## Infant and youthful mortality in Algeria

- Dr Boualem OUZRIAT, maghrebin association for the study of the population, section Algeria
- Dr Houria KERBAL maghrebin association for the study of the population, section Algeria

## 1. Introduction:

The level of mortality of the children is regarded as one of the best indicators of the level of development of a population. It constitutes, indeed, one of the essential parameters of the components of the index of human development (IDH) that the United Nations works out annually.

Closely related to the health of the population, her standard of living and the possibilities which are offered to him as regards access to the care, mortality at the youths is a phenomenon which implies factors of various dimensions. These last are so dependent that it is difficult to separate their own.

Its evolution informs about the efforts authorized in the field of maternal and infantile health and allows of this fact of appreciating the degree of success or failure of the policies and programs implemented on the matter.

Moreover, education, especially that of the mothers, is likely to act on the survival of the children. Indeed, it makes it possible to the woman to ensure the best followed pregnancy and facilitates the access to information on hygiene, the care and the services of family planning.

In addition, it is commonly allowed that the level of infant mortality is closely related to the level of fruitfulness observed. A level of infant mortality high leads the parents to have much child for the purpose of ensuring the survival of some of them

The Algerian investigation into the health of family **AIHF 2002** was interested in this phenomenon by devoting a special shutter to it and by doubling the size the sample of the investigation with the effect on the one hand, to measure the level of infant mortality and on the other hand to analyze the noted disparities.

With through the results presented one will try to examine the level of the infant mortality and youthful, his tendencies as well as the disparities noted according to the kind, the medium of residence and certain demographic characteristics socio of the mother. Lastly, the last part will be devoted to the evaluation of the impact of the environmental factors on the level of the infant mortality.

## 2. General presentation of the investigation:

The Arab project for the health of the family was developed with an aim of allowing to the decision makers Arab countries, to have information necessary to implement, to pursue and evaluate the policies of pubic health. The project is based on an effective design, able to allow to the initiators policies of health to analyze and evaluate the data. It makes it possible to plan and follow the programs and the various policies of health. This project falls under the continuity of project PAPCHILD initiated by the league of the Arab states. Algeria is the fourth Arab country to engage in the realization of this project whose execution was entrusted to the National office Statistics.

The Arab project for the health of the family was developed with an aim:

- To allow the authorities to have essential information to implement, to pursue and evaluate the policies of pubic health;
- To contribute to improve and consolidate the programs of health and in particular reproductive health, through the actualization and the enrichment of the existing data bases;
- To have the instruments necessary to follow a regional policy of population.
- To have the indicators at ends of comparability with the Arab countries and to evaluate the efforts required in the field of pubic health.

The Algerian investigation into the health of the family was carried out by the national office of the statistics in accordance with the draft-agreement ratified between the Arab project for health / League of the Arab states on the one hand and the Algerian government represented by the ministry for hospital reform and public health on the other hand

The investigation was carried out during the period from December 2001 to December 2003 (all phases); the principal report/ratio was published in July 2004.

It was carried out on a sample of 10000 households, was extended to 20000 households for the study of the infant mortality and to make it possible to have a certain number of indicators at the regional level.

For the needs for the sampling of the investigation, the territory of the country was divided into 17 pennies areas made up each one of one or more wilayas. Then it was drawn by chance a wilaya for each under area. On the whole there were 17 districts out of the 48 which account the country.

It should be stressed that the Arab project includes/understands common questionnaires that the countries are held to realize and of the questionnaires to the choices. The common questionnaires are:

- A questionnaire on the characteristics of the households
- A questionnaire for reproductive health

#### **3. Presentation of the principal results:**

# a. disparities of the levels of infant mortality according to the kind and the medium of residence:

The results of the investigation relating to the infant deaths, collected over the three last years preceding the investigation, made it possible to consider the quotient of infant mortality at 31.2 ‰.

According to the medium of residence, the results of the investigation reveal a variation of about 3.3 points in favour of the urban environment.

According to the kind, the quotients of infant mortality are estimated at 33.7‰ among boys and with 28.6‰ in the girls is a variation of five (05) points to the profit of these last. This variation reaches 8.1 points in urban environment counters only 1.5 points in rural medium.

#### b. evolution of the indicators of the infant mortality and youthful (of 1985 – 2002):

For the seventeen last years, according to various periods, During the two last years preceding the investigation, 2000-2002, out of 1000 alive births 37 do not reach their fifth anniversary; 31 of them dies before their first anniversary (20,5‰ between 0 and 1 month and 10,7‰ between 1 and 12 months).

