

Is there an increased role for general practice in making women more aware of folate supplementation to prevent neural tube defects?

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Neural tube defects are a group of serious congenital structural abnormalities of the brain, skull and spinal cord. Evidence that an adequate intake of folate periconceptionally reduces the risk of neural tube defects by approximately two-thirds is strong,¹ and this is recognised in NHMRC guidelines on folate: all women planning a pregnancy (or likely to become pregnant) should be encouraged to increase their folate intake.² There are indications that the incidence of neural tube defects among all pregnancies, including those terminated for neural tube defect, has decreased in Australia since the late 1990s,^{3,4} possibly from increased folate intake in response to increased awareness.

Methods

The Consumer Information Group on Pregnancy and Childbirth set up a community based intervention to increase

knowledge about folate prevention of neural tube defects in 1996.⁵ The study was a community randomised trial conducted in six Victorian local government areas (LGA) matched into three pairs. Telephone questionnaires were conducted using randomly selected telephone numbers generated for each location from a current residential database based on appropriate postcodes. A clearly defined telephone protocol was followed⁵ until at least 200 women aged 15–44 years per LGA were selected in each of the 1996, 1997 and 2000 surveys. The questionnaires were completed on computer scannable forms and the analysis was adjusted for the sampling design. The surveys measured the proportion of women aware of the association between folate and neural tube defects. This had changed from 12% (165/1196) in 1996 to 30% (383/1227) in 2000.^{5,6}

In this article we describe the sources

of information about folate, especially the role played by health professionals. We asked women how they had learnt about folate and neural tube defects.

Results

In the 2000 survey, the number of independent sources of information was significantly associated with increased awareness of folate with 41% of women reporting one source compared to 77% among those reporting three or more (OR: 1.92; 95% CI: 1.2–3.2, $p=0.03$). Information about folate came from a wide variety of sources (Table 1). Medical professionals, written material and television were the most frequently reported sources. There was a large increase in the importance of most sources of information between 1997 and 2000, although not for written material. Women who obtained folate information from medical professionals had greater level folate awareness (Table 1).

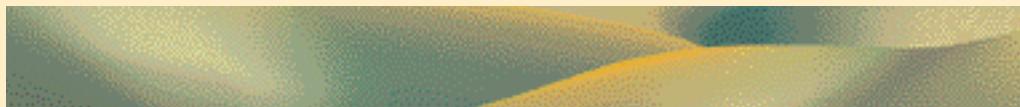


Table 1. Origin of information sources and folate awareness obtained in 1997 and 2000 by telephone surveys

Source of information about folate	1997 n=1204		2000 n=1227	
	Women who cited this source n (% _{adj})	Women who were folate aware n (% _{adj})	Women who cited this source n (% _{adj})	Women who were folate aware n (% _{adj})
Doctors	93 (7)	70 (74)	237 (18)	166 (70)
Written material	163 (12)	98 (63)	209 (16)	144 (70)
Television	61 (5)	32 (49)	184 (19)	90 (47)
Breakfast cereals	30 (2)	12 (49)	155 (13)	90 (61)

Note: %_{adj} has been adjusted according to population sampling fraction and cluster sampling design

Discussion

Women who obtained late folate information from medical professionals had a greater level of folate awareness. Hence, general practitioners are in an important position to increase the level of awareness in the community. This could be undertaken during consultations about contraception, as so few women seek pre-pregnancy counselling and so many pregnancies are unplanned.⁷ Even many women who knew about the benefits of folate had not changed their behaviour because they believed they already consumed an adequate amount of folate in their diet (survey data not shown). This is very unlikely for most: the median folate intake for women is 220 µg and even the ninetieth percentile 300 µg⁸ is well below the desirable intake for women of child bearing age.⁹ Information provided by GPs can reinforce information from other sources such as that on cereal packets.

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Implications of this study for general practice

- Most women of child bearing age are unaware of the association between folate and neural tube defects.
- Exposure to multiple information sources may increase women's retention of knowledge about folate.
- This may be greater when doctors provide the information.
- Specific information about folate supplementation may be necessary, including the information that it is difficult to obtain sufficient folate from dietary sources alone.⁸
- General practitioners appear to be ideally placed to fulfill this role.