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WHO: RECOMMENDED DEFINITIONS, TERMINOLOGY AND FORMAT FOR STATISTICAL TABLES RELATED TO THE PERINATAL PERIOD AND USE OF A NEW CERTIFICATE FOR CAUSE OF PERINATAL DEATHS

Modifications Recommended by FIGO as Amended October 14, 1976

1.0 The following limits for the inclusion of births and perinatal death in statistics are recommended:

1.1 That all fetuses and infants delivered weighing 500 g or more be reported in the country's statistics, whether or not they are alive or dead. It is recognized that legal requirements in many countries may set different criteria for registration purposes, but is hoped that the countries will arrange the registration or reporting procedures in such a way that the events required for inclusion in the statistics can be identified easily. (WHO—Approved by FIGO.)

1.2 That mortality statistics reported for purposes of international comparison should include only those born, weighing 1 000 g or more. (WHO—Approved by FIGO.)

2.0 Perinatal Statistics

2.1 *Birth Weight*

The first weight of the fetus or newborn obtained after birth. This weight should be measured preferably within one hour of life before significant postnatal weight loss has occurred. (WHO—Approved by FIGO.)

2.2 *Low Birthweight*

Less than 2 500 g. (WHO—Modified by FIGO by deleting the words: "up to, and including 2 499 g".)

2.3 *Gestational Age*

The duration of gestation as measured from the first day of the last normal menstrual period. Gestational age is expressed in completed days or completed weeks (e.g. events occurring 280 *to less than 287 days* after the onset of the last normal menstrual period are considered to have occurred at 40 weeks of gestation).

Measurements of fetal growth, as they represent continuous variables are expressed in relation to a specific week of gestation (e.g. the mean birthweight for 40 weeks is the one obtained at 280 *days —less than 287 days* of gestation on a weight-for-gestational age curve). (WHO—Accepted by FIGO.)

2.4 *Perinatal Period*

The perinatal period is the one extending from the gestational age at which the fetus attains the weight of 1 000 g (equivalent to 28 *completed* weeks of gestation) to the end of the seventh completed day (168 *completed* hours) of life. (WHO—Approved by FIGO is the word "*completed*" is included where underscored.)

2.5 *Pre-Term*

Less than 37 completed weeks (less than 259 completed days). (WHO—Accepted by FIGO.)

2.6 *Term*

From 37 completed weeks to less than 42 completed weeks. (259 to 293 days). (WHO—Accepted by FIGO.)

2.7 *Post-Term*

Forty-two completed weeks or more. (WHO—Approved by FIGO.)

2.8 *Birth*

Complete expulsion or extraction from its mother, of a fetus irrespective of whether or not the umbili-

cal cord has been cut or the placenta is attached. Fetuses weighing less than 500 g are not viable and therefore not considered as births for the purposes of perinatal statistics. In the absence of a measured birthweight, a gestational age of (20) to 22 *completed* weeks is considered equivalent to 500 g. When neither birthweight nor gestational age of (20) to 22 *completed* weeks is available, a body length of 25 cm (crown–heel) is considered equivalent to 500 g. (WHO—Approved by FIGO.)

2.9 *Life at Birth*

Life is considered to be present at birth when the infant breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles. (WHO—Approved by FIGO.)

2.10 *Live Birth*

The process of birth when there is evidence of life after birth. (WHO—Approved by FIGO.)

2.11 *Live-born Infant*

The product of a live birth. (WHO—Approved by FIGO.)

2.12 *Stillbirth*

The process of birth *of a fetus weighing more than 500 g* when there is no evidence of life after birth. For the purposes of calculation of *standard* perinatal mortality rates *for international comparison* (6.3) only stillbirths with a *stillborn infant* birthweight of 1000 g or more are included. (WHO—Approved by Figo, with the suggested italicized modifications.)

2.13 *Stillborn Infant*

The product of a stillbirth. (WHO—Approved by FIGO.)

2.14 *Early Neonatal Death*

Death of a live-born infant during the first seven completed days (168 hours) of life. (WHO—Approved by FIGO.)

