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Lipoprotein(a) concentrations
(median and 95% confidence
intervals) in matched patients
with coronary heart disease,
controls, and patients with
varying degrees of cirrhosis
(Child's stage A-C). Coronary
heart disease > control > cirrhosis
($p < 0.01$)

detectable in seven of the 10 patients in group C. There was no difference between those with alcohol related cirrhosis and those with non-alcohol related cirrhosis. In controls and patients with heart disease there was no association between alcohol consumption (based on recall and expressed as units/week) and lipoprotein(a) concentrations.

Comment

As expected, lipoprotein(a) concentrations were raised in our patients with established coronary heart

disease,¹ but we also found them reduced in patients with cirrhosis. Lipoprotein(a) concentrations are under strong genetic control¹ and are not influenced by age, gender, diet, or smoking. Relatively few drugs affect lipoprotein(a), though nicotinic acid has been shown to lower concentrations through reduced hepatic synthesis.³

An earlier study reported low lipoprotein(a) concentrations in heavy drinkers (more than 200 g alcohol/day for several years)⁴ with none having a concentration over 450 g/l, and suggested that alcohol lowered serum lipoprotein(a) concentration. In contrast, among five of our patients with such a level of alcohol intake and coronary heart disease three had serum concentrations greater than 450 mg/l. In the remaining patients with coronary heart disease and the controls there was no relation between alcohol consumption and lipoprotein(a) concentration. Possibly the low lipoprotein(a) concentration found in drinkers in the earlier study was partly mediated through hepatic damage and reduced synthesis. Support for this view comes from the progressive fall in lipoprotein(a) concentrations with the increasing severity of liver disease and our finding that concentrations were equally reduced in patients with non-alcohol related cirrhosis. We could not detect lipoprotein(a) in seven of the 10 patients with severe liver disease. A low concentration of lipoprotein(a) may be one reason why patients with cirrhosis are less prone to coronary heart disease.⁵

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Do senior registrars have adequate management training?

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It is recognised that consultants will have an increased management role in the future, but there have been few attempts to examine the extent to which senior registrars are being prepared for this work.¹ Lack of information on senior registrars' present management experience and lack of consensus on appropriate management training²⁻⁴ make it difficult to assess training requirements. This study examines the management experience of senior registrars in several clinical disciplines in one region and their perceptions of this training.

Subjects, methods, and results

In autumn 1990 questionnaires, piloted on psychiatrists,⁵ were sent, with one reminder, to all 189 senior registrars in major clinical disciplines in the west midlands. A total of 153 (81%) responded, comprising 47 of 54 physicians, 44 of 54 surgeons, 25 of 31 anaesthetists, 24 of 31 pathologists, and 13 of 19 radiologists. Similar proportions in each discipline had completed higher training: overall, 91 (60%) had

completed one to three years and 32 (21%) over three years.

Of the 58 (38%) who had attended a theoretical management course, a greater proportion of pathologists and radiologists (who receive single specialty courses) attended than other trainees (23 (62%); $\chi^2 = 10.2$, $df = 1$, $p < 0.01$). Only nine (6%) senior registrars had received training in a management skill (leadership, team motivation, budgeting, planning, information technology, chairmanship, recruitment, or conflict management).

Few senior registrars had attended a regional or district level management meeting (16 (11%) and 21 (14%) respectively); 88 (58%) had attended divisions, anaesthetists 21 (84%) more than other disciplines ($\chi^2 = 7.33$, $df = 1$, $p < 0.001$); 29 (19%) senior registrars had attended medical staff committees, five (3%) unit management group, and four (3%) planning meetings; none had attended budget meetings. Thirty one senior registrars had never attended a regional, district, or unit management meeting.

Those who had organised an operational management task were significantly more likely to rate the task as an important part of training than were those who had not had this experience (table). The proportion with organising experience varied from 73% to 19% according to task. A greater proportion of surgeons had organised duty rotas (40 (91%); $\chi^2 = 12.82$, $df = 1$, $p < 0.001$), audit meetings (35 (80%); $\chi^2 = 22.32$, $p < 0.001$), teaching programmes for juniors (35 (80%);

