



NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)

MALTA

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Compiled by

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INTRODUCTION

It is my pleasure to inform you that for the first time since the introduction of the National Obstetrics Information System (NOIS) in 1999, there was an increase in the total number of births last year (see table below).

Year	Total Births
1999	4382
2000	4377
2001	3955
2002	3927
2003	4054

Source: NOIS Project, Malta

ANALYSIS

This report analyses, the **national deliveries and births** that occurred in 2003 and compares it to the same period in 2002, where possible (published annual report 2002).

The data in this report relates to the birth for all maternities (Maltese and non-Maltese) registered into the system.

In 2003, there were a total of 3995 deliveries registered in the Maltese islands, which resulted in a total of 4054 births.

When comparing these figures to the same period last year one can see that the number of deliveries and consequently the births **increased** by 122 and 127 respectively (*deliveries: 3873, births: 3927-'02*).

MATERNAL AGE

The maternities have been grouped according to the standard age groupings and the frequency distribution of deliveries according to maternal age at delivery has been analysed. In 2003, the greatest number of deliveries (37%), occurred in the age group 25 to 29 years while the lowest number of deliveries (<1%) occurred in the 45+ age group. The minimum age of the mothers was 14 years whilst the maximum age was 45 years.

The grouped frequency distribution of deliveries according to maternal age, are given in the table below.

Age grp.(yrs)	2003		2002	
	Frequency	%	Frequency	%
<15	5	<1	4	<1
15-19	216	5	229	6
20-24	802	20	726	19
25-29	1465	37	1538	40
30-34	1028	26	901	23
35-39	377	9	375	10
40-44	81	2	86	2
45+	1	<1	1	<1
Unspecified	20	1	13	<1

MARITAL STATUS

In 2003, there were 17% (665) of all deliveries that occurred to mothers who were never married (single) while 82% (3258) of deliveries occurred to mothers who were married once (married, widowed, separated). The remaining 1% (72) deliveries had no marital status specified (14%-single, 84%-married once, 2%-unspecified-'02). When comparing these rates to 2002, one can see that the single status rate increased by 3% last year while the mothers who were married once decreased by 2%.

According to the data registered to NOIS in 2003, of the 17% (665) mothers who have never been married, 99% (656) received 'Support at home to raise the infant' while <1% (4) did not have 'support at home'. The remaining 1% (5) mothers were unspecified (14% single status: 97%-received support, 2%-not supported, 1%-unspec.-'02). On comparing these rates to 2002, one can see that with the single status mothers, there was a 2% increase in 'support at home to raise the infant', last year.

NATIONALITY OF MOTHER

In 2003, 92% (3687) of all deliveries occurred to women of Maltese nationality while 6% (220) were Non-Maltese. In the remaining 2% (88) deliveries the nationality was not specified (95%-Maltese, 4%-Non-Maltese, 1% Unspecified-'02). On comparing these rates to 2002, one can see that the number of deliveries to Non-Maltese increased by 2%.

In 2003, of the total deliveries, 51% (2035) were primapara deliveries while 49% (1960) were multiparas. When comparing these rates to 2002 figures one can see that the rates remain the same (In 2002 the primapara and multipara rate was 51% and 49% respectively).

MATERNAL LIFESTYLES

In 2003, there were 3% (123) of mothers who smoked either 1 to 3 cigarettes or more during pregnancy. When comparing these figures to 2002, it can be seen that the smoking habits of mothers remained the same. However, these figures must be read with caution as the data recorded may not reflect real picture.

The table below gives the smoking, alcohol and drug habits of mothers for 2003 and 2002.

<i>Year</i>	<i>2003</i>	<i>2002</i>
	No.	No.
<i>Cigarette smoking during pregnancy:</i>		
➤ 1 to 3/day	18	23
➤ >than 3/day	105	100
➤ Do not smoke	3824	3691
➤ Unspecified	48	59
<i>Alcohol consumption during pregnancy:</i>		
➤ Up to 1unit/day	0	2
➤ >than 1unit/day	0	-
➤ None	3948	3816
➤ Unspecified	47	55
<i>Drug Abuse during pregnancy</i>		
➤ Yes	8	6
➤ No	3941	3812
Unspecified	46	55

PATHOLOGY DURING PREGANANCY

The table below gives the number of mothers in 2003 and 2002, recorded with a specific obstetric pathology during pregnancy. There were 6% of mothers who had gestational hypertension in 2003 while for the same period in 2002 this rate was also at 5%.

Pathology recorded during pregnancy	2003			2002		
	<i>No</i>	<i>Yes</i>	<i>Unspec.</i>	<i>No</i>	<i>Yes</i>	<i>Unspec.</i>
	No.	No.	No.	No.	No.	No.
Antepartum Haemorrhage:	3942	43	10	3832	37	4
Gestational hypertension:	3724	260	11	3654	212	5
Pre-eclampsia:	3960	25	10	3839	24	10
Placenta praevia:	3960	25	10	3841	24	8
Abruption of placenta:	3969	13	13	3853	9	11
Assisted fertilisation (ART):	3949	35	11	3831	29	13
Cardiovascular disease:	3982	3	10	3867	1	5

Diabetes in pregnancy

Diabetes in pregnancy is recorded into the standard NOIS sheet according to the data recorded in the 'Booking Sheet', 'The Baby Book' and the entry note by the doctor in the personal file of the mother.

