

Community financing of drug supplies in rural Nepal: evaluating a 'fee per item' drug scheme

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A new programme in rural Nepal was evaluated in which users partly fund the supply of additional drugs needed at health posts. Patients are charged a fee per item prescribed (FPI scheme). The scheme is administered by the District Public Health Office (DPHO). This scheme is compared with two established schemes: one charges patients a fee per prescription ('fee-per-script' or FPS scheme) and is administered by independently paid NGO (non-governmental organization) staff; the other uses local shops as a means of supplying drugs.

The new scheme was associated with a rise in average daily attendance from nine to thirty-two patients a day (a 240% increase) when compared to a similar period the previous year. Fewer drugs were prescribed in the FPI scheme (average per patient 1.8 vs. 2.4, Chi square $P < 0.001$). The average cost of a drug from the user's perspective was approximately 12% lower in the FPI scheme. These factors combined to make the average cost to the patient of a prescription half that of one in the FPS scheme. The new scheme was 24% cheaper to run on a 'cost per patient' basis when compared with the FPS scheme. However, the overall subsidy needed for the scheme to operate was higher because of the big increase in attendance. One-off stocktakes of ten essential drugs were used to assess the availability of drugs for patient use. The proportion of these drugs that were in low supply or absent was 24% in the FPI scheme. This was similar in the other two schemes.

The government DPHO did not perform all the administrative tasks required. These tasks need to be simplified and different methods for involving DPHO staff in drug scheme management need to be explored. The rapid turnover of senior staff, however, will remain a major impediment.

This preliminary evaluation shows that an FPI scheme promotes a more rational use of resources, compared to an FPS scheme. Administration of the scheme may, however, prove to be more difficult. A simple field-based comparative assessment of drug supply schemes can give a valuable insight into the strengths and weaknesses of a new programme.

Introduction

The lack of government funds in developing countries has prompted the development of user fees as an alternative source of health care financing (a subject reviewed extensively elsewhere).^{1,2} This has caused much concern, in particular that user fees will act as a disincentive to those with serious illness.^{1,3} Administration of such a system can be problematic and attempts at cost recovery can create a conflict between plans for expanding health services and a political need for free or cheap health care.⁴ Charging for drugs can act as an incentive for curative care in peripheral units at the expense of preventative

work. There is, therefore, a need to improve our understanding of the effects of charging for drugs and also to compare different methods for doing this. The International Network for the Rational Use of Drugs (INRUD), set up in 1989, is attempting to co-ordinate the assessment of such projects and looks at various techniques used.⁵

Nepal government health service

An average hill district in East Nepal has 8 to 10 Health Posts (HPs) serving a total population of up to 200 000, most of whom are subsistence farmers. Most districts also have a small

hospital, nominally run by two or three doctors. Frequently, however, the doctors are not in residence. The HPs are run by staff with a variable amount of health training (usually 1 to 2 years). Village health workers (VHW) use the HPs as their base and are involved in a broad range of primary care activities. The HP staff are mainly involved in curative treatment and VHWs also become involved in treating patients. Consequently, a regular supply of drugs is given a high priority by staff at most levels.

The HPs are not well utilized largely due to their inaccessibility (all travel is by foot) and the widespread use of traditional healers. The HPs often have insufficient drugs to last all year round⁶ and this inadequate supply of medicines from the government is also thought to be a factor in the low HP utilization.⁷ Since multiparty democracy re-started in Nepal in 1991, there has been a greater political commitment to developing a more widely accessible health service. Plans for a series of peripheral sub-HPs have been laid out in the government's recent health policy.⁸ A commitment to the funding of drugs for these sub-HPs has been made by multi-lateral agencies in the short term. However, given the large logistical and personnel problems that already exist in the hill areas, the viability of this new programme is questionable.

BNMT drug supply schemes

The Britain Nepal Medical Trust (BNMT) has been supplying essential drugs to remote areas in East Nepal since 1970.^{6,9} Initially this was just through local shops. The shop owners are charged cost price plus 10% to cover transport. They then sell the drugs at a 12% profit. Where possible, shops close to government HPs were chosen. In 1980 BNMT started its first self-financing drug scheme, which distributed drugs to government HPs in order to supplement the government supply of drugs. Users of HPs are charged a small fee for each prescription issued ('fee per script' or FPS scheme). The money received is used to help buy additional drugs for the HP.

