Abortions greater than 1 | Causes directes | Causes indirectes | Evolution trends |
|--------------------|--------------------------|-----------------|-------------------|-----------------|
| Achiéko | Static situation | Upward pace | Downward pace | Mixed trend |
| M’Bromé | Downward pace | Downward pace | Static pace | Mixed trend |
| Grand Yapo | Downward pace | Downward pace | Downward pace | Transition trend |
| Azaguié | Downward pace | Upward pace | Downward pace | Mixed trend |

**Finding 17:** Mixed trend prevails in the situation of maternal health in Azaguié area, yet, a health area is an exception in the positive sense.

**SIKENSI area:** Alarming trend appears more recurrent in terms of maternal morbidity in Sikensi area. Only one health area seems to be improving (Table 18).

**Table 18**: Reproductive health issues in health areas 2008 – 2012.

| Maternal morbidity | Abortions greater than 1 | Causes directes | Causes indirectes | Evolution trends |
|--------------------|--------------------------|-----------------|-------------------|-----------------|
| Bakanou B | Downward pace | Upward pace | Downward pace | Mixed trend |
| Béchéri | Downward pace | Upward pace | Upward pace | Alarming trend |
| Elbou | Upward pace | Static pace | Upward pace | Alarming trend |
| Gomou | Downward pace | Upward pace | Upward pace | Alarming trend |
| Sahou | Upward pace | Upward pace | Downward pace | Alarming trend |
| Sikensi | Upward pace | Upward pace | Downward pace | Alarming trend |
| Yaoubou | Downward pace | Downward pace | Downward pace | Transition trend |

**Finding 18:** Alarming trend appears more recurrent in terms of maternal morbidity in Sikensi area. Only one health area seems to be improving.
Partial Conclusion 3
Reading these tables presents a variety of situations between the three areas visited with regard to the issue of maternal morbidities. Trends are also divergent as they move from one area to another.

Results of Reproductive Transition Observed
Reproductive transition is an interaction between reproductive behaviours, reproductive practices and maternal morbidities. These transition results thus relate to the general situation of each area with regard to maternal health.

ADIAKE health area: The general situation of Adiaké area does not look good. There are three cases of mixed transition and three alarming transition cases (Table 19).

Table 19: Reproductive transitions observed in Adiaké area.

| Reproductive health issues | Reproductive Risk behaviours (RRB) | Reproductive risk practices (RRP) | Maternal morbidities | Reproductive transitions |
|---------------------------|-----------------------------------|----------------------------------|---------------------|-------------------------|
| Adiake                    | Alarming trend                     | Alarming trend                   | Mixed trend         | Alarming transition     |
| Assinie Franche           | Alarming trend                     | Alarming trend                   | Mixed trend         | Alarming transition     |
| Assinie Manfa             | Alarming trend                     | Transition trend                 | Mixed trend         | Mixed transition        |

Finding 19: The general situation of Adiaké area does not look good. There are three cases of mixed transition and three alarming transition cases.

AZAGUIE health area: The general situation of Azaguié does not display a very viable configuration: the case of mixed transition prevails (Table 20).

Table 20: Reproductive transitions observed in Azaguié area.

| Reproductive health issues | RRB     | RRP     | Maternal morbidities | Reproductive transitions |
|---------------------------|---------|---------|---------------------|-------------------------|
| Achiéko                   | Mixed trend | Transition trend | Mixed trend         | Mixed transition        |
| M'Bromé                   | Alarming trend | Alarming trend | Mixed trend         | Alarming transition     |
| Grand Yapo                | Mixed trend | Mixed trend | Transition trend     | Mixed transition        |
| Azagué                    | Alarming trend | Transition trend | Mixed trend         | Mixed transition        |

Finding 20: The general situation of Azaguié does not display a very viable configuration: the case of mixed transition prevails.

SIKENSI health area: Sikensi area has less satisfactory overall appearance: Three cases are declared mixed and four alarming (Table 21).

