# EVOLUTION OF INFANT MORTALITY AND ITS MANAGEMENT IN THE COUNTY OF ALBA

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Abstract: Infant mortality rate for Alba County and Romanian average remains well above the rate registered in the EU countries. The paper aims at analysing the causes of the circumstances of the factors that bring about this negative phenomenon of health and infant mortality in terms of globalization objective and strategy approach.

**Keywords:** globalization, social intersectoriality, vulnerable population

Rezumat: Mortalitatea infantilă pentru județul Alba ca și media României se menține la o rată mult peste valorile înregistrate în țările Uniunii Europene. Analiza cauzelor circumstanțelor factorilor care determină acest fenomen negativ de sănătate, cât și mortalitatea infantilă prin prisma obiectivului globalității și strategiei de abordare.

Cuvinte cheie: globalitate, strategia mortalității infantile, intersectorialitatea socială, populația vulnerabilă

### INTRODUCTION

Infant mortality in Romania between 1996-2000 reveals the maintenance of infant mortality at a high level in comparison with the developed countries, EU candidate countries and even with the ex-communist countries. Romania is on the last place together with Moldova, although infant mortality has fallen under 14% (13,8%) in 2006 and below 12% in 2007.

- The decrease of the postneonatal infant mortality from 8,9% to 7,9% and the increase of the neonatal mortality index from 8,4% to 8,8% and respectively of early neonatal mortality from 5,7% to 6%.
- A higher rate of infant mortality can be observed in the rural environment (19,4%) as against that registered in the urban environment 13.7%. Both rates are comparative in relation with the previous years, below the registered level.
- More than 45% of the deaths registered between 1-4 years old take place in the sanitary units (47,1%).

Deaths due to AIDS fell from 9.1% of all deaths due to infectious and parasitic diseases in 1997 to 4.7% in 1999, rising again and reaching a threshold of 6.45% of all deaths as a result of infectious and parasitic diseases in 2003

Infant mortality in Alba county, taken as the average per Romania is maintained at a higher rate – much above the values registered in the countries within

the European Union, as it was published in *Health for all*, June 2003 and December 2003.

The high levels of infant mortality are kept high towards the age subgroups, both at national level and at the level of the county of Alba.

The active surveillance of the pregnant and lately confined woman is insignificant, the assistance of this particular category of population is up to the capacity of understanding and to the level of culture of this person who should be stimulated.

- the reactivation of the commission who analysis every death of a child between 0-1 and 1-5

years old, as well as the detailed analysis of the causes which determined the pregnant woman to go to the doctor as soon as possible (the first pregnancy semester) for a proper surveillance and for the early detection of the affections which might brought forward the RISK.

- The stimulation of the family physician for a correct surveillance of the pregnant woman and her guidance according to the risk and the degree of competence of maternity towards the I, II, III level maternity.
- The extension of the community assistance at the level of Alba county being considered a spy of the physician in order to detect the pregnant women who were not taken in the evidence of any family physician.
- The employment of middle sanitary personnel with obstetrics-gynaecology, paediatrics training within the family physician medical office is much optional, as the assigned budget does not provide the physician with the "luxury" of concluding service contracts for this category of personnel.
- Still, in the light of the latest regulations, there were certain measures aiming at the improvement, even at the decrease of this phenomenon.

Infant mortality:

The objective of globalisation and the approach strategy – this indicative belongs to the sanitary subsystem from the point of view of the medical nature and as an intervention from the part of the health services.

The phenomenon represents intersectoriality (social, political, economical, cultural), these factors constituting behaviours of this negative health phenomenon.

From this point of view, concrete measures were

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taken that may block either partially or totally this negative phenomenon, such as:

- the necroptic examination of the dead child irrespective of the place of the death in order to establish as accurate as possible the causes of death.
- The drawing up of the papers required at the civil registry with the help of the prefect's office and of the Alba County Council and of the institutions of the Local Authority (rroma people of the area of Blaj, Sebes and Alba Iulia).
- Responsabilization of the family physician regarding the methods for the surveillance of the new-born baby in order to early detect the reasons that may bring to its death.
- the assurance that the mothers survive pregnancy and birth and which, at the same time represents a fundamental element of the women rights.
- the accomplishment of a prenatal consultation according to the new standards and protocols (at least the consultations made within the family physician office and 1-3 consultations at a specialist physician).
- Prophylaxis of pregnancy anemia with iron products and the administration of D3 vitamin starting with the seventh month of pregnancy
- Sanitary education of the mothers, showing them the IMPORTANCE OF THE NATURAL NOURISHMENT, suggesting them to postpone the food diversification until around the age of six.