By the late 1980s it was apparent that full cost recovery was not achievable, hence the change of name to cost-sharing drug schemes (CSDS). The aim of these schemes is not to recover the total costs of drugs but rather to ensure a year round

supply of essential drugs. Different methods of drug distribution and patient charging need to be looked at with a view to encouraging more rational prescribing. The 'fee per script' system has been criticized for encouraging over-prescribing, as patients may feel 'cheated' if they only require a cheap treatment.¹⁰ The charge per script in an FPS scheme is N.Rupees 5 (US\$0.17).^{*} In the past such schemes have caused an initial drop in attendance.^{6,11,12}

The programmes are administered in each district by BNMT staff. Efforts to get government District Public Health Officers to take over the running of the schemes have been unsuccessful so far.

Khotang drug scheme (FPI scheme)

In 1990 BNMT set up a new drug scheme in association with the District Public Health Officer in three out of nine health posts in Khotang district. It was limited to three HPs in order to stimulate wider support for the scheme prior to expansion to other areas. Khotang has no roads and no electricity. The main town, Diktel, did not have a hospital at the time of this study.

The Khotang scheme differed from previous ones in two ways: it was to be run without resident BNMT staff in the district, and it would charge users a fee per item prescribed ('fee per item' or FPI scheme) using two bands (N.Rs 1 and 3, US\$0.03 and 0.10). These prices were chosen so that the overall charge would be the same as in the FPS scheme, assuming prescribing habits were approximately the same (i.e. an average of 2.5 items per prescription, usually including one expensive item such as an antibiotic). It was acknowledged that the FPI scheme might turn out to be cheaper 'per item', but this was thought to be acceptable given the concern that the introduction of a user fee may decrease attendance at the HPs even further.

Allocation of drugs to the two 'bands' was based on an assessment of how essential the drugs were and their cost. This form of 'banding' has been studied on a more systematic basis in simulated models and is described elsewhere.¹³ Pregnant women, children under 5 years and the very poor were charged the lower price for all medicines; it was left to the HP staff to decide who fitted the

'very poor' category (in the FPS schemes the same group were not charged at all). First-aid dressings were supplied free to all.

The scheme aimed to provide a year round supply of essential medicines in government health posts and also to increase utilization. The community was to be involved in the financing and running of the scheme through community representatives forming local HP committees.

Methods

The evaluation of the FPI scheme took place within the districts using routinely collected data wherever possible.

The new FPI scheme was compared with two established schemes, an FPS scheme in an adjacent district and the Hill Shop Scheme. We included three HPs using an established FPS scheme in an adjacent district (Bhojpur) and three shops from the Hill Shop Scheme. They were chosen on the basis of being in similar locations and serving similar communities as the three FPI scheme HPs being assessed. One of each was in a large town, or 'bazaar' (Group A), another was in a small bazaar (Group B) and the last was based in a small village (Group C).

A summary of the methods used is given in Table 1. The Hill Shop Scheme could only be included in some aspects of the evaluation as no record is kept of prescriptions or attendance. There was insufficient time and resources for an assessment of consumer views. The HP and shop-based assessments were done by a BNMT Hill Shop Scheme supervisor who performed the

tasks over three months during the pre-monsoon period (May-June 1991).

The impact of the new scheme on utilization was assessed by looking at the HP attendance registers for the year before and the five months after the new scheme started. The FPS scheme HPs were included to act as controls and to clarify any seasonal variations that might take place.

We chose ten important essential drugs to assess overall drug availability. The quantity of these drugs that constituted a full course was set in advance. During his one-off visit to the HP or shop, the supervisor performed a stocktake of these items and calculated the number of full courses available.

Completed HP prescription pads are routinely sent back to the BNMT/DPHO office. One thousand consecutive prescriptions from each HP were analysed to assess prescribing habits. A further random sample of one hundred scripts was used to assess costs. Chi-squared tests were used on the aggregated data.

