Hormone Replacement Therapy: A Survey of Irish General Practitioners

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Abstract
We report findings of a cross-sectional postal survey of current prescribing practices of hormone replacement therapy (HRT) by Irish General Practitioners from a random sample of 600 Irish College of General Practitioners members. Median estimated prescribing rate of HRT was 17.5% (interquartile range 10 to 30%). The majority of General Practitioners would prescribe for the prevention of osteoporosis but there was some reluctance to prescribe solely for the prevention of CVD. Common cardiovascular conditions were regarded as contraindications to HRT by nearly one-third of GPs. Female GPs were more likely than males to request mammogram (p = 0.002), to consider a first degree relative with breast cancer in the family (p = 0.0001) and less likely to prescribe HRT for longer than 10 years (p<0.0001), because of breast cancer risk. 78% of GPs would offer HRT to all eligible women. We conclude the estimated prescribing rate is comparable to rates in other developed countries.

Introduction
Over the last four decades, enthusiasm for and acceptance of hormone replacement therapy (HRT) by both the public and the medical profession has fluctuated considerably. Use of HRT increased up to the late 1970s when reports were published linking oestrogen only HRT with endometrial cancer. This resulted in a fall in HRT use until the 1980s when it became common to prescribe combined oestrogen and progesterone to women. In recent years, concern over a possible increase in the risk of breast cancer during use and in the years after HRT is stopped has resulted in a decreased proportion of postmenopausal women using HRT.

One of the benefits of HRT is a possible 50% reduction in the incidence of CVD. The other is a significant reduction in the prevalence of osteoporosis and the incidence of oestrogen fractures. The debate now centres around the balance of these benefits and the risk of breast cancer during use and in the years after HRT is stopped. It is likely that the proportion of postmenopausal women using HRT will increase considerably over the next decade. This emphasises the importance of establishing the relative benefits and hazards of the different regimens as conclusively as possible.

The Medical Research Council’s Epidemiology and Medical Care Unit (MRC EMCU) in the United Kingdom have been involved in feasibility studies of randomised controlled trials of HRT over the last five years. A large scale international randomised controlled trial, which will include Ireland, is planned. This should address methodological problems with previous extensive observational work which includes self-selection of women and uncertainty among both doctors and women.

This present survey was undertaken to establish General Practitioners’ views on indications, contra-indications, initiation and duration of HRT. In particular, their views on the use of HRT for the prevention of osteoporosis and CVD were explored. The issue of breast cancer was also addressed. Furthermore, we wished to establish the level of interest of Irish General Practitioners in a randomised controlled trial of HRT.

Methods
This was a cross-sectional survey using a self-administered postal questionnaire based on a similar instrument used in the United Kingdom. As there is no comprehensive register of currently practising Irish General Practitioners, a random sample of Irish College of General Practitioners members was selected because the vast majority of General Practitioners are members (National Manpower survey 1997). A sample size determined that 600 questionnaires should be distributed in order to detect a real prescribing rate of HRT of 20% (95% CI 16.3 to 23.7%), at a response rate of 60%. The questionnaire was first piloted on 30 Irish General Practitioners (five percent of the sampling frame). A “freepost” envelope was enclosed with the questionnaire. A reminder not to post the questionnaire was dispatched to non-responders. Analysis was done using Stata statistical package. Associations between categorical variables were tested with X² distribution. Prescribing rates were compared using the t test and X² test for trend. Stratified analysis was done using the Mantel Haenzel method. Logistic regression was used to adjust significant findings for multiple variables.

Results
A total of 389 (64.8%) were returned. Forty-nine (12.5%) doctors were not working in general practice and 10 questionnaires were returned blank, leaving 379 questionnaires suitable for analysis. Table 1 shows the demographic characteristics of the General Practitioners; 67.6% of females and 50% of males responded; women were therefore significantly over-represented in the sample (p = 0.035). There were relatively more women in private practice (p = 0.02) and less working as principals (p < 0.00001).

Participants were asked to estimate their current prescribing rate of HRT in their practice. 312 General Practitioners answered this question. The median estimated prescribing rate was 17.5% overall (Inter quartile (IQ) range 10-30%), it was 20% (IQ range 10 to 30%) for female doctors and 15% (IQ range 10 to 25%) for male doctors. The prescribing rate was not normally distributed and there was a significant difference in geometric mean prescribing rate between male and female GPs (t test p=0.015) and there was a significant trend
of prescribing rate with gender (c2 test for trend p<0.01). No GPs stated that they never prescribe HRT although three (0.9%) omitted to respond to this question. Thirteen percent of male General Practitioners and eight percent of female General Practitioners, 36 in all (10.6%) would only prescribe HRT if initiated by the patient.

