Evaluation of the maternal and perinatal health promotion policy: the 2016 - 2020 National Perinatology Plan

July 7th and 8th 2021

About the audit?

- The assessment was split into two phases:
- 1- The first phase "strategy and steering of the national perinatal program" This phase was carried out in 2019,
- 2- The second phase will focus on the conditions of organization and exercise of perinatal care at the level of health establishments.

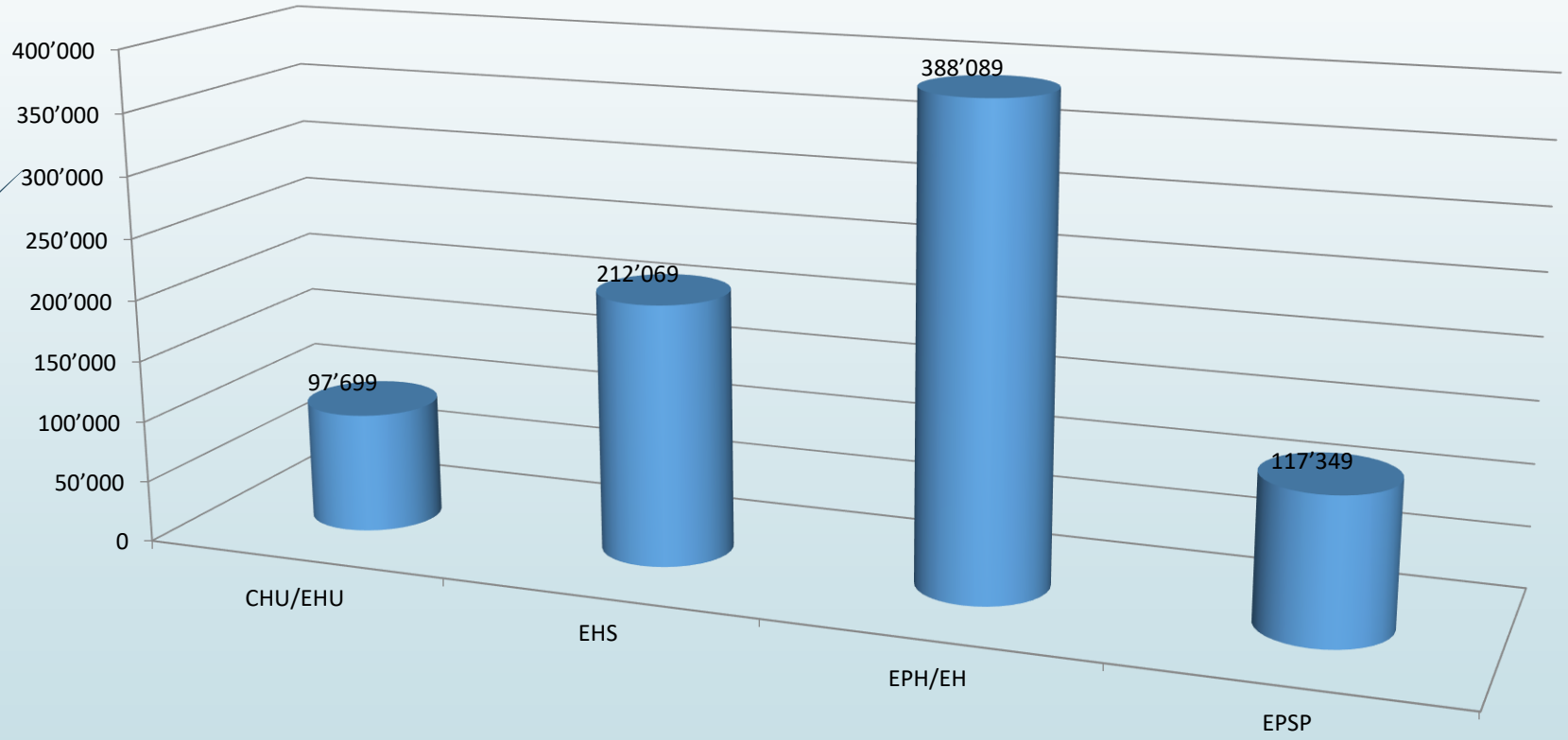
Preliminary findings of the evaluation mission

- **1- Non implementation of a care network based on obstetrical risk:**
- In fact, the total number of deliveries recorded for the year 2018 at the national level is 815 206 deliveries, with an average of 1 709 deliveries per facility annually, or 5 deliveries per facility per day.
- The majority of these deliveries are recorded at the EPH and EH (hospital) level with a rate of 48% representing 388 089 deliveries, while 273 EPSP (local health facilities) only receive 14% of all deliveries

Origin of the problem:

- This is due to the absence of implementation of a care network based on the obstetrical risk allowing the preliminary orientation of the parturient towards a host facility according to the seriousness of her case (obstetrical and fetal risk)

Total deliveries per facility category



Recommandation:

- Establish a map of delivery structures and ensure that the hierarchy of care is respected by first directing parturients to host facilities according to the obstetrical and fetal risk.

