	Prescription costs per doctor (L)					
(years) -	۸	В	С	D	E	
Under 16 16-64	0 68 1-04	0-69 1-95	0-71 1-09	0.76 1.08	0·78	
65 and over	116	104	1 08	1 05	0.99	

	Average prescription costs		
Therapeutic group	New	Repeat	
Alimentary	0-85	1:54	
Cardiovascular	2.00	2:51	
Central pervous system	0-87	1:30	
Musculoskeletal	2 0 2	364	
Indocrine	1 73	2-26	
enitourinery	1 49	1-65	
nfections	1 13	1.64	
utrition	0.57	0.87	
Cespiratory	0.66	2.15	
ar, nose, and oropharynx	1 00	1.84	
Bye	0.64	0.48	
Allerenc	0.65	0.94	
kin	0.96	1.06	
Metabolism	6.08	6 29	
Premines	0.98	1.69	

was little difference in the prescription coats among the doctors. A two
way analysis of versione performed on these results showed that at the
1% versione ratio level there was a significant difference between
children and the adult groups but no significant difference mong
doctors. Thus within an age group all the doctors had statistically
similar prescription costs.
With the exception of drugs acting on the cyt, all new prescriptions
(table III). The cost of new and repeat prescriptions (table III). The cost of new and repeat prescriptions for each doctor
for all therepeutic groups was calculated. To compare doctors, a two
way analysis of variance was performed on the prescription costs for
each therepeutic group. For II out of 15 therepeutic groups (the
exceptions being endocrine; eye, altergy, and skin) there was no
but there was a significant difference between the cost of new
and repeat prescriptions. Thus within a therapeutic group the cost of new
and repeat prescriptions. Thus within a therapeutic group the cost of new
and repeat prescriptions.

Discussion

The results of this study are based on prescriptions dispensed in one pharmacy between 1976 and 1977, representing 65% of the total number of items issued by one group practice in one year. The remainder were either presented at nother pharmacy personal properties of the present of the pharmacies were a special group, and the sample used in this study seems to be representative of all prescriptions issued in the group practice.

Several factor influenced prescribing costs. Repeat prescriptions. Several factor influenced prescribing costs. Repeat prescriptions are to fleet in the group practice. The present of the prescriptions are often issued to cover short courses of treatment, whereas repeats may be issued for longer periods in large quantities to treat chronic conditions. The age of the patient also affected costs. Within each age group under 10 years were much cheaper than those for adults. The direct relation between cost and age reflects a higher proportion of repeat prescriptions are often for adults. The direct relation between cost and age reflects a higher proportion of repeat prescriptions for fine given to the older patients with their higher incidence of chronic diseases. In children there were more prescriptions for fine-fictious diseases that are treated by short courses of relatively cheap drugs.

Prescribing costs appeared to be set related in adults, men receiving more expensive items than women. There were no important differences in prescribing costs among the doctors in this practice when each therapeutic group of furgy was examined separately. The most expensive, however, were drugs acting on the cardiovascular system, muculoakeletal system, and respiratory system, and these are the categories most used for older age groups with their high proportion of repeat prescriptions. From the results of this study it appears, therefore, that the differences in prescribing costs among the doctors in the prescribe differences in prescribing costs among the doctors in the prescriber, and the difference of the study of the prescribing costs and the disease group treated, it is chronicity, and the proportion of repeat to new prescriptions mainly influenced the difference in the costs among the doctors. In previous internal sudits in the practice it had been established that the highest cost prescriber (Dr A) had seen more old patients, and more men, and treated a higher proportion of the more costly chronic diseases, such as cardiovascular, musculoses more women (chaper) and children (chaper) and deals with a less cost year good and the prescription of the more worked to the prescription of the more worked prescription. And deals with a less costly group of drug.

A deficiency in this study was the division of prescriptions into new and repeat prescriptions into new and repeat prescriptions also not so were supplied to the pharmaciet's records and knowledge of the patients. In future studies the prescriptions bould be categorised into new and repeat prescriptions should be categorised into new and repeat prescriptions and analyse prescribing costs into the repeate groups, they take no account of new to repeat prescribing. And although they take account of the entingredient cost of prescriptions and the cost per patient on a doctor's list and analyse prescribing costs into therapeutic groups, they take no account

We thank Drs C Bennett and D J Bell and the directors of Triphar Ltd, Baguley, for their help and cooperation.