Over the 17 last years period, notwithstanding the risks related to the errors of recording, we can note that the infant mortality rate dropped by 19, 7 points while passing from 50.9‰, during the period 1989-85, with 31.2‰ between 2000 and 2002, is a reduction of 38.7%. During the same period, the youthful death rate infant was reduced of 23, 6 points is 39.1%.

It is also noted that the fall of the level of in particular infantile mortality is due primarily to the significant fall of mortality post neonatal. The level of mortality neonatal, as for him, knows a light increase. These results can be explained by the efforts made in the field of infantile health cantered mainly on the reduction of the exogenic causes such as the infectious diseases, the conditions of hygiene and the food, etc.

#### c. infant mortality and characteristic of the mother:

The demographic characteristics of the mother in particular the age and the educational level constitute factors determining of the level of the infant mortality and youthful. The results of the investigation highlight this relation and more particularly the effect of the age and the educational level of the mother.

The investigation revealed that the level of infant mortality drops as the educational level of the mother increases. The risk to die before reaching the first anniversary is definitely higher for a child born of an illiterate mother than for a child born of a mother of a secondary level or more. The risk to die is practically three times higher is 40‰ against 12‰.

The same tendency is observed concerning youthful mortality; probability of death of a child before reaching 5 years and whose mother is illiterate is four times higher than those of the mothers having a secondary level or more.

From the point of view of the age, the risks to die highest are observed at less than twenty years and the most 35 years. The quotient of infant mortality reached at these ages respectively 45.9‰ and 40.2‰ against 30‰ for the old mothers between 20 and 34 years

#### d. infant mortality and characteristic of the child:

Among the principal characteristics of the children died, we retained the row with the birth and the interval inter genesis. Differential mortality according to these two characteristics highlights the significant risks related to a high fruitfulness. The results of the investigation emphasize that the level of infant mortality increases as the row of birth rises. The quotient of infant mortality passes from 27.6‰ for rows 2 and 3 to 38.2‰ for those whose rows with the birth are higher than three. The same report is observed for youthful mortality neonatal, post neonatal and.

Concerning the risk to die of the children according to the interval inter genesis, the results confirm this relation and reveal that 25.8‰ alive births whose interval inter genesis is higher than 4 years, die before reaching their first anniversary. This risk is twice higher this interval does not exceed two years.

## e. impact of the environmental factors:

Concerning the impact of the environment, apprehended mainly through the conditions of habitat, on the infant mortality and more particularly mortality post neonatal, the results of the investigation reveal that the risk to die is almost twice higher for the children of less than one year born in households living of the traditional houses (40.4‰) that for the children born in households living in apartments. Moreover, the share of mortality post neonatal in the infant mortality is also very significant. It passes from 29.3% near the households living in apartments to 40.6% for those which live in traditional houses.

The results of the investigation emphasize that the risk to die for the children of less than one year passes from 29.8‰ when the household feeds since the public network from supply drinking water with 39.9‰ for the other sources. The share of mortality post neonatal, as for it, passes respectively from 37.9% in the infant mortality to 39.6%.

Moreover, the risk to die for the children of less than one year reached 42.2‰ when housing is not attached to the sewerage system against 29.4‰ when housing is attached there.

The effect of the mode of evacuation of the household refuse on the level of the infant mortality is also perceptible, the quotient of infant mortality passes from 24.2‰ at the households which get rid of the household refuse by depositing them in collectors of refuse, with 31, 2‰ at those which deposit them in a place special and reached 38.6‰ for those which get rid some anyhow. As for mortality post neonatal, the latter accounts for 28.5% of the total of the infant mortality of the households which deposit their refuse in the collectors of refuse; this share rises to 44.3 % in the households having recourse to other modes of evacuation.

#### In conclusion

We can be satisfied efforts authorized within the framework of the various national programs out of matters of protection and of promotion of the health of the child, worked out in the beginning of the Eighties, carried out and readjusted through differently the stages, to quote some indicators, the infant mortality rate was estimated at 31,4%, the probability of survival of the girls of less than one year is higher than those of the boys, the children of the urban environment are likely in addition more to survive than those of the rural zone. It should be recalled that this rate knew a significant fall compared to 1992 when the data of the investigation into the health of the mother and the child estimated it at 44 %**0**. the quotient of youthful mortality infant is estimated at 36,7%0. This rate knew a fall compared to the year 1992 when it was estimated at 49 %**0**.

But much remains to be made to erase and reduce the disparities in particular on the socio-economic environment plan and conditions to the profit of the exposed families (habitat, drinking water, hygiene of the medium, education, promotion of the woman....)