2.15 *Late Neonatal Death*

Death of a live-born infant after 7 *completed days* but before 28 completed 28 days of life. (WHO—Approved by FIGO with the above suggested italicized modification of "*completed days*".

3.1 *Stillbirth Rate*

Is the number of stillborn infants weighing 1 000 g or more per 1 000 total births (stillborn infants plus live-born infants) *at birth weighing 1 000 g or more* over a given period. (WHO—Accepted by FIGO with the suggested underscored modification.)

3.2 *Early Neonatal Mortality Rate*

Is the number of early neonatal deaths of infants *weighing 1 000 g or more* occurring less than 7 completed days (168 completed hours) from the time of birth per 1 000 live-births of infants weighing 1 000 g or more. (WHO—Accepted by FIGO with the suggested italicized modification.)

3.3 The calculation of these rates for international comparison calls for inclusion of births *of infants* weighing 1 000 g and over. If the birthweight of a fetus or infant is not known, a gestational age of 28 *completed* weeks should be taken as equivalent to 1 000 g birthweight. If neither birthweight nor gestational age is known, a body length (crown–heel) at birth of 35 cm should be taken as equivalent to 1 000 g birthweight. (WHO—Approved by FIGO.)

4.0 Recommendations for Uniform Minimal Statistical Tables

For the foreseeable future, mortality statistics for infants should be restricted to those weighing 1 000 g and over and are intended to provide comparable information for all countries. They should also provide minimal data for those countries which are, at this time, unable to produce a more detailed analysis. It is recommended that all countries provide the following minimal uniform statistics as soon as possible. (WHO—Approved by FIGO.)

4.1 *Perinatal Mortality Rate*

$$\frac{\text{Stillborn infants weighing 1 000 g and over} + \text{early neonatal deaths } \textit{of infants} \text{ weighing 1 000 g and over}}{\text{Stillborn infants weighing 1 000 g and over} + \text{live-born infants weighing 1 000 g and over}} \times 1\,000$$

(WHO—Approved by FIGO with the suggested modification of adding the italicized words "*of infants*".)

4.2 *Early Neonatal Mortality Rate*

$$\frac{\text{Early neonatal deaths of infants weighing 1 000 g and over at birth}}{\text{Live-born infants weighing 1 000 g and over}} \times 1\,000$$

(WHO—Approved by FIGO.)

4.3 *Stillbirth Rate*

$$\frac{\text{Stillborn infants weighing 1 000 g and over}}{\text{Stillborn infants weighing 1 000 g and over + live-born infants weighing 1 000 g and over } \textit{at birth}} \times 1\,000$$

(WHO—Approved by FIGO with the suggested modification of adding the italicized words "*at birth*".)

5.0 Recommendations for Further Analysis

For more detailed analysis of data on the perinatal period concerned with birthweight and gestational age, statistics should be presented in a uniform way which allows comparisons to be made easily.

Detailed tables should be given, where appropriate, related to the total number of infants born, identifying separately those stillborn, those live-born but dying in the first 7 days, and those surviving 7 days.

5.1 *By Birthweight*

The weight interval of 500 g is accepted by FIGO but not the method of designation, i.e. 1 000–1 499 g, 1 500–1 999 g, etc. Because some confusion might occur for an infant weighing 1 499.5 g FIGO prefers the following techniques of designation: From 1 000 g to less than 1 500 g to less than 2 000 g, and so on.

5.2 *By Gestational Age*[1]

The weekly intervals are accepted by FIGO but not the technique of designation, because it is felt that there is some margin for error. Because a weekly interval does not gain a numerical designation until the 7 days of that interval have been completed, i.e. week no. 1 is so designated when the first 7 days have been completed, the 2nd week when 14 days have been completed, and so on. FIGO suggests the following technique for designating weekly intervals.

Gestational Age

28 weeks to less than 32 completed weeks (196 days to less than 224 completed days)

32 weeks to less than 36 completed weeks (224 days to less than 252 completed days)

36 weeks to less than 38 completed weeks (252 days to less than 266 completed days)

38 weeks to less than 42 completed weeks (266 days to less than 294 completed days)

42 completed weeks (294 days) and over

5.3 For early neonatal deaths, by age of death, using the following intervals:

Birth to less than 60 completed minutes
1 hour to less than 12 completed hours
12 hours to less than 24 completed hours
24 hours to less than 48 completed hours
48 hours to less than 72 completed hours
72 hours to less than 168 completed hours.