In 2003, there were 15 mothers who were registered as being Insulin Dependent Diabetic before this pregnancy while there were 4 mothers recorded with Non-Insulin Dependent diabetes. In addition, there were a total of 80 mothers registered with gestational diabetes who were controlled with (1) and without (79) the use of insulin.

In addition there were 50 mothers that were recorded with 'Glycosuria' (ICD 10-O26.9) with no mention of IDDM/NIDDM before pregnancy or gestational diabetes during pregnancy.

ULTRASONOGRAPHY

According to NOIS in 2003, there were 30% of mothers who had two ultrasounds carried out during pregnancy while in 8% of mothers this was not specified. The table below gives the number and rate of ultrasound scans carried out during pregnancy.

No of Scans	2003		2002	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
1	889	22	739	19
2	1189	30	1208	31
3	867	22	905	23
4	470	12	478	12
=/>5	232	6	293	8
Unspecified	348	8	250	7

CATEGORY OF MATERNITY ACCORDING TO DELIVERY

For 2003, there were a total of 3939 (99%) singleton, 53 (1%) twin deliveries and 3 triplet (<1%) deliveries (see table below). When comparing 2003 and 2002, one can see that the number of singleton, twin and triplet deliveries increased by 118, 3 and 1 respectively.

	2003	2002
<i>Category</i>	<i>No.</i>	<i>No.</i>
Singleton	3939	3821
Twin	53	50
Triplet	3	2
Quadruplet	-	-

SITE AND ONSET OF DELIVERY

In 2003, of the total deliveries (3995), 99.5% (3976) occurred in hospital while 0.5% were deliveries that occurred at home (3), underwater (11) and other (2) site. In addition, there were 3 deliveries that had no site specified. When comparing these rates to 2002, the rates remain unchanged.

In 2003, of the total deliveries (3995), 48% (1912) were spontaneous onset of contractions, 39% (1554) were induced by drugs or Artificial Rupture of Membranes (ARM), 13% (510) were planned Caesarean sections and 19 had no onset of delivery registered.

METHOD OF BIRTH

In 2003, there were 69% of births that were delivered by vertex delivery, 27% by emergency or elective Caesarean section and 4% by assisted vaginal delivery (includes forceps, ventouse and breech).

When comparing the method of birth to 2002, it can be seen that the vertex deliveries decreased by 3% (2002: *vertex:72%, C section: 24%, assisted vaginal delivery: 4%*).

	2003	2002
<i>Method of Birth*</i>	<i>No.</i>	<i>No.</i>
Infants delivered by vertex delivery	2801	2813
Infants delivered by emergency/elective Caesarean Section	1091	956
Infants delivered by forceps	11	22
Infants delivered by ventouse	145	132
Breech deliveries	6	4

Note: *:Data analysed according to total birth

BIRTHWEIGHTS AND GENDER OF BIRTHS

In 2003, of the total births (4054), 92% (3744) occurred in the birth weight range of 2500g to 4999g, 6% (251) in the low birth weight range of 1500g to 2499g and 1% (45) in the very low birth weight range of 500g to 1499g. (see table).

Birthweight(g)	2003	2002
<500g	3	1
500-1499g	45	36
1500-2499g	251	211
2500-4999g	3744	3671
5000+	2	5
Unspecified	9	3
Average Birthweight	3202	3241

The female and male distribution of births in 2003 and 2002 is given in the table below.

Gender	2003		2002	
	No.	%	No.	%
Female	1993	49	1851	47
Male	2061	51	2076	53

OUTCOME OF BIRTH

The number of live births in 2003 and 2002 were 4036 and 3906 respectively which accounted for 99.6% of the total birth rate at a national level. The remaining 0.4 % accounted for the stillbirths (see table below).

Outcome of Birth	2003	2002
Babies born alive	4036	3906
Stillbirths*	18	21
<i>Early Neonatal deaths</i>	<i>19</i>	<i>16</i>
<i>Late Neonatal deaths</i>	<i>2</i>	<i>3</i>

Note: *: Includes all births irrespective of gestational age

BREAST FEEDING WITHIN 30 MINUTES OF DELIVERY

In 2003, there were 49% of infants that were breast fed 'within 30 minutes of birth' while 51% were not breast fed during the same time period. When comparing these figures to same period in 2002, one can see that there was a 14% **increase** in the number of infants who were breast fed 'within 30 minutes of birth' in 2003 (2001: 35% breast fed, 65% not breast fed).

Breast feeding within 30mins. of delivery	2003	2002
	<i>No.</i>	<i>No.</i>
Infants breast fed	1983	1371
Infants not breast fed	2068	2554
Unspecified	3	2

INFANT FEEDING METHODS AT DISCHARGE

Infant feeding habits are recorded by hospital staff at the time of discharge, little can be said on the actual infant feeding habits from the numbers given below as these may change soon after discharge from the birthing facilities.

Infant feeding methods at time of discharge	2003	2002
		No.
Breast only	2165	1914
Bottle only	1427	1538
Mixed (Breast & Bottle)	397	405
Other	16	12
Unspecified	51	58

CONCLUSION

I would also like to inform you that this is my final report as Focal Point, NOIS. As of 2004, I am working for the Data Management Unit, St. Luke's Hospital and no longer work for the Department of Health Information. Dr Miriam Gatt at the DHI has agreed take on the role of Focal Point, NOIS, Malta.

I would like to take this opportunity and sincerely thank you for your time and effort in making NOIS a truly unique national information system that has served the nation.

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