Table 21: Reproductive transitions observed in Sikensi area.

| Reproductive health issues | RRB     | RRP     | Maternal morbidities | Reproductive transitions |
|---------------------------|---------|---------|---------------------|-------------------------|
| Bakamou B                 | Transition trend | Mixed trend | Mixed trend         | Mixed transition        |
| Béédi                     | Mixed trend | Transition trend | Alarming trend | Mixed transition        |
| Elibou                    | Alarming trend | Alarming trend | Alarming trend | Alarming transition     |
| Gomons                    | Mixed trend | Alarming trend | Alarming trend | Alarming transition     |
| Sahyé                    | Mixed trend | Mixed trend | Alarming trend | Mixed transition        |
| Sikensi                   | Alarming trend | Mixed trend | Alarming trend | Alarming transition     |
| Yaooubu                   | Alarming trend | Alarming trend | Transition trend | Alarming transition     |

Finding 21: Sikensi area has less satisfactory overall appearance: Three cases are declared mixed and four alarming.

Partial Conclusion 4
As a result of the experience presented, items stated below are kept in mind the following results:
- Geographical differentiation of the level of the issues;
- Variation in trends in critical situations;
- Unequal distribution of maternal health issues;

Discussion
The “reproductive transition” concept derives from the context of observation scales theory. What does this mean?

Observation scale theory
Observation scales are a variety of viewpoints offered by a social reality. To geographers, it is a basic tool that helps to develop maps. It is an approach to reality division. There are large scales and small scales. DESJEUX (2004) [4], states that what is visible on a scale disappears when such observation scale is changed; yet, other aspects or other invisible phenomena on the previous scale, appear by the very fact of this change. There are different observation scales.

In his theory, DESJEUX [4] lays an emphasis on three scales that are: macro-social scale, micro-social scale and micro-individual scale.
- Macro-social scale – is the widest. It is that of regularities, major trends, social affiliations and values. Individual actors are not that visible in there.
- Micro-social scale – is that of social actors interacting with one another.
- Micro-individual scale – involves subjets, agents, individuals, be it in its psychosocial, cognitive or unconscious dimension.

Privilege granted to the micro-individual observation scale
All official estimates that are habitually observed up to now, as a rule, fall within the micro-individual scale for assessing maternal health in the world. This means that all national and international organisations (WHO, UNICEF, UNFPA, etc.) have adopted the individual scale observation approach as a tradition. This is the case in most African countries where maternal morbidity and mortality are rife. Indeed, an official reference document is that entitled: "Demographic and Health Survey". In my country, Côte d'Ivoire, we have performed the third "Demographic and Health Survey". The first one was carried out in 1994 [5]; the second in 1998-1999 [6] and the third in 2011-2012 [7]. How are methodological characteristics of this classical approach defined?

Objectives
The defined objectives are determined in an international organisational framework that is the Demographic and Health Surveys (DHS) global programme. In Côte d'Ivoire, the
Demographic and Health Survey is conducted by the Ministry of Health in collaboration with the National Institute of Statistics (INS) [7]. This operation covers the entire national territory. It aims to collect, analyse and disseminate demographic and health data, relating particularly to fertility, family planning, maternal and child health and nutrition and HIV / AIDS” (EDSCI, III, 5) [7]. DHS is to inscribe this approach in a quantitative survey related aim.

Collection techniques used
The survey results from a statistically representative sample and the use of individual questionnaires.

- The sample is based on a stratified area sampling, and is a two-tier one (EDSCI, II; 9) [6].
- The collection instruments are specified as follows:
  - a household questionnaire – was used to list all members and visitors of selected households;
  - an individual questionnaire for women – is filled in for all women registered in the household, i.e. all women aged 15-49;
  - an individual questionnaire for men – the individual questionnaire for men provides information on men's knowledge as well as their attitudes towards AIDS. (EDSCI-I,11) [5].

What is today's observation?

Limits of the micro-individual scale
Based on micro-individual observation and analysis, the Demographic and Health Survey has been successful and remains a tradition in Africa. It has established itself as the reference source for all official communications on maternal, neonatal and child health. However, despite its relative effectiveness and relevance, the issue of morbidity and mortality is still a topical issue. Should we remain in methodological stand-pattism? From this question, in my capacity as anthropologist, I have had recourse to another observation alternative; i.e. community scale.