Where detailed information is not available data on age at death should be provided as follows:

Birth to less than 60 completed minutes
1–less than 24 completed hours
24–less than 168 completed hours.

(WHO—Modified by FIGO.)

In each table, appropriate totals and subtotals should be given (for example, all infants with birthweight *1 000 up to less than 1 500 g*, or all infants of 28 to *less than 38 completed* weeks gestation etc. (together with appropriate percentages. If more detailed breakdowns are tabulated, it should be possible to aggregate them into the above groupings. (WHO—Approved by FIGO with the italicized suggested modifications.)

6.0 Mortality Statistics

These should be presented in relation to different groups of infants, using the definitions of rates given below.

6.1 *Stillbirth and Perinatal Death Rates*

(*a*) all infants 1 000 g or more
(*b*) all infants 1 000 g or more in 500 g groups

[1] The duration of gestation is measured from the first day of the last normal menstrual period. Gestational age is expressed in completed days or completed weeks (e.g. events occurring 280 to less than 287 days after the onset of the last menstrual period are considered to occur at 40 weeks of gestation).

(*c*) all infants weighing 1 000 up *to less than 2 500 g*
(*d*) all infants weighing 2 500 up *to less than 4 000 g*
(*e*) infants weighing 4 000 or more
(*f*) gestational age groups
(WHO—Approved by FIGO with the suggested italicized modifications.)

6.2 *Early Neonatal Death Rates*

(*a*) all live-born infants 1 000 g or more in 500 g groups
(*b*) infants weighing 1 000 *to less than 2 500 g*
(*c*) infants weighing 2 500 *to less than 4 000 g*
(*d*) infants weighing 4 000 g or more
(*e*) gestational groups
(*f*) age at death
(WHO—Approved by FIGO with the suggested underscored modifications.)

7.0 Cause of Death

Mortality statistics (numbers and rates) should be presented according to the appropriate ICD list, separately for stillbirths, early neonatal deaths, and perinatal deaths. These should be given for all infants weighing 1 000 g or more as well as in appropriate sub-groups of weight, gestational age, and age at death. (WHO–Approved by FIGO.)

8.0 Other Variables

Whenever possible statistics on births and perinatal deaths should be presented to show the relation to other factors, such as region, characteristics of the mother (parity, health status, age, education), socio-economic, ethnic, and cultural groups. (WHO—Approved by FIGO.)

9.0 Early Antenatal Deaths

Whenever, possible, the above statistical tabulations should also be produced separately, for the group of infants weighing 500 up *to less than 1 000 g* at birth, using the corresponding denominators restricted to infants of 500 up *to less than 1 000 g*. (WHO—FIGO approves with the suggested italicized modifications.)

10.0 Maternal Mortality

10.1 A maternal death is defined as the death of any woman while pregnant or within 42 *completed* days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. (WHO—Approved by FIGO with the addition of the italicized modification.)

10.2 Maternal deaths are subdivided into two groups. (WHO—Accepted by FIGO.)

10.2.1 Direct obstetric deaths: those resulting from obstetric complications of the pregnancy state (pregnancy, labour and puerperium), from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above. (WHO—Approved by FIGO.)

10.2.2. Indirect obstetric deaths: those resulting from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but which was aggravated by the physiological effects of pregnancy (WHO —Approved by FIGO.)

10.3. The maternal mortality rate, the direct obstetric death rate and the indirect obstetric death rate should be expressed as rates per 1 000 total births, the latter defined as the births of infants born live or dead, weighing 1 000 g or more at birth. (WHO—approved by FIGO.)

11.0 Special Certificate of Cause of Perinatal Death

11.1 A separate certificate of perinatal death should be adopted, in which the causes are set out in the following manner.
(*a*) Main disease or condition in fetus or infant
(*b*) Other diseases or conditions in fetus or infant
(*c*) Main maternal disease or maternal condition affecting fetus or infant
(*d*) Other maternal diseases or maternal conditions affecting fetus or infant
(*e*) Other relevant circumstances
(WHO—Approved by FIGO.)

