# DO HIGH PRESCRIPTION CHARGES UNDERMINE COMPLIANCE?

*Prescription charges are likely to rise as usual this April. But do high prescription charges really affect how patients take their medicines? Ellen Schafheutle investigates*

Harris Interactive of Rochester[1,2] was the latest to add to the increasing number of United States studies that report on the high out-of-pocket cost of prescription medicines and how this has a negative impact on patient compliance.[3–6] Harris found that a large proportion of its sample of 1,010 adults did not ask their doctors for a prescription, did not have their prescriptions dispensed, took a lower dose of their medicine, or took it less often, to make their prescription last longer — as a direct result of cost. It further found that those in fair or poor health, and those with higher out-of-pocket prescription costs were more likely to be non-compliant because of cost. Harris Interactive argues that such non-compliance, producing a short-term saving for both patients and insurance companies, may have long-term health (and therefore cost) implications if people become more seriously ill owing to a failure to take medicines with proven long-term benefits.

Lucky, one might argue, that in the United Kingdom, we have a system that is different from those many and varied health insurance plans that exist in the US. Here, we pay a flat fee prescription charge for each item on a prescription, a "tax" of currently £6.20, which is independent of drug cost. Furthermore, most prescription items, 85 per cent, are exempt from prescription charges.[7] Finally, even those people that have to get regular prescriptions, yet do not fall into any of the exemption categories, should not have to pay more than a certain amount: prepayment certificates are available at a price of £32.40 or £89.00 and entitle patients to an unlimited number of prescriptions for four or 12 months, respectively.

## ALL IS NOT WELL

But not all is well on this side of the Atlantic either, and the latest findings of Harris Interactive may be relevant here, too. There are people who cannot afford their medicines, and we want to know what they do if that is the case. Community pharmacists commonly see customers who say they cannot afford at least some of their medicines on a regular basis. But this evidence is anecdotal, and UK research evidence on problems people may have affording their medication is scarce.

At Manchester University we have been involved in a number of projects exploring the impact of medication cost on patients' and general practitioners' management behaviour. Some of our later work certainly seems to echo US findings. Before discussing these, it is worth noting that, even though the UK prescription charge is a flat fee independent of drug cost, this cost is relatively high as shown in a European comparison of seven countries.[8]

## THE INFLUENCE OF COST

Initial indications that the cost of prescription charges may have an influence on patient behaviour came from studies describing patterns of GP prescribing and dispensing of prescriptions. These demonstrated that prescriptions that had to be paid for were more likely not to be dispensed than those for exempt patients.[9] Jones and Britten[10] provided qualitative evidence that for a number of GP patients who failed to have their prescription dispensed cost was a factor. A more recent study provided more conclusive evidence by gaining insight into reasons for non-dispensing but also outcomes, ie, whether substitution occurred.[11] In this study, pharmacy staff in 16 community pharmacies in the north of England recorded reasons for non-dispensing of prescriptions over a period of six weeks. The most common reason for non-dispensing (308/587, 52.5 per cent) was related to the cost of the prescription charge. In most of these cases (n=242) an over-the-counter product was sold for less than the prescription charge (£6 at the time of the study). In a few cases (n=5) patients presented a private prescription alongside an NHS prescription. However, there were 62 incidents where a prescribed item was not dispensed or substituted due to cost. Even more importantly, more than a third of these items (n=22) were drugs where non-compliance could adversely affect patient outcomes (eg, inhaled bronchodilators and corticosteroids, anti-infectives and a beta-blocker).

That the issue of prescription cost is not a minor one is supported by the results of a survey of 1,085 clients of 84 Citizens Advice Bureaux throughout England and Wales who had paid prescription charges in the previous year.[12] This survey showed that 50 per cent of respondents had found it difficult to afford the cost of prescriptions. As many as 28 per cent had not had all of their prescribed medicine dispensed because of the cost, and this figure rose to 37 per cent for people with long-term health problems.