Interviews were held with the most senior person in the HP and the Hill Shop Scheme owners. The supervisor described three hypothetical cases and then requested a prescription for each. The hypothetical cases were deliberately chosen to represent a 'typical case' (i.e. a series of complaints) rather than cases with an 'obvious' diagnosis. He then encouraged them to point out the strengths and weaknesses of their respective drug scheme.

Table 1. Methods used for comparing the FPI scheme in Khotang District with an FPS scheme in Bhojpur District and a Hill Shop Scheme

Marker for Comparison	Method of data collection	Place	Drug schemes involved		
			FPI	FPS	Hill
Attendance	Health Post register	HP	yes	yes	no
Drug availability	Stocktake	HP or Shop	yes	yes	yes
Prescribing patterns	Analysis of prescriptions	District Centre	yes	yes	no
	Example cases	HP or Shop	yes	yes	yes
Costs	Prescription pad analysis	District Centre	yes	yes	no
Prescribers views	Structured interview	HP or Shop	yes	yes	yes
Administration	Qualitative assessment by BNMT supervisor	HP + District Centre	yes	yes	no

The administrative duties of the DPHO and HP staff were assessed by the BNMT district supervisor from the FPS scheme. This involved checking to see that replacement drugs were ordered, monies collected and routine information, regarding matters such as drug distribution and financial information, was relayed to the central (BNMT) Drug Scheme Office.

Results

Health Post utilization

In all the HPs there is a seasonal variation in attendance, with a peak in the pre-monsoon/early monsoon summer period and a low in the autumn. This can be clearly seen in the HPs with the established FPS scheme, see Figure 1. The new scheme was started just before attendance would be expected to rise. This study was performed at the time of expected peak attendance.

During the five month period after the FPI scheme was started, the three HPs saw 11 730 patients as against 3442 in the corresponding period the previous year – an increase of 240%, see Figure 2. This corresponds to an average increase in attendance at each HP from 9 patients a day before the scheme started to 32 patients a day afterwards (making allowances for a 6 day

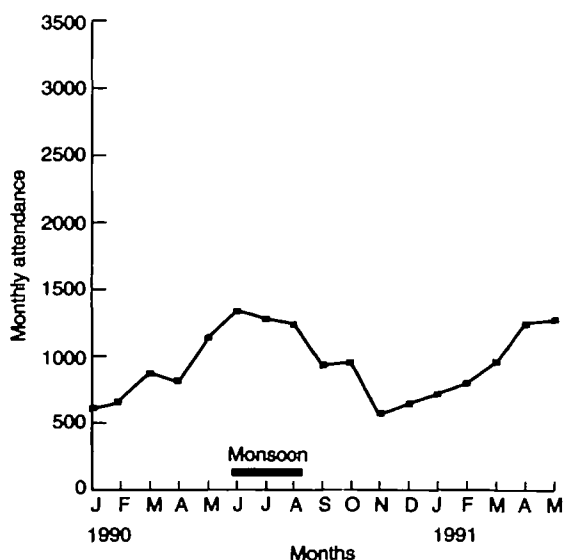


Figure 1. Monthly attendance at three health posts with an established FPS scheme

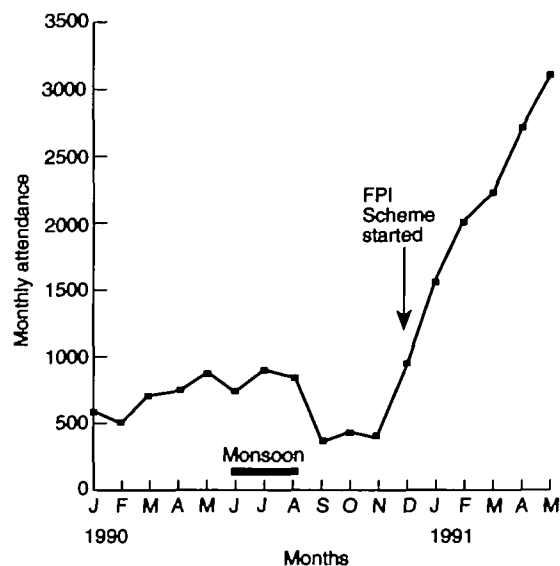


Figure 2. Monthly attendance at three health posts before and after start of FPI drug scheme

working week and official holidays when the HP is closed). In fact the increases were not spread equally amongst the HPs; the bulk of the increase was in the Group 'A' HP ('large town'), see Figure 3.