11.2 In addition, the following items were considered to be an integral part of any medical certificate of causes of perinatal death: (i) identifying particulars including relevant dates and times; (ii) a statement as to whether the baby was born alive or dead; (iii) information about atopsy. (WHO—Approved by FIGO.)

CERTIFICATE OF CAUSE OF PERINATAL DEATH

To be completed for stillbirths and live born infants dying within 168 hours (1 week) from birth

(Identifying Particulars)

☐ This child was live born on ____ at ____ hours
and died on ____ at ____ hours

☐ This child was stillborn on ____ at ____ hours
and died Before labour ☐ During labour ☐ Not known ☐

Mother

Date of birth ☐☐☐☐☐☐
or, if unknown, age (years) ☐☐

Number of previous pregnancies:
Live births ☐☐
Stillbirths ☐☐
Abortions ☐☐

Outcome of last previous pregnancy:
Live birth ☐
Stillbirth ☐
Abortion ☐
Date ☐☐☐☐☐☐

1st day of last menstrual period ☐☐☐☐
or, if unknown, estimated duration
of pregnancy (completed weeks) ☐☐

Antenatal care, two or more visits
Yes ☐
No ☐
Not known ☐

Delivery:
Normal spontaneous vertex ☐
Other (specify) . . . . . .

Child

Birthweight: . . . . . grammes
Sex:
Boy ☐ Girl ☐ Indeterminate ☐
Single birth ☐ First twin ☐
Second twin ☐ Other multiple ☐

Attendant at birth

Physician ☐ Trained midwife ☐
Other trained person (specify) . . . . . .
Other (specify) . . . . . .

CAUSES OF DEATH

a. Main disease or condition in fetus or infant

b. Other diseases or conditions in fetus or infant

c. Main maternal disease or condition affecting fetus or infant

d. Other maternal diseases or conditions affecting fetus or infant

e. Other relevant circumstances

The certified cause of death has been confirmed by autopsy ☐
Autopsy information may be available later ☐
Autopsy not being held ☐

I certify . . . . . .
. . . . . .
. . . . . .

Signature and qualification

11.3 While the supplementary information to be collected at death or stillbirth may be varied in accordance with the wishes of the individual countries, it is recommended that consideration be given to the collection of the following items as a minimum:

Mother

Date of birth:

Previous history:

Number of previous pregnancies; live-births/stillbirths/abortions

Outcome of previous pregnancies; live-births/stillbirths/abortions and date

(WHO—Approved by FIGO.)

GYNECOLOGIC TERMS AND DEFINITIONS

2.1 *Postmenstrual phase (Menstrual period, Menstruation, Menses)*

The postmenstrual phase is the phase that includes the 4–5 days following the menstrual phase. The endometrium is thin, measuring ordinarily only 1 or 2 mm in thickness. The surface epithelium and the epithelium lining the glands is of cuboidal type. The endometrial glands are straight, narrow, and collapsed; the stroma is dense and compact.

2.2 *Proliferative Phase*

The proliferative phase is the growth phase of the endometrium. The endometrium is stimulated by estrogen. The endometrial glands are straight and short, and the glandular epithelium is cuboidal and shows no evidence of secretory activity. The stromal cells multiply, and the spiral arteries begin to grow.

2.3 *Secretory Phase*

The secretory phase is the postovulatory phase of the endometrium. The endometrium is stimulated by estrogen and progesterone. The endometrial glands are long and tortuous. The glandular epithelium is columnar and filled with secretion. The stromal cells are large, and the spiral arteries are long and tortuous.

2.4 *Premenstrual Phase*

The premenstrual phase is the phase that includes the 2–3 days prior to the menstrual phase and corresponds to the regression of the corpus luteum. The chief histologic characteristic of this phase is infiltration of the stroma by polymorphonuclear or mononuclear leukocytes, producing a pseudoinflammatory appearance. Concurrently, the reticular framework of the stroma in the superficial zone disintegrates. As a result of the loss of tissue fluid and secretion, the thickness of the endometrium often decreases significantly during the 2 days before the menstrual phase. In the process of reduction, the glands and arteries collapse.