However, UK patients have developed much more varied ways of coping with the cost of prescription charges than merely not getting their medication dispensed at all or obtaining a cheaper, often OTC, substitute. These were explored in a qualitative study, where six focus groups were conducted with people suffering from dyspepsia, hay fever or hypertension, or with women taking hormone replacement therapy (HRT).[13] Cost was not an overriding influence, and other factors such as symptom or disease severity, treatment effectiveness or necessity played an important part. Nevertheless, that cost was an issue was reflected in the various strategies that patients used to reduce the cost of medication, and some of those were not dissimilar to those employed by patients in the US.[1,3–6] Besides not having their prescription dispensed and buying OTC products, UK patients also took less of their medication to make it last longer, selected only certain items if more than one was prescribed, delayed having their prescription dispensed, or borrowed money to pay for it.

## POTENTIAL SAFEGUARD

In contrast to most of the US co-payment systems, the UK system has a potential safeguard for people in need of regular medication (and not qualifying for exemption) in the form of pre-payment certificates. However, our results as well as those published by the National Association of Citizens Advice Bureaux (NACAB)[12] suggest that patients' awareness of the existence of these certificates is low. More importantly, patients found them expensive and could not afford such a large lump sum in one payment, and it was recommended that the option of paying for prepayment certificates by instalments be introduced.

Another interesting finding in our focus group study[13] was that patients said they did not talk to their GPs about the difficulty they had affording medication or the strategies they employed to reduce medication cost. They believed that paying for prescriptions was their problem, and that discussing cost issues may jeopardise the doctor-patient relationship. In another study, focus groups with GPs[14] showed that GPs thought they had a relatively good insight into patients' affordability issues. They said they used numerous strategies to help patients they perceived to be in need of help

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with prescription cost. They said they recommended OTC products, or prescribed a longer supply of medication (often two or three months rather than just one), thus giving better value for money. Some also mentioned prescribing more effectively by reducing the number of prescribed items. However, if patients do not feel comfortable talking to their GP about cost issues, they may be more comfortable doing so with pharmacists. Several studies exploring patients' use of pharmacies have highlighted the accessibility and approachability of pharmacists and their staff.[15–17]

## CONCLUSIONS

In the UK, we are beginning to gather evidence to show that patients who have to pay for their prescriptions may find it difficult to afford them. This may be particularly the case for people suffering from chronic conditions requiring regular medication. That the reasons for exemption from prescription charges, particularly those on medical grounds, are unfair and in need of review was most recently discussed in a news feature in *The Pharmaceutical Journal* of 15 June 2002,[18] but this is not the focus of this paper. It seems that studies set in different health care and reimbursement systems, such as the US, can still provide us with useful insights. In this case, the problem that people face is the same, regardless of what health care system they live in. Medication cost is high, some patients cannot afford to pay for their prescriptions and they use numerous strategies to reduce cost.

Some of these strategies may be adequate, such as OTC substitution. However, there is evidence that the use of essential medicines is also reduced with increasing co-payment.[19,20] The studies on non-compliance due to cost, as discussed in this paper, would suggest that some of the cost reduction strategies used by patients could have serious health (and health care cost) implications. For some chronic conditions it is essential that treatment is uninterrupted in order to achieve beneficial clinical outcomes, and several studies have demonstrated that "non-compliers" had worse outcomes in terms of coronary heart disease risk and mortality.[21–23] Even interrupting treatment for just a few days, as in the case of hypertension, for example, can increase the risk of stroke.[24] Finally, one recent study has linked prescription cost directly with a negative impact on outcome. Tamblyn *et al*[25] demonstrated in a large-scale study of elderly and welfare recipients in Canada that the introduction of a co-payment scheme led to reduced consumption of essential drugs, which in turn led to an increased number of adverse events, including visits to accident and emergency departments, and acute and long-term inpatient stays, or death.

National service frameworks and other clinical guidance, including that from the National Institute for Clinical Excellence, are being introduced with the intention of reducing health inequalities. However, the success of these programmes is predicated on the assumption that once best practice is established patients will adhere to the care package set out for them, part of which will include drug treatment. Based on the evidence discussed in this paper it seems that the successful implementation of these programmes may be undermined by non-adherence due to prescription charges. It is therefore essential to identify those patients who, due to cost-based decisions, are most at risk of reducing their use of essential drugs. With the help of an NHS R&D National Primary Care PPP/DH postdoctoral award", that is what I intend to address.

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