The number of children attending aged under five also rose, although the overall proportion dropped slightly from 25% before the scheme started to 21% after. Recorded attendance by pregnant women remained very low.

Drug availability in peripheral units

The proportion of drugs that had a 'low' or 'empty' supply (five or under full courses) in the FPI scheme HPs was 24% as against 30% in the other two schemes, see Table 2. It is interesting to note that drug stocks tended to be low rather than empty in the Hill Shop Scheme when compared with the HP based schemes.

Prescribing patterns

The analysis of 1000 scripts from each HP showed that patients attending HPs with the FPI scheme had less items prescribed compared to the FPS scheme (Chi sq $P < 0.001$), see Table 3. Fewer antibiotics were also prescribed (33% vs 54% of prescriptions); approximately half of these were for Procain Penicillin.

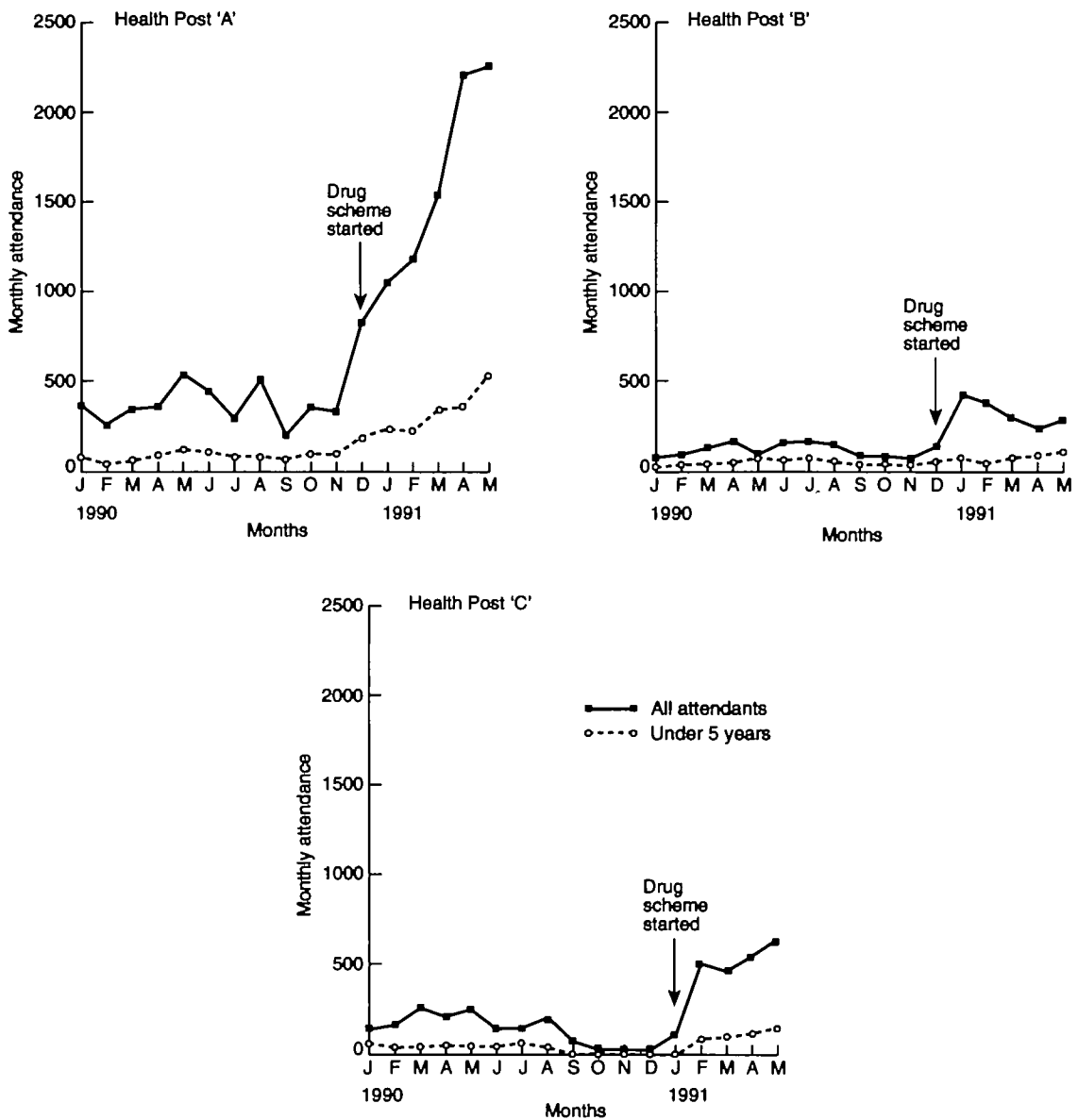


Figure 3. Monthly attendance at individual health posts with FPI drug scheme

The three hypothetical cases presented to prescribers allowed a more qualitative assessment of prescribing, as well as a comparison of cost to users (an example is given in Table 4). There is a general tendency to over-prescribe in all three schemes. In the example shown, the Hill Shop Scheme prescriptions might be judged to be 'better' because only two items were prescribed, and this did not include an anti-spasmodic (which is almost definitely inappropriate). It is

difficult, however, to gauge what a 'correct answer' should be even if an actual patient could have been used. Even 'expert' medical views can differ widely when patients present with non-specific illnesses.

