Pharmacists A Key Factor in Health Care

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In South Africa, in both public and private sectors, approximately 25% of the health budget is spent on drugs. Eighty percent of the country's drugs are used in the public sector.

Pharmacists - A Cost Saving Investment

Pharmacists are the country's experts in the care, storage, action and use of drugs. They are university trained to do these tasks for four years, plus a further year of internship, before they register. Yet the public sector, with its consumption of 80% of the country's drugs, employs around 10% of the country's pharmacists. Drugs in the health service constitute a massive investment. The TPA alone spends over R150m on drugs a year. Pharmacists are able to advise on safer and more economical methods of drug use. In Canada, it has been calculated that for every \$1 spent on pharmacists' pay, a saving of \$20 can be made on drug costs (and this with no decrease in the quality of patient care).

Studies in southern African hospitals have shown massive savings through better use of pharmacists in wards and in patient care areas. They assist doctors and nurses alike on drug use. At one Cape teaching hospital, pharmacist audit of the emergency drug cupboard has been projected to save R60 000 to R70 000 a year. In another study in a Transvaal teaching hospital, involvement of one pharmacist in intravenous feeding is calculated to save over R100 000 a year. At the clinic level, pharmacists, advice on the distribution, care, control and use of medication promotes better and more cost effective patient care and helps to reduce medicine wastage. Simple arithmetic shows that in the Transvaal alone a 1% reduction in the drug bill would result in a saving of R1,5m.

Staffing: Supply and Demand

If pharmacists can make such savings and improvements in patient care, why are more of them not employed by the state?

The majority of pharmacists work in the private sector as community retail pharmacists, where they can earn a living which is appropriate to their qualification - and there are still plenty of jobs in retail pharmacy. Hospital pharmacists have poor conditions of service by comparison. The majority of hospital pharmacists do "after hours" work in retail pharmacies to supplement their income,

In recent years the number of pharmacy schools has been cut in an attempt to rationalise training. Although this move was aimed at more effective use of resources, it has not been properly implemented and has resulted in a fall in the number of pharmacists qualifying. In 1985, 497 new pharmacists registered, and there was a net increase of 468 to the register. By 1992, the number of new pharmacists had fallen to 350, and the net increase to the register was a mere 180. The reduction in pharmacist numbers is further complicated by the fact that over 80% of pharmacy graduates are women. Women make excellent pharmacists, but on average a woman pharmacist works for 56% of her potential working life, compared with 85% for a man.

Staff Vacancies and Turnover

Vacancies and staff turnover place a further constraint on the public sector. In 1991, in the eastern Cape and border region there were 23% vacancies, and 33 out of 88 pharmacists left the services that year. In the Transvaal, there were approximately 10% vacancies, with a staff turnover of about 20%. Some hospitals in the Transvaal have vacancy rates of up to 75%. In the self-governing and independent states, conditions are much worse, to mention only a few examples:

Percentage of Vacancies (1991)

Bophuthatswana 53% Gazankulu 68% Kangwane 67%

The overall vacancy rate for the self governing and independent states was 56%.

In 1993, the government decided to freeze all posts that had been vacant for more than a year. This has grave implications for an already overburdened profession. Services which were cut temporarily until the posts were filled, are to be shelved indefinitely.

Geographical Maldistribution of Pharmacy Staff

A factor which adds to the problem of supply of hospital pharmacists is their geographical maldistribution. As with doctors, pharmacists are concentrated in urban areas. Hospitals in rural areas struggle to obtain pharmacists. There is also the question of ethnic maldistribution. In 1989, there were 2.9 pharmacists per 10 000 people in southern Africa. This figure compares well with the 3,1 per 10 000 people in the United Kingdom. Yet in southern Africa the ratio was 15,3% for the white population and 0.06% for the black population. This shows a tremendous imbalance due to the educational disadvantage of black people.

As a result of the shortage of pharmacists in rural areas, many pharmaceutical services rely heavily on the use of assistants. The appropriate use of trained assistants is a tremendous benefit to hospital pharmacy worldwide. In the UK and USA, pharmacy technicians are employed in all hospital pharmacies in a ratio of approximately one assistant or technician to one pharmacist. Appropriate training and an adequate career structure for assistants is essential. In 1986, the South African Pharmacy Council introduced a new training and registration system for pharmacists' assistants. The process involves registration and a 2 year course with examinations. There is no mechanism in the public sector for official help with funding of registration and examination costs, nor is there any financial benefit to be gained once the trainee assistant qualifies. What then is the training incentive for these much needed members of the pharmacy team?

Determining Needs

One way of measuring the need for pharmacists is to calculate how many hospitals beds are served by one pharmacist. In a recent survey to investigate pharmacy labour power requirements, an overall figure for the average pharmacist to bed ratio was 111 beds per pharmacist. Figures per region are:

Cape province	72 beds
Transvaal	85 beds
Natal	90 beds
Orange Free State	135 beds
KwaZulu	275 beds
Ciskei and Transkei	475 beds
Bophuthatswana	484 beds
Venda and Lebowa	542 beds

The greatest need exists in Lebowa and Venda, where there is a ratio of 542 beds per pharmacist.

The problems associated with both pharmacists' and their assistants' conditions of service have been brought to the attention of successive ministers of health and the Commission for Administration over the past few years with little result, despite active campaigning on the part of the South African Association of Hospital and Institutional Pharmacists (SAAHIP). In the meantime hospital pharmacy services crumble, patients suffer and vast quantities of money are wasted through the inappropriate storage, handling and use of drugs, as well as theft.

It is clear that more pharmacists are needed in hospital and primary health care services, where there are currently no pharmacy services. In particular, there is a great need for pharmacists in poorly serviced rural areas. Greater numbers of trained assistants are needed as part of a vital support system. Concerted action is necessary on several fronts:

- conditions of service must be improved for pharmacy staff, with appropriate career structures for pharmacists and assistants;
- conditions of service for part-time staff must be addressed;
- there must be equal opportunities for all, regardless of race, gender or creed;
- more assistants must be trained and supported in their training;
- more black pharmacists must be trained;
- posts in rural areas must be made more attractive through area allowances;
- efficient medicine distribution systems must ensure a continuous supply of medication to those who need it; and
- a national drug policy must be established.

Through action on these points, a better, more cost effective health service would be provided to a population which has been considerably deprived.

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