

# Trends in negative defensive medicine within general practice

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## SUMMARY

*Negative defensive medical practice has adverse consequences both for individual patients and for public health. This paper reports the results from a survey conducted in 1999 in which certain features indicative of negative defensive practice were compared with an identical survey conducted five years previously. Responding general practitioners stated that they are now significantly more likely to undertake diagnostic testing, refer patients, and avoid the treatment of certain conditions.*

*Keywords: negative defensive medicine; public health; general practitioners.*

## Introduction

**D**EFENSIVE medicine may be defined as the ordering of treatments, tests, and procedures for the purpose of protecting the doctor from criticism rather than diagnosing or treating the patient. In 1994, the author conducted a national questionnaire survey of defensive medical practice.<sup>1</sup> Of particular concern was the large number of general practitioners (GPs) who were practising negative defensive medicine; e.g. increased follow-up, referral rates, and diagnostic testing. Over half of the doctors stated that they had increased testing, referrals, and follow-up as a result of the possibility of a patient complaining.

In a review of defensive behaviour among Dutch family physicians, Veldhuis noted that negative defensive behaviour appeared to be increasing.<sup>2</sup> In particular, she cited evidence indicating an increase in test ordering and referral behaviours. Recently, information published by both the Medical Defence Union (MDU) and the Medical Protection Society has revealed a continuing rise in complaints and litigation against GPs.<sup>3,4</sup> According to the MDU failure/delay in diagnosis accounted for 28% of complaints in 1998; the most frequent clinical condition associated with diagnostic failure or delay was missed malignancy.

The overall objective of this present study was to re-examine negative defensive medical practice in general practice and to highlight any significant changes over the past five years.

## Method

With the complete GP membership list of the MDU as the sampling frame, the method used was identical to that adopted in the 1994 survey. A questionnaire was distributed to every fortieth name on an alphabetically-ordered listing of GP members of the MDU. Five hundred GPs were selected to be surveyed.

The questionnaire reproduced the questions posed in the 1994 survey about the likelihood of certain practice changes in response to the possibility of patients complaining. The questionnaire data were entered onto Epi Info Version 6.0 with a 10%

double-data entry check. Specific associations between similar variables from the 1994 and 1999 surveys were examined using odds ratios (ORs) with 95% confidence intervals.

## Results

Of the 500 questionnaires dispatched, 346 were returned and, of these, seven were excluded as the replying doctors indicated that they were no longer working in general practice. The effective response rate was therefore 69% (339). Not all responders completed every question and the *n* values in parentheses reflect any incompleteness in answers.

Fifty-seven per cent (192) of the responders were men (*n* = 335), 42% (138) were members of the Royal College of General Practitioners (RCGP) (*n* = 325), half (*n* = 157) worked in urban practices (*n* = 313), the mean age was 38 years (*n* = 322), and the mean number of partners was four (*n* = 300).

## Discussion

In comparison with the information obtained in 1994 using a similar instrument and sampling frame, the current results highlight some important trends. GPs state that they are now more likely to undertake diagnostic testing (OR = 1.55 [1.10–2.18]), refer patients (OR = 1.51 [1.07–2.15]), and avoid the treatment of certain conditions (OR = 1.45 [1.04–2.01]).

The response rate in this survey was 69% (compared with 60% in the previous survey). The populations studied on both occasions were comparable in terms of mean age, membership of the RCGP, number working in urban practices, and the mean number of partners. The only sizeable demographic difference was the higher proportion of men in the 1994 survey (73% compared with 57%). However, this is consistent with a known trend towards a greater proportion of female GPs nationally. Overall the demographic features within the studied population are comparable to the national picture.<sup>5</sup>

Diagnostic difficulties within primary care appear to compound defensive practice. In a survey of Dutch GPs, diagnostic uncertainty was one of the key considerations in a shift towards defensive practice.<sup>2</sup> Unfortunately, much primary care research and many current evidence-based initiatives within primary care focus solely on treatment. As the most frequent clinical condition associated with complaints alleging diagnostic failure or delay was missed malignancy, it is salutary to note that the evidence for the significance of chronic cough as a symptom of lung cancer remains inadequate.<sup>4,6</sup>

This study suggests that there is an adverse trend in negative defensive medical practice. As an observational study it is not possible to draw any conclusions as to the causes of such a trend. Furthermore, as in the original survey, biases may have arisen as a result of the choice of the sampling frame, the sampling procedure, and the nature of the responders. However, if GPs could be empowered with relevant primary care clinical research findings on which to base their clinical decision making, such as more explicit guidelines for the management of possible early symptoms of malignancy, it would be interesting to further study the effect on negative defensive practice.

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**Table 1.** Negative defensive medical practice: 1994 and 1999.

Negative defensive medical practice	Percentage (n) of GPs likely or very likely to change		Odds ratios (comparing 1999 with 1994) <sup>a</sup>
	1994	1999	
Increased referral rate	63.8 (199)	72.7 (237)	1.51 (1.07–2.15) <sup>a</sup>
Increased follow-up	63.4 (189)	68.4 (223)	1.19 (0.84–1.68)
Increased diagnostic testing	59.6 (177)	69.5 (228)	1.55 (1.10–2.18) <sup>a</sup>
Avoiding treatment of certain conditions in general practice	41.9 (124)	51.1 (166)	1.45 (1.04–2.01) <sup>a</sup>
Consideration of diagnostic testing where there is a known element of risk	40.3 (116)	44.5 (143)	1.12 (0.80–1.58)
Prescription of unnecessary drugs	29.3 (87)	21.9 (71)	0.68 (0.49–1.00)

<sup>a</sup>Significant result at the 5% level.

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