Prescribers' views

The interview with prescribers allowed them to give feedback on their scheme. There was a

Table 2. Stocks of drugs in peripheral units

Health posts	FPI Scheme			FPS Scheme			Hill Shop		
	A	B	C	A	B	C	A	B	C
Index drugs									
Scabicide	F	F	F	O	F	F	F	F	F
Cotrimoxazole	F	F	F	F	F	L	F	F	F
Penicillin (PPF)	F	F	F	O	F	L	L	L	L
Water for inj.	O	F	F	O	F	F	L	F	F
Aspirin/Paracet.	F	F	F	F	F	F	F	F	F
ORT packets	O	L	F	O	F	F	O	L	O
Anti-helminthic	F	F	F	F	F	F	L	F	F
Amoebacide	F	F	F	F	F	F	F	F	F
Whitfields	O	F	F	O	F	O	L	F	F
Vitamin A*	O	L	O	F	F	O	—	—	—
Stock summary									
% empty	17%			23%			4%		
% low	7%			7%			26%		
% full	76%			70%			70%		

empty (O): no stock

low (L): 5 or under full courses available

full (F): over 5 full courses available

* Vitamin A not supplied in Hill Shop Scheme

Table 3. Average number of items prescribed per script and percentage containing an antibiotic

Health post		Number of items per script	% scripts with antibiotics
A	FPI	1.7	33%
	FPS	2.2	52%
B	FPI	1.5	30%
	FPS	2.8	56%
C	FPI	2.2	35%
	FPS	2.8	54%
Overall averages			
FPI Scheme		1.8	33%
FPS Scheme		2.4	54%

Table 4. Types of drugs prescribed for a hypothetical case put to three prescribers in each scheme

FPI Scheme HPs		FPS Scheme HPs		Hill Shop Scheme	
A	antacid	A	anti-helminthic anti-biotic anti-spasmodic	A	analgesic antacid
B	anti-helminthic anti-spasmodic analgesic	B	anti-helminthic analgesic anti-spasmodic	B	analgesic antacid
C	anti-spasmodic analgesic	C	analgesic anti-spasmodic	C	analgesic anti-helminthic

Case 1: 'I (30-yr-old male) have had headaches, fevers and abdominal pains for two days. I live near the HP'. If examined he has a fever of 99°F.

See text for discussion of prescriptions.