Since 2000, the most complex programme (2000-PN12, 2001-2007-PN3, 2008-PN4, 2009-PN5) has been functioning in Romania, which is responsible for the mother's and child's health; this programme has 18 subprogrammes (interventions) out of which in the county of Alba, the following programmes are in development:

- suprogramme 1 on the distribution of freely distributed contraceptives through the Family Planning centres and through the family physician.
- Suprogramme 4 prophylaxis of the Rh immunization syndrome through the administration of anti-D globulin, which is developed in hospitals.
- Suprogramme 5 on the decrease of the maternal deaths and infant mortality.
- Suprogramme 10 on the prevention of the dystrophy in infants through the administration of powder milk in the children between 0-1 years old by the local authority (Order no. 418/2001 and the Application Norms April 2006)
- Subprogramme 11 food and nutritive elements for premature births, developed by the new-born departments within hospitals.
- Subprogramme 12 anemia prophylaxis in pregnant women through the distribution of iron-based products by the family physicians.
- Subprogramme 13 iron-deficiency anemia prophylaxis in infants through the iron-based products, intervention developed with the help of the family physician.
- Subprogramme 14 rickets prophylaxis with D3 vitamin-based products through the new-born

- departments and family physicians.
- Subprogramme 15.2 prophylaxis and treatment of bronchial asthma in children.
- Subprogramme 18 National programme management

Together, all these subprogrammes (interventions) make the infant be less vulnerable in the biological handicaps.

Through this national programme and through this new vision regarding the maternal mortality, ante, intra and post-partum mortality and through the rehabilitation of those 6 maternities within the county of Alba, the premises for the increase of the efforts are created, regarding the vulnerable population groups, as well as the vulnerable theories (rural environment, urban periphery) and at the same time, the intersection of the health activity with the social protection and promotion activity will thus take place.

It is necessary to decrease the infant mortality indicator, especially through the post-natal and intersectorial incidence, as well as through the drawing up of an intersectorial programme of prevention, by fighting this negative health indicator.

## CONCLUSION REGARDING INFANT MORTALITY IN THE COUNTY OF ALBA

% of the total of the infants born alive

	Birth weight									
Year	Below 1000 gr.	1000- 1499 gr.	1500- 1999 gr	2000- 2499 gr.	2500 - 2999 gr.	3000- 3499 gr.	3500- 3999 gr.	4000 - 4499	4500- 4999 gr.	5000 gr and more
1998	0,14	0,51	2,14	6,08	22,25	39,23	23,62	5,51	0,51	0,02
1999	0,30	0,72	2,05	5,70	21,59	40,93	22,87	5,08	0,76	0,00
2000	0,23	0,58	1,90	6,20	23,22	39,25	23,37	4,51	0,66	0,08
2001	0,06	0,56	1,72	5,84	22,61	40,71	23,03	4,85	0,56	0,06
2002	0,12	0,49	2,18	6,21	22,19	39,79	23,06	5,39	0,55	0,03
2003	0,09	0,37	2,13	5,62	24,91	39,83	2094	5,36	0,60	0.14

Causes of death	Romanian average				Average in the county of Alba					
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Total of causes	18,6	18.6	18,4	17,3	16,7	16.8	17.2	18,6	20,3	19,0
Respiratory diseases	6,3	5.7	5,4	5,4	4.8	3.2	3.0	3.4	3.2	5.2
Perinatal causes	5,9	6.2	6,0	5,0	5.6	7.6	7.9	7.9	5.5	6.3
Congenital abnormalities	3.3	3.5	3,9	4,1	4.0	4.7	4.3	5.6	8.7	5.5
Infectious diseases	0.8	0.8	0,8	0,8	0.6	0.2	0.5	0.6	0.6	0.3
Digestive diseases	0.6	0.6	0,5	0,5	0.2	0.2	0.0	0.0	0.3	0.3
Other causes	0.7	0.8	1,4	1,5	1.3	0.2	1.0	0.6	0.9	0.3