Community Observation Scale Alternative
In contrast to the DHS individual observation scale, I propose a community observation scale; which corresponds to the micro-social scale according to DESJEUX’s theory. In this case, the unit of analysis is the community – referring to all populations living in a given geographical area and governed by a system of common institutions, beliefs, norms, values and ideals. This is justified for the very simple reason that the object of anthropology is not an isolated individual, but rather a global community having its organisation and functioning. It is therefore necessary to observe, from an anthropological perspective, maternal health in a collective or community way, in space and its process of construction and deconstruction over time. "The whole is different from the sum of its parts", they say. But why should we have recourse to the community perspective?

A Challenge of Having Recourse to Community Scale
The challenge of moving from the micro-individual scale to the so-called community scale in the process is about complying with the principle of "double-blind" assessment for more relevant and effective actions for mothers’ health. According to DESJEUX (2004: 5), "results achieved in a survey depend on an observer’s position, observation conditions, an observation scale and a reality division on a given scale. Depending on viewpoints, landmarks, the form of phenomena, methods and therefore the description of reality may change "[4]. Clearly, the results of a survey based on an individual scale will not be the same as those based on a community-scale observation. For this reason, the author (op. cit. 48) adds: "a division is neither true nor false in itself. It depends on a problem to be solved and the level of precision that actors need to understand and act." [4]. This is the foundation for choosing my community scale option. Indeed, my goal is not to question the individual scale approach. It would be far too pretentious.

The community scale rather reinforces the ESDCI tradition from a methodological triangulation perspective. Ultimately, it was in connection with this community approach to maternal health that I came up with the concept of "reproductive transition".

Conclusion
Explanation of variability

- Reproductive behaviours and reproductive practices relating to beliefs, norms and cultural values are variable in space and time within the same country;
- Unequal distribution of exposure factors underlies maternal mortality and mortality.

The challenge of community scale
The reproductive transition theory derived from the community-scale observation is as follows:

- A sociological early warning system on maternal health for cultural communities;
- A relevant decision-making tool in the accelerated maternal mortality reduction project.

Suggestion for solution efficiency
Finally, I suggest formatting data processing software, designing the reproductive transition for greater efficiency and excellent performance in addressing this worrying issue of maternal health in developing countries. This community-scale tool constitutes a support for an individual scale.

Acknowledgments
I say thank you to everyone who contributed to the survey and data analysis for this study. Those are:
- Eckra Amenan Marie Noelle;
- Koffi N’Dri Célestin;
- Tanoh N’Doloua Aimée Edith;
- Bodoua Kouadio Oscar;
- Brou Adjoua Juliana;
- Koffi Affoué Nadège;
- Kouakou Kouadio; et
- Kouassi Konan Adrien.

References
1. OMS, UNICEF, L’UNFPA, Le Groupe de la Banque Mondiale et la Division de la Population des Nations Unies : Tendances
de la mortalité maternelle 1990-2015. Résumé d’orientation. 2015.

2. ABE NN. La procreation, le symbolisme et la santé de la reproduction en Afrique noire au Sud du Sahara: Le cas du groupe baoulé en Côte d’Ivoire. Thèse de doctorat d’Etat en Anthropologie. Université de Bouaké. 2007; 31-32.

3. ABE NN. La théorie de la transition génésique un outil de l’observatoire de la santé maternelle et infantile en Afrique, Editions Balafons. Abidjan. 2013; 81.

4. Dominique Desjeux. Les sciences sociales, PUF. Paris. 2004; 6.

5. N’Cho Sombo, Lucien Kouassi, Albert Kouamé Koffi, et al. Enquête Démographique et de Santé Côte d’Ivoire 1994. Macro International Inc. Enquête Démographique et de santé. 1994.

6. Institut National de la Statistique, Abidjan, Côte d’Ivoire, ORC Macro Calverton, Maryland - USA Enquête démographique et de la santé 1998-1999. République de Côte d’Ivoire. 2001.

7. Ministère de la santé et de la lutte contre le SIDA (MSLS), Institut National de la Statistique, Ministère d’Etat, Ministère du plan et du développement (MEMPD), Abidjan côte d’Ivoire : Enquête Démographique et de Santé et à indicateurs multiples (EDS_MICS), 2011-2012.