Table 5. Average cost of drugs prescribed and proportion covered by patient fee in FPI and FPS schemes

Health Post		Total cost of drugs	Average cost of a prescription (Nepalese Rupees)		% Cost recovery (Patient fee/Total)
			Patient fee	Subsidy	
A	FPI	6.0	2.0	4.0	32%
	FPS	8.0	5.0	3.0	59%
B	FPI	8.0	3.1	4.9	38%
	FPS	16.0	5.0	11.0	31%
C	FPI	9.0	2.8	6.2	32%
	FPS	11.0	5.0	6.0	47%
Averages					
FPI Scheme		7.7	2.6	5.1	34%
FPS Scheme		11.7	5.0	6.7	43%

In Nepalese Rupees; June 1991 Exchange rate: 29.3 N.Rupees = US\$1.00

general request for training and also for an improvement in drug distribution. Two of the three prescribers using the FPI scheme requested a change to an FPS system as they had heard that it was easier to administer.

Costs

The total cost of drugs prescribed for 100 patients in the FPI scheme was less than in the FPS scheme ($P < 0.001$), see Table 5. The FPI scheme provided a cheaper service to patients than the FPS scheme (average cost of a prescription fee N.Rs 2.6 vs. 5.0 from script analysis). There are two reasons for this:

- fewer drugs were prescribed in the FPI scheme;
- the average unit cost of a drug was 12% cheaper in the FPI scheme.

This second reason (b) reflected the slightly more expensive mix of drugs such as antibiotics used in FPS prescriptions. This also meant that the average patient fee per item was 31% lower in the FPI scheme, see Table 6. Cost recovery was lower than in the FPS scheme, see Table 5. The differential unit costs make it difficult to know to what extent these differences are due to the charging systems (i.e. FPI or FPS) or due to the pricing structure. The prescriptions issued for the 'hypothetical cases' suggested that patients in the

FPI scheme paid about 20% of the price of prescriptions in the non-subsidized Hill Shop Scheme when presenting with the same complaint, see Table 7.

Table 6. Pricing structure of FPI and FPS drug schemes

Drug scheme	Total cost per script	Average cost per item prescribed	Average patient fee per item
FPI	7.7	4.27	1.44
FPS	11.7	4.87	2.08

In Nepalese Rupees; June 1991 Exchange rate: 29.3 N.Rupees = US\$1.00

Table 7. Average prescription charge for three hypothetical cases put to prescribers in each drug scheme

Cases	FPI Scheme	FPS Scheme	Hill Shop Scheme
1	3.0	5.0	9.6
2	2.7	5.0	24.0
3	2.0	5.0	9.5
Average	2.6	5.0	14.5
Ratio	1	2	5.6

In Nepalese Rupees; June 1991 Exchange rate: 29.3 N.Rupees = US\$1.00

The overall subsidy needed per patient in the FPI scheme was 24% less (Chi sq $P < 0.001$, average subsidy per prescription N.Rs 5.1 vs. 6.7). However the overall subsidy required to run these three HPs was higher because of the higher attendance. There is no subsidy in the Hill Shop Scheme as it recovers 112% of drug costs (which include a delivery charge not included in the cost of drugs in the FPI and FPS schemes).

Administration

The most crucial aspects of running the new scheme, such as collecting monies and ordering further drug supplies, were adequately carried out. There were three main problem areas in the new scheme:

- i) The DPHO's stocks of drugs became low and in fact some items ran out completely. This was partly due to demand being higher than expected but there were also problems in supplying drugs from the out-of-district BNMT drug scheme office (see 'Discussion of results').
- ii) Forms listing information such as drug stocks and monies collected were late being prepared for the BNMT drug scheme office. Some other forms such as copies of drug orders for HPs (a copy of which is meant to be sent to the central (BNMT) drug scheme office) were not filled out at all.
- iii) HP administrative work was also delayed, particularly in the HP based in the large town (A) which had the largest rise in attendance, see Figure 3. This problem was eased when the increasing workload brought about the appointment of a more qualified HP-in-charge.

The HP prescribers felt that the accounting procedures would be easier to perform in a FPS scheme.

