used and not for debate may drive
import elsewh n Europe and to
ies.

J P GRIFFIN
F O WELLS

: British Pharmaceutical Industry,
DY

J D SWALES
K B SAUNDERS

.inical Professors of Medicine,
ledicine,
ital,
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ıg whether to be a doctor

ee with M J Kelly's views that sixth
nts need expert help in deciding
embark on a career in medicine.[1] For
years I have run a course at a large
ege with the specific aim of educating
edical students about the life doctors
they can make an informed choice
uture career.
se runs for two hours a week over 10
includes information about courses,
specialist training, the nitty gritty of
'y work, and interview technique with
ne for discussion. I include half hour
essions for students, aimed particularly
nem to evaluate whether they really do
a doctor. The students greatly appre-
ank discussion and game techniques
get the point across.
idents whom I have seen, five subse-
ided to pursue another degree course.
bright, most expecting to get AAA or
at A level, but most have little idea of
s do apart from what they have seen on
rogrammes. They usually want to be
ne wanting to be general practitioners,
e no idea of the huge range of careers
icine. I encourage them to get work
for example, in a hospital or old
ne—and to talk to their general practi-
college also runs a pre-health course,
les first aid training.
engender in students the confidence
at they have chosen the right career for
sons and not because of parental and
essure, glamorous fantasies, or lack of
about alternative professions that may
m with the same satisfaction. It is
o many of our young doctors become
and angry and regret their choice of
not, however, surprising in view of the
right students are swept along by a
r people's enthusiasm and their own
Medicine is a wonderful, varied, and
er also full of heartache and frustra-
r duty to educate our future colleagues
m prevail.

ANN H YORK

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eing for themselves. BMJ 1991;303:1598-600.
mber.)
emoralised doctors. BMJ 1990;300:56-7.

Kelly has taken an imaginative
helping potential medical students to
ght into medical school and medical
s comment on the approach of teachers
advisers in schools is right; in my
hey have little idea of the demands of
he fault, however, is not just on the
chools, for the medical schools are far
ess.
chools need to exert more authority
s: the selection process for medical
ds overhauling, and a firmer line on
those who are misfits is needed. As the
person responsible for the preregistration year in this medical school, I know that consultants are concerned that some graduates have difficulty in completing their year as a house officer. These doctors' undergraduate records often show the signs of impending disaster. The arguments for their continuing the course are as Kelly outlined; when they are challenged to account for their poor performance they give many reasons, but how seriously is their commitment to medicine questioned?

I have doubts about the adequacy of the current system of selection for medical school. A considerable financial investment is made to educate a doctor. Is a 10 minute interview, or none at all, an adequate means of deciding who should benefit from this investment? The procedure needs to be more rigorous and professional. Roberts and Porter called for a change in the selection process.[2] Potential recruits to the armed services and civil service and potential national airline pilots undergo a comprehensive selection process.

Students who find their motivation to pursue a medical career wanting may find it difficult to express their fears. This may be reflected in poor reports. Students must be encouraged to seek advice; a genuine doubt about a future in medicine needs to be handled with understanding. Student counsellors, and interested members of staff, have much to offer. Students should know that such advice is available and easily accessible.

Let us ensure that those we select are of the required standard, intellectually and emotionally.

J PARKER-WILLIAMS

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1 Kelly MJ. Seeing for themselves. *BMJ* 1991;303:1598-600. (21-28 December.)
2 Roberts GD, Porter AMW. Medical student selection—time for change: discussion paper. *J R Soc Med* 1989;82:289-91.

High potency factor VIII concentrates

SIR,—I am responding on behalf of the United Kingdom Haemophilia Centre Directors' Organisation to John D Cash's article on high potency factor VIII concentrates.[1] The article has been quoted by several purchasing authorities as evidence for lack of benefit from high purity factor VIII. Such a view is an oversimplification. Presently, most factor VIII used in the United Kingdom is of intermediate purity and is prepared, mainly by NHS fractionation laboratories, from voluntary donors. It has been in use since 1985 and found to be efficacious and safe from viral infection. Thus, continuing its use while newer products are being introduced and evaluated seems reasonable.

High purity factor VIII, free from extraneous protein, is both appropriate and desirable. Nevertheless, it should be introduced gradually and, as with any new therapeutic substance, monitored for safety and efficacy.

In 1990 the United Kingdom Haemophilia Centre Directors' Organisation issued recommendations for the treatment of haemophilia and identified certain groups that might benefit from high purity factor VIII. Firstly, patients receiving intermediate purity products who develop an allergic reaction should be changed to a high purity product; this is consistent with Cash's view.[1] Others include patients undergoing major surgery or receiving treatment for the first time. A high purity product provides the haemostatic dose in a smaller volume and is of particular benefit to patients with poor venous access and children. Most patients treated for the first time are children. We accept, however, that any new treatment should be of proved safety in adults before being given to children. Therefore, a paediatric haemophilia working party has been established to address this issue and to plan prospective trials. These trials will also incorporate regimens for planned prophylaxis and an appraisal of the incidence of factor VIII antibodies. Concern has been expressed that treatment with monoclonally derived high purity products is associated with an increased incidence of inhibitors.[2-4]

There remains the question whether high purity factor VIII prevents down regulation of the immune system. Evidence of benefit continues to accumulate, as indicated recently by de Biasi *et al*.[5] Evans *et al* have shown preservation of the immune system in patients treated with only one product of intermediate purity.[6] If a sustained defect in the immune system is evident, however, it seems reasonable to change to treatment with a high purity product, again with careful clinical and laboratory evaluation.