*not exclusive categories

Table 2 illustrates that the presence of symptoms and risk factors strongly influenced their willingness to prescribe, particularly in the case of CVD prevention where 81 (24.5%) would prescribe only if the woman was at high risk and 19 (5.8%) omitted to answer this question. Table 2 also shows how many years after menopause General Practitioners would consider starting HRT for different indications. Osteoporosis was the single largest indication for starting HRT after menopause in the time categories shown.

General Practitioners were also asked for what indications they prescribe HRT in order of frequency. Two hundred and fifty-nine (78.5%) respondents gave relief of menopausal symptoms as the most common reason if the woman was not at risk of CVD or osteoporosis; female General Practitioners being more likely to say so than men (p<0.0001). This difference remained highly significant when controlled for age, type of practice, position within the practice and being vocationally trained where the adjusted odds ratio of being female and answering yes to this question was 3.7 (95% CI 2.04 - 6.8) (p < 0.0001). Female General Practitioners were also more likely to send their patients for mammography before prescribing HRT (adjusted OR 2.3) (95% CI 1.44-4.1) (p=0.003) and at regular intervals while on HRT (adjusted OR 2.6) (95% CI 1.4 - 4.8) (p = 0.002). Females were more likely to say that breast cancer in a first degree relative was a contraindication or a relative contraindication to HRT. Again this remained significant when adjusted for all other factors (OR 2.3) (95% CI 1.2 - 4.4) (p = 0.011).
Table 4 shows how General Practitioners regarded some common cardiovascular conditions in terms of contraindications and relative contraindications. Two hundred and forty-three (73.6%) General Practitioners agreed that HRT should be offered to all women age 50 to 65 years assuming no contraindications. General Practitioners were asked about entering their female patients into a randomised controlled trial of HRT. Thirty-three (10%) said “yes definitely”, 126 (39%) said “yes, but contraindications” and 74 (21.2%) said “no definitely”. The only feature associated with being interested in participating was being a practice principal (adjusted OR 2.6) (95% CI 1.2 -5.7) (p=0.022).

Discussion
The estimated median prescribing rate of HRT is consistent with estimates from other developed countries. This figure remains to be validated by a notetaker in a sample of practices. However, population studies of women’s health in Ireland, indicate that this is more likely to be the proportion of women who have ever taken HRT rather than the proportion currently taking it\(^1\). The range of estimated prescribing rate is quite wide, indicated by a large inter-quartile range.

One of the striking features of this survey is that GPs appear to be confident about prescribing for menopausal symptoms in younger women and for the prevention of osteoporosis in the long term but they expressed considerable uncertainty about prescribing for the prevention of CVD over long periods of time even though CVD is the commonest cause of death and disability in postmenopausal Irish women\(^1\). Of those who do prescribe for this reason, there is a tendency to do so only if risk factors are present or if the patient is at high risk of CVD. Most of these will prescribe for up to 10 years and again will prescribe for longer durations if the woman has a history of oophorectomy.

A number of common cardiovascular conditions were indicated by some General Practitioners as relative or absolute contraindications. For instance up to one third of General Practitioners stated that hypertension was a relative contraindication and for the prevention of osteoporosis in the long term but they expressed considerable uncertainty about prescribing for the prevention of CVD over long periods of time even though CVD is the commonest cause of death and disability in postmenopausal Irish women\(^1\). Of those who do prescribe for this reason, there is a tendency to do so only if risk factors are present or if the patient is at high risk of CVD. Most of these will prescribe for up to 10 years and again will prescribe for longer durations if the woman has a history of oophorectomy.

Table 4

<table>
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<tr>
<th>Condition</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Relative</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Relative</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>绝对</th>
<th>Total</th>
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<tbody>
<tr>
<td>Ischaemic heart disease</td>
<td>28 (8.8)</td>
<td>107 (31.6)</td>
<td>66 (20.0)</td>
<td>8 (2.4)</td>
<td>330 (100)</td>
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<td>Cerebrovascular disease</td>
<td>47 (14.9)</td>
<td>177 (53.6)</td>
<td>99 (30.0)</td>
<td>17 (5.3)</td>
<td>330 (100)</td>
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<tr>
<td>Angina</td>
<td>33 (9.9)</td>
<td>156 (45.5)</td>
<td>72 (21.5)</td>
<td>12 (3.4)</td>
<td>330 (100)</td>
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<tr>
<td>Hypertension</td>
<td>18 (5.5)</td>
<td>195 (59.1)</td>
<td>132 (40.1)</td>
<td>14 (4.2)</td>
<td>330 (100)</td>
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References