Community involvement

Although not formally evaluated, casual observation suggested that there was very little involvement by the community in the running of HP-based activities. The situation was not helped by the national revolution, which brought about a collapse of the local political infrastructure soon after the scheme started.

Discussion of methods

It is very difficult to perform field evaluations in these locations. The methods used looked at costs, utilization, drug availability, prescribing patterns and district administration.

To keep the evaluation simple we used data available in health posts and the DPHO and information gained by one-off visits to peripheral units. This simplified method has limitations. For example, there is no direct measure of the gain in health that the community acquires as a result of the drug scheme starting. We were not able to assess consumers views or evaluate community involvement in the running of the HPs, even if this had taken place to a significant degree. Focus groups have been used to assess consumer views of HP services in these types of districts.⁷ However, views expressed in groups may need to be validated by other methods, such as individual interviews, before any definite conclusions can be made.¹⁴

The study compares different schemes, yet it is difficult to know to what degree the communities involved are themselves comparable. However, similar trends were found in all three HPs using the FPI scheme, despite their very different settings. The accuracy of recording attendance in different HPs may vary. Looking at trends over a long period of time will help overcome this problem as well as take into account seasonal variation. It was not possible to comment on the level of 'repeat attenders' at the HPs.

Assessing the impact of user fees on the attendance by vulnerable groups is obviously important. Assessing utilization by under-five-year-olds is easy as age is usually written on the prescription. This is not the case for pregnant women or the very poor. For the first group, 'women of child bearing age' could be monitored, but to assess HP use by the 'very poor', the prescriptions have to be marked as 'entitled to exemption' even if drugs from the low price band only are prescribed. Clearly this will be difficult, suggesting, perhaps, the need for alternative methods.

In evaluation of the drug delivery system, a one-off stocktake gives a measure of how it is working. It is important to define a 'full course' in ad-

vance, taking into account paediatric doses and elixir preparations.

Analysis of prescription pads gives some measure of health care delivery and allows an analysis of costs. When the FPI scheme is based in more units, a lower number of prescriptions from a larger number of HPs should ideally be used for the prescription analysis. The hypothetical cases were of limited use but did allow a scheme without prescriptions (Hill Shop Scheme) to be included. They also gave some insight to common prescribing traits, such as the use of an anti-spasmodic for abdominal pain.

The assessment of the administration needs to be improved given the importance of this area. Quantitative methods are needed and more key individuals inside and outside the district need to be interviewed. A checklist could be developed so that evaluation, and regular supervision, could be carried out in a more systematic manner.

Discussion of results

There was a noticeable rise in attendance at all of the Health Posts where the new FPI scheme was started, over and above the expected seasonal rise. Previous FPS schemes started by BNMT have not shown a similar effect, in fact two caused a drop in attendance.^{11,12} The FPI scheme encouraged the prescribing of fewer drugs at a lower overall cost. This study does not allow an assessment of the overall 'health gain'; however, the rise in utilization does suggest that local communities found HPs starting an FPI scheme more popular than previous ones starting an FPS scheme. Presumably there was a perceived higher quality of care brought about by a regular supply of drugs. This outweighed the cost of being charged for medication.

There are other factors to be considered; staff receive more training and supervision at the start of a new scheme. They might be more motivated in their work, given a full supply of drugs. The scheme was also preceded by a local publicity campaign. However, these factors were also present at the start of the FPS schemes when utilization dropped. The effect on attendance was probably exaggerated because the FPI scheme was only in three HPs; these three HPs, especially the one from group 'A', probably

attracted patients from outside their expected catchment areas. The proportion of children and pregnant women attending HPs has always been low (although the latter would not necessarily be noted on prescription pads). There is no evidence from this study that the lower priced prescriptions changed the situation.

Of the essential drugs included in the stock check, about one quarter were absent or low in all three schemes. The main reason behind this seemed to be a delay in obtaining drugs from the out-of-district drug scheme office, a problem common to all three schemes. The lower level of empty drug stocks in the Hill Shop Scheme may reflect their self-profit motive; this incentive does not exist in the HP based schemes.