2- Lack of correlation between the objectives of the program and the causes of perinatal death

- The National Institute of Public Health (INSP) is the national health authority responsible, through its annexes called regional health observatories (ORS), for the use of medical death certificates.
- during the years 2015 and 2016, the institute received approximatively 51% and 50% of the deaths declared to the National office of statistics (167,718 in 2015 and 165,648 in 2016), which affects the completeness of health information
- The sample which causes of death have been analyzed at the INSP is 13,174 neonatal deaths, representing around 50% of all deaths.

Main causes of perinatal death:

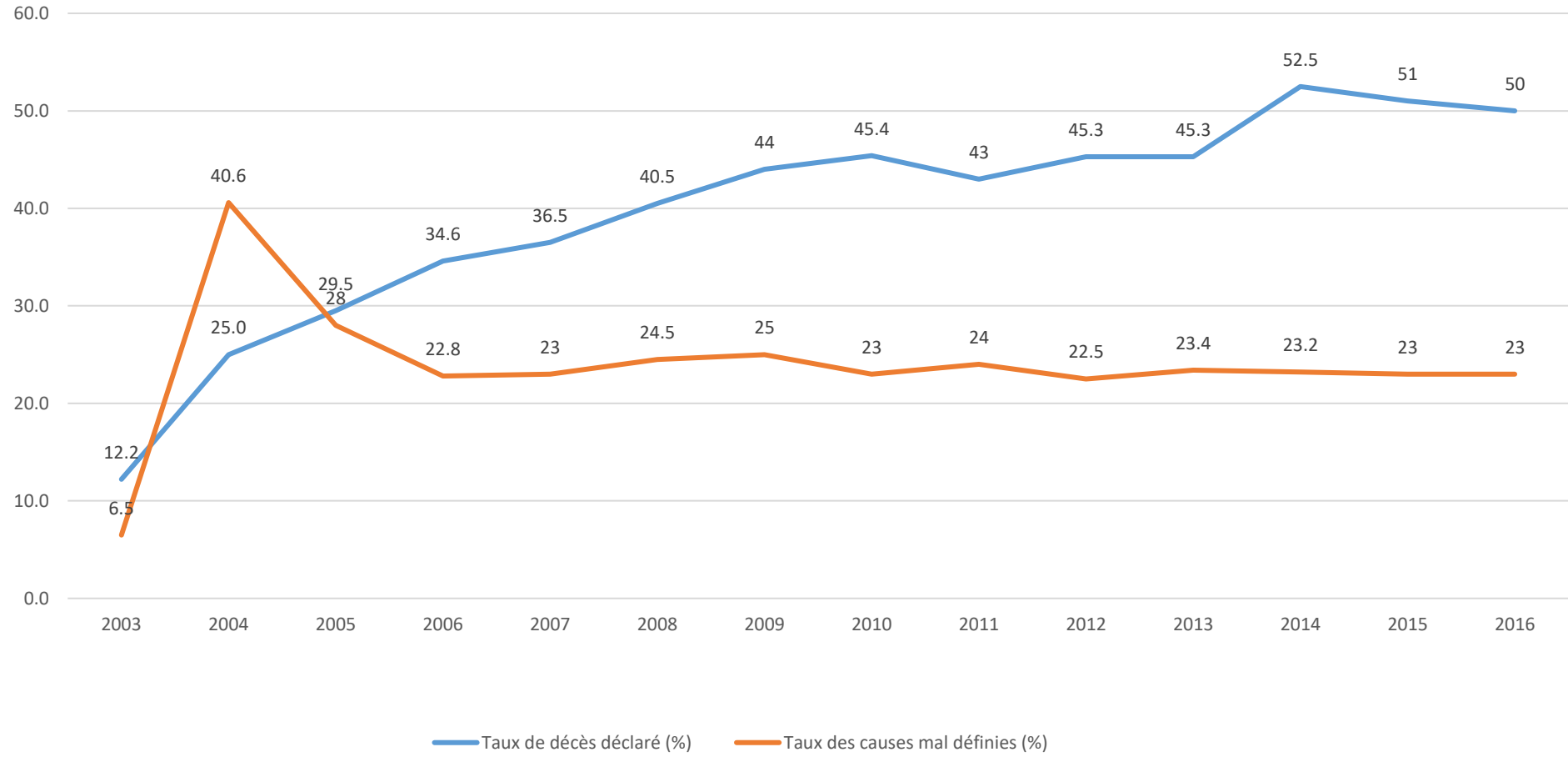
- The report of neonatal causes of death showed that the main cause of death is prematurity with a prevalence of 27.7%, followed by congenital heart disease (18.5%), respiratory distress (13%), fetal suffering (4,4%) neonatal asphyxia (3.2%) and neonatal infection (3.2%).

