Appropriateness of patient attendance at specialist clinics in public hospitals in eThekwini municipality

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To the Editor: Although South Africa spends an unusually high proportion of her gross domestic product (GDP) on health care,¹ the health status of most South Africans remains poor.² The disproportionately high consumption of health care resources by the private sector is in part the cause of this disjuncture.¹ However, inefficiencies and other constraints within the public sector may also be responsible.

An important inefficiency in the public hospital sector is the treatment of patients at levels of care inappropriate to their health problem – specifically, the treatment of patients at hospital level when they could be managed effectively at a lower level of care.³ The costs of treating a patient increase as the level of care increases from primary care (clinic) level to district, regional and tertiary hospital level.⁴ As much as one-third of total hospital costs could be saved by treating primary care patients at a clinic rather than at hospital level.⁵ Although a number of studies have investigated the inappropriate use of inpatient stays in hospitals,⁶⁻⁸ few have looked at inappropriate patient attendance at hospital outpatient departments.⁹¹⁰ This study investigated the appropriateness of patient attendance at regional and tertiary hospital outpatient departments, and the reasons for this attendance.

Materials and methods

This was an observational, cross-sectional, descriptive study. The study population consisted of all patients attending high-volume specialist clinics (antenatal, general surgical, medical and paediatric) in 5 of the 10 public hospitals in eThekwini municipality, from 13 to 15 January 2003. All hospitals were either regional (secondary level) or tertiary.

Questionnaires were administered to a representative sample of patients after their consultation with the doctor. Clinical and management information was obtained directly from the patient’s record. Other information, such as the patient’s reasons for attending the hospital, was obtained from the patient.

The method used to determine the appropriateness of hospital attendance was based on clinical, investigative and referral criteria routinely recorded in patients’ files. Our assessments were informed by the Standard Treatment Guidelines and Essential Drugs Lists for primary and hospital care.¹¹⁻¹³

Results

A total of 1 462 patients were included in this study. Of these, 43.6% (95% confidence interval (CI): 41.1 - 46.1%) could have been managed effectively at primary care level.

Hypertension (11.5%) was the most common reason for attendance, followed by pregnancy (11.2%) and diabetes (6.0%). Five of the 10 most common causes of ill health were chronic diseases.

The most common reason given for attending the specialist hospital clinic was that it was close to the patient’s home (29%). Twenty-six per cent of the patients said that they had been referred by a health worker but only 1% of all patients could show the interviewer a referral letter, while one-quarter (25%) said the hospital clinic offered the best care available to them (Fig. 1).

There was a significant association between the proportion of patients seen inappropriately at the various clinics and the type of clinic (Fig. 2), with the highest proportion of inappropriately seen patients at paediatric clinics ($\chi^2 = 24.15$ on 3 df, $p < 0.0001$).

The reasons patients gave for attending paediatric clinics differed significantly from those given for all the other clinics sampled for this study ($\chi^2 = 61.14$ on 4 df, $p < 0.0001$). A higher proportion of patients attending paediatric clinics (35.7%) gave as their reason the high quality of care at hospitals, while a lower proportion (14.3%) were referred, compared with...
patients from all the other clinics.

Discussion

The findings of this study are fairly similar to the results obtained in other South African studies. Strebel et al.\textsuperscript{10} found that 48% of patients attending outpatient departments at the Red Cross War Memorial Children’s Hospital in Cape Town could have been managed at primary care level. The study by Rutkove et al.\textsuperscript{9} done in the paediatric outpatient department of King Edward VIII Hospital in Durban found that 42.2% of patients could have been managed effectively at clinic level.

Our findings have three important implications. The first is that resources that should be spent on patients requiring specialised hospital treatment are being spent on patients who do not require this. This is an inefficient use of scarce resources. Resources in health care are usually, if not always, insufficient to meet the needs and demands of populations.\textsuperscript{14} It is therefore imperative that they be used to best effect, and that wastage be minimised.