Over-prescribing is common in most health service systems that do not have a rigid prescribing policy and can be detrimental to patient care.^{15,16} The FPI system acts as an incentive to prescribe fewer drugs which in turn represents an overall improvement in prescribing. However, there may be some individuals with more than one illness who may suffer from a move to prescribe less drugs. This could be defended, at least in part, by the common knowledge that compliance with treatment gets worse with a higher number of prescribed drugs, no matter how 'rational' prescribing is.

Assessing prescribing is difficult in these situations. It is often difficult to know what the presenting complaint actually was. Prescription pads are of limited use because the prescriber often only writes a broad symptom category (e.g. 'abdominal pain') rather than details of the complaint or a diagnosis. When a diagnosis is written it is possible that it has been written more to justify the treatment given than to accurately record the patient's condition. This is given some support by the observation that the quantity of drugs available influences prescribing.¹⁷ For example, the HP staff use anti-spasmodics for abdominal pains. This could be because they are diagnosing some form of colic; the more likely explanation, however, is that this drug is supplied far in excess of need as part of the government indent of drugs, so the HP workers feel they have to use it for something. A similar observation has been made about a diagnosis of 'worms'; this is often used as a diagnosis for

non-ill attenders as there is a plentiful supply of cheap anti-helminthics in the HP (Kathy Holloway, personal communication).

The fewer drugs that were prescribed per patient in the FPI scheme makes this scheme cheaper to run on a 'per patient' basis. However, the rise in attendance meant that the absolute level of subsidy (i.e. cost of additional drugs not covered by the patients fees) per HP was approximately N.Rs 4000 (US\$137) per month in the FPI scheme, as against only N.Rs 2300 (US\$78) in the FPS scheme. An increase in the charge would reduce the subsidy needed but may have a negative effect on utilization. A two-band price structure allows more flexibility when considering such a change in pricing policy.

An itemized charge system involved more administrative work – a point made by two of the HP staff using the FPI scheme. As this study was only performed five months after the scheme started, it is not possible to say whether or not the FPI scheme is as robust as the FPS scheme, given the rapid increase in utilization. Although this study suggests an FPI scheme encourages more rational prescribing, a more detailed assessment of the administrative costs is needed before any definite claim could be made about any overall increase in efficiency.

The administrative duties were not performed well by the DPHO staff when compared to those in the FPS (BNMT) scheme who are specifically employed for these duties. The central BNMT drug scheme office requires regular reports on district activities as part of a monitoring system. However, the DPHO staff running the FPI scheme had no statutory need to comply with this system. This is a difficult area, but possible ways forward are:

- a) working with DPHOs to help ease general administrative problems and not just concentrating on drug schemes;
- b) improving the drug scheme administrative skills of all the DPHO staff;
- c) minimizing the data needed by the central drug scheme office;
- d) encouraging the regional administration to monitor district drug scheme activity (assuming the regional tier remains in existence);
- e) trying to minimize the number of times the DPH officer himself changes; constant

changing of senior staff makes it difficult to ensure a regular commitment to the proper running of the scheme.

The degree to which the government takes on responsibility for NGO work is critically important and is an issue requiring further study.

This evaluation was done soon after the scheme was set up in order to get some initial feedback and to develop methods for future evaluations. An assessment performed when the scheme is more established will allow a more valid comparison with already established FPS and Hill Shop schemes.

Conclusions

A new drug supply scheme that charged patients a fee per item prescribed compared favourably against a scheme that charged patients a fee per whole prescription. There is evidence of more rational prescribing and the service probably provides better value for money for most of the users. However, the scheme probably has higher administration costs at HP level. These findings will need to be validated by further evaluations when the scheme is more established.

The introduction of this fee-per-item scheme brought about an increase in utilization in all three HPs. This presumably reflected a perceived increase in quality of care by users of the HP. Providing cheaper prescriptions for children and pregnant women did not increase the proportion of these groups attending the HPs. The administration of the scheme by district government staff proved difficult and is the main threat to the scheme's long-term viability. A simple comparative assessment as described here using established schemes as 'standards' is easy to perform and can provide a valuable insight into the operational aspects of a new programme.

Endnotes

- * June 1991 exchange rate: US\$1 = N.Rupees 29.3.

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