	Place of death					
Year	In sanitary units	At home	Other situations			
1997	77,9	13,0	9,1			
1998	70,8	19,4	9,7			
1999	77,9	17,6	4,4			
2000	83,8	14,7	1,5			
2001	86.4	13.6	0			
2002	72.9	22.9	4.3			
2003	72.7	16.7	10.6			

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Environment/gender	In sanitary units	At home	Other situations
Total –county of Alba – out of which	72,7	16,7	10,6
- Maale	71,1	17,8	11,1
- Female	76,2	14,3	9,5
Urban – out of which	77,1	8,6	14,3
- Male	72,0	12,0	16,0
- Female	90,0	-	10,0
Rural – out of which	67,7	25,8	6,5
- Male	70,0	25,0	5,0
- Female	63,6	27,3	9,1

#### At 1000 born alive

Year	0 - 6 days		7 - 27 days		1 month – 11 months		
	Romania	Alba	Romania	Alba	Romania	Alba	
1997	6,4	8,1	9,5	9,0	12,5	9,2	
1998	6,5	6,5	9,4	9,4	11,1	7,9	
1999	5,7	8,9	8,6	11,6	10,0	5,2	
2000	6,2	7,6	9,2	11,4	9,5	5,8	
2001	6,1	9.0	9,2	12.4	9,2	6.2	
2002	5,7	8,7	8,4	13,1	8,9	7,3	
2003	5,9	8,6	8,8	11,2	7,9	7,8	

### **BIBLIOGRAPHY**

- Bocsan I. Epidemiologia practica pentru medicii de familie, 1999.
- Enachescu D, Marcu M. Sanatate publica si management sanitary, 1995.
- 55. European congresus conference on quality assurance indicators for perinatal care, tubingen.
- Vulcu L. Introducerea la globalizarea sănătății, vol. i, ii, iii, 1997.
- 57. Vulcu L. Management sanitar. 2004. Mortalitatea feto-infantilă, măsurare, descriere, interpretare, prevenire și combaterea bazată pe noțiunile de risc.
- 58. Vulcu L. Tratat de medicină publică-2005, vol.I-III.
- Programul național de supraveghere nutrițională, 1993 – 2000.
- 60. C.S.S.D.M. Anuar de statistică sanitară, 2003.
- 61. Health for all, 2004.
- 62. Ionescu T, Ursuleanu D, Ursuleanu I. Starea de sanatate de un an. Posibile legături cu unele boli cronice la vârsta adultă, 2004.
- 63. Manciuaux M, Lebovici S et al. L'Enfant et sa Sanate.
- 64. Rotaru T. Demografia și sociologia populației, 2003.
- Comisia Națională de Statistică. Anuarul Statistic al României, 1993.
- 66. Ministerul Sănătății. Direcția Ocrotirii Mamei şi Copilului, UNICEF, Centrul de Calcul, Statistică Sanitară şi Documentare Medicală. Analiza mortalității infantile în perioada 1 ianuarie – 31 august 1995. Mortalitatea 1-4 ani.
- 67. Comisia Națională pentru Statistică. Particularități ale evoluției demografice a popuilației în mediul urban și rural în perioada 1990 1995.
- 68. Institutul Național de Statistică București. Anuarul demografic al României, 2001

- 69. Institutul Național de Statistică București. Ancheta bugetelor de familie.
- 70. IOMC UNICEF. Programul Național de Supraveghere Nutrițională 1993 2000.
- 71. Ministerul Sănătății, Centrul de Calcul, Statistică Sanitară și Documentare Medicală. Mortalitatea primei copilării în România, 2003.
- Prevenirea mortalității infantile. Ed. Sincron, pag. 169, 2003.
- 73. Pediatrie Socială. ISBM 973- 95604-1-5, 1995;40.
- 74. Rusu O. Aspecte privind morbiditatea și mortalitatea perinatală" Rev. Pediatrie nr. 3, 1973.
- 75. Trifan N. Prematuritatea în cadrul pediatriei sociale Viața Medicală nr. 11, 1970.
- 76. Vulcu L. Mortalitate infantilă. Raport de statistique sanitare mondiale OMS, 1970, Vol. 23, nr. 9.
- Bocsan I. Epidemiologia practica pentru medicii de familie, 1999.
- Enachescu D, Marcu M. Sanatate publica si management sanitar-1995.