Organisational task	Experience of organising		No experience of organising		χ^2 (df=1)	p Value
	No (%) responding	No (%) of respondents who saw task as important	No (%) responding	No (%) of respondents who saw task as important		
Own clinic (n=137)	48 (35)	45 (94)	89 (65)	26 (29)	49.47	<0.001
Postgraduate exam practice (n=143)	79 (55)	67 (85)	64 (45)	24 (38)	32.18	<0.001
Clinics of junior staff (n=131)	25 (19)	21 (84)	106 (81)	28 (26)	26.35	<0.001
Audit meetings (n=140)	74 (53)	68 (92)	66 (47)	40 (61)	17.63	<0.001
Journal clubs (n=142)	75 (53)	56 (75)	67 (47)	28 (42)	14.50	<0.001
Clinical meeting programmes (n=144)	93 (65)	78 (84)	51 (35)	28 (55)	12.77	<0.001
Duty rotas (n=143)	105 (73)	58 (55)	38 (27)	10 (26)	8.81	<0.01
Teaching programmes:						
Medical students (n=145)	87 (60)	81 (93)	58 (40)	38 (66)	16.17	<0.001
Junior staff (n=140)	96 (69)	91 (95)	44 (31)	30 (68)	16.01	<0.001

$\chi^2=6.48$, $df=1$, $p<0.02$), and journal clubs (30 (68%); $\chi^2=5.04$, $df=1$, $p<0.05$); a greater proportion of physicians had organised their clinics (24 (51%); $\chi^2=5.04$, $df=1$, $p<0.05$) and anaesthetists postgraduate examination practice (18 (72%); $\chi^2=4.04$, $df=1$, $p<0.05$).

Overall, 121 (79%) rated their theoretical and 123 (80%) their practical management training inadequate. Of the 32 senior registrars who had completed over three years of higher training only eight (25%) rated their theoretical and four (13%) their practical training adequate. There were no interdisciplinary differences.

Trainees provided many positive suggestions for improvement, including more involvement in management meetings (15 respondents), more encouragement from consultants (13), and development of formal courses throughout higher training (13). High service commitments were impairing some trainees' participation in management training.

Comment

There is no evidence that this region is atypical in terms of management training offered. The numbers in each discipline are small, and although some interdisciplinary differences were noted, the similarities are more important.

The 19% non-response rate is a potential source of bias, but even if these non-responders had extensive management training there would still be considerable

cause for concern. The limited theoretical training in management and management skills and the lack of exposure to medical advisory and formal management meetings mean that trainees in any of the clinical disciplines examined are unlikely to be adequately prepared for the extensive management role required of consultants. It may be argued that higher training is not yet complete, but management education may be more helpful if undertaken earlier rather than later so that doctors can assimilate and develop information and skills before becoming consultants.

A positive finding is that trainees clearly recognise these training deficiencies and want to develop their management education. Ensuring that this goal is achieved should become a training priority.

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ONE HUNDRED YEARS AGO

WANTED, A CURE.

The influenza is once more in the air, wafted hither and thither throughout the habitable globe, a formidable, disabling and fatal pandemic. Once more we are urgently asked on all sides, "Have we a specific? Can we offer a cure?" It is the old delusion and the everlasting and unreasoning, but excusable, impatience for the miraculous and the impossible. "Disease comes by Providence and goes by medicine;" that is a durable and popular formula. Of specifics for sale there are of course a legion. To sell them is the business of the quacks: the Matteis, the Holloways, the Morrises abound in specifics. There are a dozen available for cholera, for typhoid, for small-pox, for hydrophobia, for cancer—all equally plausible and equally useless except for commerce—and why not for influenza? But is there a specific for any disease? It is more than doubtful. The more we know of the nature and cause of disease, of its origin and life-history, the less we are inclined even to expect the discovery of specifics. Disease we know not as an entity, an enemy to be struck down with a club, or to be expelled by a drug, but as a process, the change of tissues and of fluids, the growth of a microbe, the proliferation of a cell, the secretion of a virus. We can modify the processes, we can lessen their virulent products, we can fortify against their worst effects; we can aid the evolution and perhaps guide it to health; sometimes

we can arrest it; and often we can anticipate it. Thus we know how to ward off many diseases: Cholera, typhoid, small-pox, hydrophobia, they are enemies whom we can meet at the gate and forbid their approach. Deaths from either of these preventable diseases are the most part violent deaths, inflicted by the ignorance of the people, the neglect of the sanitary authorities. *Populus vult mori*. In their search for specifics they parley with the enemy and they lose their lives. Of influenza we know less than of most other infections; it is aerial, communicable from person to person, and along the lines of travel. For it, as for scarlet fever, we have only isolation as a preventive and palliatives as a treatment. Perhaps one day we shall know more; but there does not seem any likelihood of the discovery of a specific, and judging from numerous analogies it is far from certain that there is in this any ground for reproach. At any rate it comes badly from a public and from a generation which is content to leave Great Britain without even one Institute of Preventive Medicine, and which is left to an appeal for funds from a Lister and a Roscoe to found such an institute—in which lies a chief hope for further life saving and the advance of preventive and curative knowledge—while millions are lavished on weapons of destruction, or the more obvious means of charitable relief to physical suffering; and finally on the purchase of fraudulent "specifics."

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