- **Lack of a list of feasible and concrete actions and measures allowing the management of the causes of neonatal morbidity:**
- With regard to prematurity, it was recommended to generalize “kangaroo units” only, without however proposing a number of actions and concrete measures on the acquisition in sufficient quantities of the equipment and material necessary for the care in particular of large premature.
- Also, the program has not been detailed into "measures" or "actions" for the management of neonatal morbidity.
- For example, the fight against "neonatal asphyxia" is one of the objectives of the neonatal program. Maternal pathologies are among the main causes of neonatal asphyxia such as hypotension or arterial hypertension, yet no measures were recommended in the program for the management of these pathologies.

Significant proportion of undefined causes in neonatal death certificates:

- Non-defined causes occupy an important part of the causes of death. In fact, they represented 19% in 2013 and 23% for the two years 2015 and 2016. This implies the need to strengthen training and awareness of doctors about providing the certificate of causes of death according to the ICD 10 classification.

Evolution of death declarations



3- Lack of precision and reliability of the perinatal statistical indicator:

- The indicators on infant and neonatal mortality are calculated from the data appearing in the statistical bulletins provided by the civil registrars.
- **these statistical bulletins are filled in manually by the civil status officers. Likewise, data from municipalities, which have not transmitted their statistical bulletins, are collected by telephone.**

Origin of the problem:

- This method of data collection gives rise to a fairly high margin of error and calls into question the reliability of the indicator. In addition, it is expensive in terms of time and budget
- Indeed, the on-site visits to certain municipalities of Algiers to collect data on neonatal and early neonatal mortality from the civil status registers, allowed us to identify discrepancies between the numbers appearing in these registers and the numbers put forward by the ONS.

Recommendation:

- The use of electronic civil status registers by the national office of statistics, in order to minimize the margins of error and to achieve savings in terms of accuracy, time and budgetary and human resources.

4- Inadequate and unequal distribution of human resources between delivery structures

- A lack of specialized medical staff (gynecologists) was noted, particularly at the level of the EPSP (local health facilities) but also at the level of the EPH and EH (hospitals),
- The university hospitals have the highest average of gynecologists and midwives, respectively 9 gynecologists per facility and 47 midwives per facility, while the local facilities have the lowest averages, i.e. 0.08 gynecologists per establishment and 15 midwives per establishment
- A considerable imbalance was also noted in several facilities in terms of the distribution of midwives in relation to maternity activity. For example, the local facility of Bordj El Kifan (Dergana) has 84 midwives, at the time when it recorded 327 deliveries throughout the year and the specialized facility mother and child of Tamanrasset only has one midwife, while it recorded 4,453 deliveries, or an average of 12 deliveries per day, carried out by a single midwife.

5- Inadequate and unequal distribution of material resources and equipment:

- An unequal distribution of material resources between the different establishments was noted, for example resuscitation beds (for newborns), resuscitation tables (newborns), heating tables, incubators, etc.
- As regards the distribution of resuscitation beds, a considerable imbalance has been recorded. By way of illustration, the university hospital of Constantine has 828 beds with a total of 4,611 deliveries, on the other hand the university hospital of Sétif has only 150 beds with a total of 13,822 deliveries.

Distribution of resuscitation beds for a sample of departments

№	Wilaya	Lits de réanimation	Taux
1	Constantine	996	18%
2	Tipaza	350	6%
3	Alger	320	6%
4	Tlemcen	284	5%
5	Tébessa	277	5%
6	Tindouf	0	0%
7	Tamanrasset	0	0%
8	Ghardaïa	8	0,1%
9	El Oued	9	0,1%
10	Chlef	11	0,1%

Recommendation:

- Standardize delivery structures by specifying the nature and number of equipment with which they must be equipped according to the level of maternity hospitals and ensure application (allocate the necessary resources) and strict compliance with these standards.

-No activation of the mechanisms for evaluating and monitoring the actions of the plan:

- The health and population departments (DSP) of the 48 departments created in 2016, perinatal committees in accordance with the provisions of the 2016-2020 national perinatal program.
- However, the use and analysis of the decisions to create the said committees have revealed the following observations.
- - These committees do not have their central relay (national perinatal committee) which ensures their operation, the consolidation of their work and the monitoring of the execution of their decisions. –
- The conduct of the meetings is not framed and their frequency differs from one department to another. In some local departments, no timetable has been set. In the majority of cases, no meeting was recorded other than the installation meeting.

- Likewise, it was noted the absence of an evaluation of the incidence of morbidity related to neonatal asphyxia, hypothermia, hemorrhagic disease, neonatal infection in order to make it possible to establish readjustments and to put in place the appropriate strategies to fight against the causes of these neonatal diseases.

- Thank you for your attention