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ONE HUNDRED VEARS AGO So much illness is directly traceable to chills and code contracted during milws/travelling in this very changeable and trying climate of ours, and so little has a yet been done by our ruilwsy companies to introduce a better method of heating the carriage, that we are glad to see the matter is attracting some sitention at the hands of the Caledonian Railwsy Company, felt want. The idea is to utilise the cabasat steam from the engine, which at present pause into the atmosphere through the funnel, and to carry it into piper which pass undernest the frame of the carriages in time piper which pass undernest the frame of the carriage in the piper which the sum of the carriage in coils the carriage in by means of flexible tubes, such as those used in the continuous as-brake, and thus the heat is carried throughout the whole trans. In the case of a trail recently made with a trail neiving Glasgor for one of the adocument of the continuous as-brake, and thus the heat is carried throughout the whole trans. In the case of a trail recently made with a trail neiving Glasgor for one of the adocument of the continuous as-brake, and thus the heat is earlied throughout the whole trans. In the case of a trail recently made with a trail neiving Glasgor for one of the adocument to the continuous as-brake, and thus the heat is earlied throughout the whole trans. In the case of a trail recently made with a trail neiving Glasgor for one of the adocument as the continuous as-brake, and thus the heat as we had as a substant and the case of the adocument as a substant as a s

Results
Tables I and II summarise the results for the three large groups of respondents. The five research units proved to be to diverse in their responses that an overview is difficult to make, but in general they were most like the exclemic departments. Research was not salient for most faculty secretaries or regional advisors. A high degree of fanishms about the ability of general practitioners to cope with research was expressed by both of these groups, 4%, and 9%, respectively hands, containing the properties of the propert

TABLE 1-Survey of resources for advice on research

	Faculty secretaries (n = 27)	Regional advisers (n = 17)
		* (n)
Dissecisfied with status quo	6 (22)	5 (29)
Specific comment on little demand for research advice	12 (44)	10 (59)
No of referral options listed Mean	1.7	2.8
Range	i-4	1-6
Agencies listed for referral		
Department of general practice/		
equivalent	13 (48)	8 (47) 8 (47)
Faculty of RCGP	11 (41) 4 (15)	11 (65)
Miscellaneous university departments Other individuals	6 (22)	6 (35)
Research units	5 (18)	2 (12)
Facilities for statistics		
No problems at all	14 (52)	14 (82)
Don't know	3 (11)	0 (0)
Some difficulties	10 (37)	3 (18)
Suggestions for improvement		
Batablish fellowship	6 (22)	5 (29)
Strengthen academic departments	5 (18)	7 (41)
Research coordinators	4 (15)	- '

ABLE II—Survey of resources for research advice: academic depart

100% feel they have a responsibility for research advisory role.
18:24 (75) have difficulty in doing justice to this role owing to time and staff

ou do the academics approach research training?	No (*,)
Regular department research meeting	4 (17)
Use of course in epidemiology/statistics	14 (58)
Running a course for general practitioner research	1 (4)
About to/have run a course	4 (17)
Lecturer training posts (one or more)	7 (29)
Research fellows posts (one or more)	6 (25)
lost departmental heads perceive informal assimilation of research	
skills by doing and discussion rather than by formal traching.	

What do the heads of department want?

More posts for temporary lecturers or junior research fellows on short 19 (79) term contracts

Over 20°, of regional advisers and faculty secretaries perceived training posts in scademic departments of general practice to be the best way to produce a cadre of general practicioners skilled in research. They approved of the work of scademic departments, recognised their need for more resources, and were critical of the few areas where no such departments had yet been established. A group of faculty secretaries with the scademic departments of the region advisers for postgraduate education.

All the scademic departments felt responsible for a research advisory role but three quarters after recognised the restriction of the research advisory role but three quarters after recognised the need from the production of the resource of the resource of the resource of the research advisory role but the required the resource that the research skills expenses the research skills of the survey, only 17°, of departments to be few survey, only 17°, of departments

held regular research meetings for staff, and most department heads seemed to regard informal discussions as the main basis for refinement of research skills. In this way to responded to our questionnaire were diverse in their needs, views, and functions. In general they were busy with research programmen and regarded training as a spin off function rather than a primary goal, yet all are drawn into giving research advice frequently. Like the academic departments, they find a wide gap between needs and resources. One research unit was fighting for its nurvival at the time of the survey owing to finance to

Discussion

It is remarkable that three quarters of the heads of scademic departments stated that they were baving difficulty in meeting all the request for research help, whereas nightly fewer faculty several to the property of the made unsolicited comments about there being little demand for advice about projects. It seems that reponal advisers and faculty research secretaries are by passed by general practicationer researchers seeking advice. Furthermore, regional advisers and faculty secretaries seem to be unaware of the treasest and strain separated by the property of the discipline. When the property of the discipline of the property of the

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Research in General Practice

Sources of advice

N C H STOTT, R C FRASER, D C MORRELL

Abstract
Regional advisers, faculty secretaries of the Royal
College of General Practitioners, heads of scademic
tender of General Practitioners, heads of scademic
tenders of general practices and primary cars, and
heads of RCGP research units were invited to complete a
semistructured questionnaire to determine the nature
and availability of current sources of advice for general
practitioners participating in research activities and the
demands placed on the available sources in the United
Kingdom.

The primary and the present practice, yet these have insufficient resources to cope with requests and few have spare
capacity to stimulate research. Regional advisers and
faculty secretaries do not seem to be kindling a spirit of
inquiry and they seem somewhat complacent about both
the lack of requests for research advice from general
practitioners and the difficulties of scademic departments.

ments.

Proper development of research capability in general practice and primary care is unlikely to occur without more resources to create training posts in academic departments and a greater spirit of inquiry in vocational training programme, which should lead to both review (audit) and research.