At present Scotland and Northern Ireland are introducing an alternative high purity product for all patients. The product will be fractionated according to the technology of Burnouf *et al*.[7] It will be administered within prospective clinical trials. Thus the place of high purity factor VIII is emerging and, provided it proves to be satisfactory on scientific evaluation, it will attain its rightful place in the treatment of haemophilia within a short time.

E E MAYNE

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United Kingdom Haemophilia Centre
Directors' Organisation,
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Belfast BT12 6BA

1 Cash JD. High potency factor VIII concentrates: value not proved? *BMJ* 1991;303:633-4. (14 September.)
2 Bell BA, Kurczynski EM, Bergman G. Inhibitors to monoclonal antibody purified factor VIII. *Lancet* 1990;336:638.
3 Kessler GM, Sachse K. Factor VIII:C inhibitor associated with monoclonal-antibody purified factor VIII concentrate. *Lancet* 1990;335:1403.
4 Montoro JB, Rodriguez S, Altisent C, Tusell JM. Transient factor VIII inhibitor and treatment with monoclonal-antibody-purified factor VIII. *Lancet* 1991;337:1222.
5 de Biasi R, Rocino A, Miraglia E, Mastrullo L, Quirino AA. The impact of a very high purity factor VIII concentrate on the immune system of human immunodeficiency virus-infected haemophiliacs: a randomized, prospective, two-year comparison with an intermediate purity concentrate. *Blood* 1991;
6 Evans JA, Pasi JK, Williams MD, Hill FGH. Consistently normal CD4+, CD8+ levels in haemophilic boys only treated with a virally safe factor VIII concentrate (BPL 8Y). *Br J Haematol* 1991;79:457-61.
7 Burnouf T, Burnouf-Radosevich M, Huart JJ, Goudemand M. A highly purified factor VIII:c concentrate prepared from cryoprecipitate by ion exchange chromatography. *Vox Sang* 1991; 60:8-15.

Impact resistance of drinking glasses

SIR,—J P Shepherd and colleagues' letter on the impact resistance of drinking glasses has received considerable publicity in the national press.[1] Ravenhead does not question the accuracy of the experiments, but the conclusions reached are not based on fact.

We do not agree that the drinking glasses used in attacks are usually intact, nor have we found police records to support this statement. If this is the case we find it difficult to understand how lacerations occur. We believe that glass used in "glassing" attacks, whether drinking glasses or bottles are used, is first broken to produce lethal dagger-like spikes. We agree that tempered glassware, if properly tempered, can be stronger than stress free, normal glassware, but this is only in its new, unused condition. Within hours of first being used in a busy pub the strength of tempered glassware deteriorates rapidly and it can become unstable. This is due to surface abrasion, which occurs when it comes into contact with other objects—for example, other glasses and cutlery.

We have yet to find a tempered glass that

BMJ

Please copy to J. Cavan
HC(M)46

For advice please - so far we have not entered the lists on this apart from providing briefing. But what about our role in producing a treatment protocol for haemophiliacs. Should we be promoting a clear view?

GRO-C

Mr Dobson | From: Dr H Pickles RDD

F. Blood - haemophilia | Date: 24 June 1992

Copy: Dr Reed HC(M)
Dr Lakhani HCP-PH
Dr Rejman HC(M)
Mr Scofield CAD-OPU2
Miss Simkins FC1-A1
Mr Lally FC1-A2B
Mr Canavan CAD-OPU2
Dr Henshall RD3 - with papers

GRO-C

COST OF HIGH PURITY FACTOR 8

1. Thank you for sharing with RDD the correspondence on this issue.

2. In RDD we are particularly concerned that new interventions are not introduced into routine NHS use without proper cost-benefit analysis. It seems highly unlikely that high purity factor VIII would be seen as a sensible use of NHS resources even if it were to have the marginal safety and convenience advantages over existing material that is claimed by its protagonists. Any health gain must be so marginal - and not affecting overall mortality - that it cannot possibly justify the massive extra bill. Haemophilia specialists may need to watch their practice very carefully; they already have some of the most expensive patients in the NHS and this sort of action demonstrates to their colleagues that they are not interested in self-constraint. In a cash-limited system, their action is at the expense of colleagues in specialties with a lower profile.

3. If the Licensing Authority is persuaded that one factor VIII is safer than another, and makes appropriate changes to the licence, then the situation may have to be reassessed. But we are not there yet.

4. In other circumstances, we might suggest a formal cost-benefit analysis. In this case, though, the evidence is already quite clear: the increased costs are blatant, any increased benefits are so slight they can hardly be measured. The problem then is one for management and medical audit, not research.