2.5 *Menstrual Phase—Menstrual Period*

The menstrual phase is the period of desquamation of the endometrium. There are increased numbers of polymorphonuclear leukocytes, plasmatocytes, and other wandering blood cells in the tissue.

2.6 *Amenorrhea*

Amenorrhea is the absence of menstruation. It may be primary or secondary, physiologic or pathologic. It is a subjective, but not a reliable sign of pregnancy.

2.7 *Amenorrhea, Pathologic*

Pathologic amenorrhea is the cessation of menstruation for at least 3 months at any time after puberty, other than during pregnancy and lactation, and before the onset of menopause. It can be either primary or secondary and caused by any of the following factors: congenital abnormalities, central nervous system lesions, systemic conditions, ovarian disturbances, and uterine trauma.

2.8 *Amenorrhea, Physiologic*

Physiologic amenorrhea is the normal absence of menstruation before the menarche, during pregnancy and lactation, and after the menopause.

2.9 *Anovular Menstruation (Anovular Bleeding)*

Anovular menstruation is menstrual bleeding without discharge of an ovum.

2.10 *Dysmenorrhea*

Dysmenorrhea is a symptom characterized by painful menstruation.

2.11 *Mechanical Dysmenorrhea*

Mechanical dysmenorrhea is a menstrual pain due to cervical stenosis or other obstruction to menstrual flow.

2.12 *Primary or Functional Dysmenorrhea*

Primary dysmenorrhea is menstrual pain observed in the absence of any noteworthy pelvic lesion.

2.13 *Secondary or Acquired Dysmenorrhea*

Secondary dysmenorrhea is menstrual pain caused by demonstrable pelvic disease.

2.14 *Hypomenorrhea*

Hypomenorrhea is a diminution in the amount of the flow or a shortening of the duration of menstruation.

2.15 *Mittelschmerz*

Mittelschmerz is intermenstrual pain in the lower abdomen generally associated with ovulation.

2.16 *Oligomenorrhea*

Oligomenorrhea is a reduction in the frequency of menstruation. An interval between the cycles of longer than 38 days, but less than 3 months indicates oligomenorrhea.

2.17 *Puberty*

Puberty is the period when a person becomes sexually mature. The reproductive organs become functional and secondary sex characteristics are developed.

2.18 *Vicarious Menstruation*

Vicarious menstruation is bleeding from any surface other than the mucous membrane of the uterine cavity. It occurs periodically at the time when normal menstruation should take place.

2.19 *Abruptio Placentae*

Abruptio placentae is the complete or partial detachment of the normally implanted placenta from the uterine wall at 20 weeks or more of gestation. Abruptio placentae may occur in conjunction with placenta previa. Hypofibrinogenemia is the most common complication of abruptio placentae.

2.20 *Concealed Hemorrhage*

A concealed hemorrhage is an accumulation of blood within the uterus or amniotic sac associated with abruptio placentae.

2.21 *Placenta Previa*

Placenta previa is the implantation of any part of the placenta in the lower part of the uterine segment. The term expresses the anatomic relationship between the placental site and the lower uterine segment. The placenta encroaches on or covers (completely or partially) the internal cervical os. Placenta previa is classified as marginal, partial, or total.

2.22 *Marginal Placenta Previa*

Marginal placenta previa is present when some part of the placenta is attached to the lower uterine segment and extends to, but does not cover, any part of the internal cervical os.

2.23 *Partial Placenta Previa*

Partial placenta previa is present when any part of the placenta incompletely covers the internal cervical os.

2.24 *Total Placenta Previa*

Total placenta previa is present when any part of the placenta completely covers the internal cervical os.

2.25 *Abortion*

Abortion is the expulsion or extraction from its mother of a fetus or embryo weighing 500 g or less (approximately equal to 20 completed weeks (140 completed days) to 22 completed weeks (154 completed days)) of gestation or an otherwise product of gestation of any weight and specifically designated (e.g. hydatidiform mole) irrespective of gestational age and whether or not there is evidence of life, and whether or not the abortion was spontaneous or induced.