Although general practitioners have been responsible for many notable examples of original work, most general practitioners seem to have neither the desire nor the time to carry out research. Consequently, "research among experienced general practitioners is till rare ... writing papers and getting them published is till, alss, distinctly ususual." Indeed, it has been estimated that in a year only one general practitioner in 300 will publish a

that in a year only one general presents—
research paper.

Among the small minority of general practitioners who do
undertake research a lack of methodological skill is too often
apparent. It is distressing to be called on to advise on a
completed research project which has been so poorly designed
that the data produced cannot be usefully interpreted and the
practitioners concerned have invanishly expended a great deal of
time and effort (and often ingenuity). Such an experience tends

Research Division Executive, Royal College of General Practitioners NIGEL C H STOTT, PROFS, MRGGP, senior lecturer ROBIN C FRASER, MD, PROGP, professor of general practice DAVID C MORRELL, PROF, PROGP, professor of general practice

Correspondence to: Dr N C H Stott, Department of General Practice, Health Centre, Maelfs, Llanedeyrn, Cardiff CF3 7PN.

to lead to frustrision and consequent disendantment with further participation in research activities.

One reason for this unastifactory state of affairs is that few general practioners have received formal training to enable them to acquire research skills and recognise when help is needed. The principles of research method are identical wherever the work is to be conducted, but prospective general practitioner researchers must be made aware of the particular advantages and problems of carrying out research in the setting of general practitioners are stated to the state of the property of the state of the property of the state of research upport, particularly at the design and analysis stage of research projects. No formal network of support exists, although ad hoc advice and support may be available from university departments, the Royal College of General Practitioners research units, and the research division of the college.

If general practitioner researchers are to make the contribution to original work that they should, more information as needed to identify the original of the college. The state of support services available to them. This is particularly important at a time of financial restraint and educational cuts.*

The aims of the study were as follows:

(1) To determine the nature and availability of current sources of advice for general practitioners participating in research activities.

(2) To assert participation gractificating invested health of the formal procedures and the study and deficiencies and to suggest some improvements.

(4) To provide a factual basis for debate, which is central to the future of primary health care and general practice.

Method

Two separate questionnaires were devised. The first explored how advice in research was obtained by general practitioner researchers and was sent to all RCGP faculty secretaries and regional advisers in general practice in the United Kingdom. The second focused on the availability of training posts and resources for research and was sent to all heads of seaderms departments of general practice and primary care of the control of t

worken to be academic leaders without overload of the few custing skilled people and without becoming smothered by enthusiants from without the discipline of primary care? In this survey several solutions were suggested. The idea that was mentioned most was to expand the numbers of posts for junior research fellows or lecturers (either full time or part time) in academic departments of general practice. This would in effect expand the academic grades and produce people who would be preparing to become academics, regional advisers, course organisers, or individual researchers. The cost of such posts might be relatively low if they were established for one to three years. During that time research stills could be developed and these doctors would be capable of pursuing independent research in the future as well as providing an advisory service for colleagues.

in the future as well as providing an advisory service for col-leagues.

Could academic departments of general practice cope with more junior staff? The answers from the heads of department to the provided of the provided provided that the but in general they were positive about the idea, provided that the balance between teaching and research could be met and provided that senior lectrurers could help to supervise colleagues in research posits. The stresses on academic departments were clearly portrayed in many unsolicited comments about teaching loads and administrative responsibilities; hally put forward by Another more coastly suggestion (original put forward by a comment of the provided pro

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resource for research. Such a post has no parallel in other disciplines and the relationship between such people and the academic departments would have to be clarified if dissociation between research and postgraduate training is not to be per-

peruated.

We hope that this survey will kindle discussion and serious consideration of issues that will continue to bear on the nature of our emergent discipline and the vocational training we organise.

We are grateful to all those senior doctors who completed our questionnaire and to Jenny Bartholomew for her help in the preliminary analysis of the dats. The work was conducted for the Research Executive of the Royal College of General Practitioners, and we are grateful to our colleagues on the executive for their helpful comments.

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ONE HUNDRED YEARS AGO

The more callous amongst us become accustomed to the notices which appear in the Gastetic, from time to time, of the imposition of quantantee on this or that frontiers are to the mission of the imposition of quantantee on the or that frontiers are of national of easy statistry virtue. The axiom may safely be laid down, that the less cleanly the people, the firmer believers are they in the efficacy of quarantien. That so barbarous a relie of the middle ages should still be regarded by rational people in the light of a disease, or keeping it out, quarantine has approved itself to be the best possible agent for its propagation. Sanstrainas of the study justly condernin quarantine as paradoxical and useless; those who have had personal experience of its tender merces find difficulty in crucity and inhumanity. We have before us an extract from a letter just written to frends in England by an English hely travelling with her two daughters to the Mediterranean coast of Spain, which gives a picture more graphic than columns of fine writing shout the misseries the contract of the property of the propert

that ladies should have to enter such a place. However, there was no help for it, so we followed the doctor, who was to distribute the rooms. He had heard there were some finglish ladies coming, and so cross. He had heard there were some finglish ladies coming, and so the control of the sound of the control of the contr