

Smoking Behaviour in Pregnant Maltese Females

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ABSTRACT

The smoking behaviour of a randomly selected group of pregnant Maltese females attending the Antenatal clinic at Karin Grech Hospital, Malta was studied during the first four months of 1988. The group was also screened with regard to educational attainment, occupation and attitudes to smoking.

It was found out that 45.4% used to smoke before getting pregnant while 22.6% still smoked during their current pregnancy. The reasons for and the duration of the smoking habit are among the findings that are discussed.

INTRODUCTION

Over 30 years ago, the first reports discussing the hazards of smoking in pregnancy were published.¹ More recently there were firm indications that even moderate smoking causes low birthweight. Maternal smoking during pregnancy gives rise to retarded fetal growth, resulting in an average weight 200g less than that of children born to non-smoking mothers. This weight deficiency is related to the number of cigarettes smoked during pregnancy rather than to the number of cigarettes smoked before pregnancy began.^{2,3} There may also be an increased risk of congenital malformations in those children whose mothers smoke during pregnancy. When the pregnant mother smokes, the risk of perinatal death increases by 28%. Children whose mother smoked during pregnancy have been shown to lag behind non-exposed children both with regard to intellectual development as well as general physical health.⁴

The smoking habit is quite widespread among the younger age-groups of Maltese females, as has been shown through a national population survey.⁵ The aim of this study was to investigate the prevalence of smoking among pregnant females, past smoking habits and the age at which such individuals started to smoke.

METHOD

In order to study smoking behaviour in pregnant Maltese females, an observational study was set up and screening was held at the Antenatal clinic, Karin Grech Hospital, Malta. New cases visit the clinic daily in order to be registered, assessed and referred for later visits to either their own general practitioner or the polyclinic closest to their

home. Therefore, this eliminated the possibility of screening the same patient repeatedly. The average number of pregnant women attending the clinic for the first time from Monday to Friday was around 20 per day.

The first four months of the year 1988 were chosen. From each month, a single week was randomly selected so as to obtain a sample from each month; then from each week, 3 days were randomly selected so as to recruit a sample size of approximately 200 individuals. Random sampling was done by a simple mechanical device and the following weekdays were selected from the

RESULTS

The age ranges for the pregnant individuals surveyed varied from 14 to 44 years. The mean age was 28.3 years. The highest number of individuals were in the 25 – 29 year category. (38.7%, n=70) (table 1). This tallies precisely with the national rates where the rate has been the same for the past four years.⁶ In all, 22.6% (n=41) continued to smoke during their current pregnancy, of which 16.0% (n=29) were regular smokers while 6.6% (n=12) admitted to smoking occasionally. The rest (77.4% n=140) stated that they had never smoked during their current pregnancy. (table 2).

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TABLES

Age ranges in years	<15	15-19	20-24	25-29	30-34	35-39	40-44	Total
n	1	7	33	70	50	17	3	181
%	0.5	3.9	18.2	38.7	27.6	9.4	1.7	100

Table 1 - NUMBER OF INDIVIDUALS SURVEYED BY AGE-GROUPS

Smoking behaviour	%	n
Regular smokers	16.0	29
Occasional smokers	6.6	12
Non-smokers	77.4	140

Table 2 - SMOKING PATTERN DURING CURRENT PREGNANCY

respective months: January 19, 21, 22, February 9, 10, 11, March 15, 16, 18 and April 19, 21, 22.

All the 181 pregnant females who visited the clinic on the randomly selected days were interviewed. Before embarking on the actual survey, a small pilot study involving 22 persons was carried out in order to test and refine the questionnaire and screening methods.

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Of the individuals who did not smoke during their current pregnancy, 45.4% (n=64) admitted that they used to smoke: 27.0% (n=38) on a regular basis while 18.4% (n=26) occasionally. (table 3). In fact, 62.5% (n=40) stopped long before they knew they were pregnant while 37.5% (n=24) stopped on discovering that they were pregnant.

Various reasons for smoking were put forward. The main ones were relaxation, enjoyment, stress and weight reduction. The majority (46.3%, n=19) claimed that they smoked mainly as a response to stressful situations. (table 4).

Table 5 shows that initiation of smoking most commonly started in the teenage years. A large percentage of females surveyed had in fact attempted to quit smoking (63.4%, n=26).

still smoked during their current pregnancy had not succeeded to stop for a variety of reasons, among them lack of will power but also perhaps because their partner also smoked. In fact overall, only about 35% of the spouses were non-smokers.

A large amount of females start smoking between the ages of 15 – 19 years and this trend towards early initiation of smoking may have a significant impact on the future health of such females as many of the health risks associated with smoking increase with earlier onset of smoking and therefore duration of the smoking habit.

There is strong evidence in this study that females use what they term the sedative effect of smoking as almost 50% of the individuals claim that they smoke in order to control stress or as a response to it. It has

The role of family physicians, obstetricians and nurses is crucial if the prevalence of smoking during pregnancy is to be reduced. Their explicit advice based on scientific evidence is usually heeded by the pregnant woman who places her trust in them, while practical help should also be offered when appropriate in order to reinforce any attempt to stop smoking. Emphasis should be made repeatedly so that women stop smoking as soon after conception as possible, not only for the future well-being of their offspring but also in order that they may safeguard their own health.

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Smoking behaviour	%	n
Regular smokers	27.0	38
Occasional smokers	18.4	26
Non-smokers	54.6	76

Table 3 - SMOKING PATTERN OF THE NON-SMOKING GROUP BEFORE CURRENT PREGNANCY

Declared reason	%	n
Relaxation	19.5	8
Enjoyment	31.7	13
To control stress	46.3	19
To reduce weight	2.5	1

Table 4 - REASONS FOR SMOKING DURING PREGNANCY

Age ranges	Smokers		Ex-Smokers	
	%	n	%	n
10 - 14	39.0	16	10.9	7
15 - 19	51.2	21	57.8	37
20 - 24	4.9	2	23.5	15
25 - 29	4.9	2	7.8	5

Table 5 - AGE RANGES FOR INITIATION OF THE SMOKING HABIT FOR THE DECLARED SMOKERS AMONG THE INDIVIDUALS SURVEYED (IRRESPECTIVE OF WHETHER THEY HAD STOPPED SMOKING OR NOT).

DISCUSSION

The above results give information about the smoking behaviour in pregnant Maltese female. The percentage of maternal smoking in the study was 22.65% (n=41) and it is reasonable to assume that the smoking characteristic would remain the same even after the mother would have given birth.

The number of individuals who stated that they had tried to quit (63.4%, n=26) suggest that they must know about the adverse effects of smoking and they do accept the fact that smoking is a health hazard not only to themselves but also to their developing fetus. Those individuals who

also been stated by many individuals surveyed that anxiety and stress were induced by the different roles they had to assume, such as that of a wife, mother, housekeeper and at times that of a working woman. Intrafamily, "in-law" tensions and lack of privacy were also some of the reasons that were informally mentioned during the interview.

It seems that pregnant Maltese smokers are generally aware of the ill-effects of smoking especially during pregnancy and this study supports this view i.e. 37.5% (n=24) of females did actually stop smoking on discovering they were pregnant while a much higher percentage attempted to stop. (63.4%, n=26).

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