This inefficient use of resources also compounds the tension in the financing of primary care versus hospital care. Historically, health care financing in South Africa has favoured hospital services. Since 1994 the government has attempted to address this imbalance by increasing expenditure on primary health care.\textsuperscript{1} However, the excess number of patients attending hospitals will make shifting resources from hospitals to the primary care level difficult. This is ironic because as this study shows, many hospital patients could be treated effectively at primary care level.

The second implication of these findings is that the role of hospitals in the district health system becomes blurred.\textsuperscript{3} In order to function most efficiently, hospitals and clinics should manage only those patients they are designed and equipped to manage. However, when the hospital manages a mix of patient levels, it functions ‘as a combination of all levels of care’\textsuperscript{15} and is therefore less efficient.

The third important implication is that registrars-in-training are exposed to significant numbers of patients with primary care level complaints. This will affect the quality of their training and detract from the range of their clinical experience at training institutions.

There may be a number of reasons for the high proportion of primary care patients attending specialist clinics found in our study. These reasons relate to health worker behaviour, patients’ health-seeking behaviour, and the wider social environment.

Health worker behaviour

The referral of patients from hospitals to clinics is essential in order to ensure that hospitals manage those patients they are best equipped to manage. Therefore patients whose treatment has been stabilised at a hospital should be referred back to clinics for ongoing treatment.\textsuperscript{20–22} However, more than 1 in 10 patients (12%) overall, and at 1 regional hospital almost 1 in 5 patients (19.3%), reported coming to the hospital clinic because they had been going there for a long time.

There may be a number of reasons for the poor practice of referral back to clinics found in this study. Within the health system there may be no clear guidelines for referral of patients between hospitals and clinics. Alternatively, even if these guidelines do exist, health workers may not be aware of them. Finally, health worker apathy may result in suboptimal use of existing, publicised guidelines.\textsuperscript{23}

Patients’ health-seeking behaviour

Patients’ health-seeking behaviour (the demand side of care) is another crucial aspect of the problem of inappropriate attendance at hospital clinics. In this study, 2 of the 3 most important reasons given for this attendance were that the hospital was close to the patients’ homes, and that it offered the best care available. Since patients may feel obliged to give an address within the catchment area of the hospital in order to justify their treatment there (Dr Govender, Medical Outpatients Department, King Edward VIII Hospital, Durban, 2003 – personal communication) this reason may simply reflect their anxiety that they will be refused treatment at the hospital unless they can claim proximity to it.

Patients understandably seek the care they perceive to be of the highest quality. The presence of doctors and sophisticated medical equipment at hospitals are two reasons for the common perception that hospital care is superior.\textsuperscript{3}

In certain areas of South Africa the preference for hospital care over clinic care may be justified. Clinics in KwaZulu-Natal score poorly on a number of indicators, including infrastructure, in-service training of staff and ambulance response times.\textsuperscript{17} If patient attendance at clinics is to be increased, the quality of clinic care must be improved. This requires substantial investment in terms of human and financial resources, but is necessary if health facilities and the health system as a whole are to function more efficiently.\textsuperscript{4}

Social environment

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On a broader social level, the substantial influx of people into cities since 1994 has almost certainly resulted in higher numbers of patients attending hospital clinics. Also, increased morbidity as a result of HIV/AIDS has resulted in increased patient attendance at hospitals and clinics. Although HIV morbidity was not assessed in this study, it may have played a role in increased patient attendance at hospital clinics, whether appropriate or inappropriate.

Conclusions

Over 43% of patients seen at specialist clinics in Durban’s regional and tertiary hospitals could be classified as primary care patients; by definition, the most appropriate level of care at which these patients should have been managed is the primary level clinic. This amounts to a highly inefficient use of financial and human resources that South Africa can ill afford.

The most important reasons for this inappropriate attendance relate to health worker behaviour and patient health-seeking behaviour. Interventions to reduce inappropriate attendance include raising the awareness of health professionals at hospitals with regard to the importance of referring patients back to clinics for ongoing management, and improving the quality of care at clinics in order to attract patients there.

1. Doherty J, Thomas S, Mainhead D, McIntyre D. Health care financing and expenditure. In: