## A PROFILE OF PATIENTS ATTENDING THE PHYSIOTHERAPY DEPARTMENT AT THE ALEXANDRA HEALTH CENTRE AND UNIVERSITY CLINIC

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#### **ABSTRACT**

During 1989 the Alexandra Health Centre and University Clinic (AHC) experimented with a health information system to determine a profile of the patients presenting at the AHC physiotherapy department.

Data were analysed for 1408 patients. The age distribution was 2% (n=33): 0-4 years of age, 5% (n-74): 5-14 years, 85% (n-1186): 15-59 years and 8% (n=108): over 60 years (no data on 1%, n=7). 31% (n=439) had neck and back problems, 30% (n-419) had problems related to the arms, 22% (n-303) had lower limb problems, 13% (n=185) had hand problems, 4% (n=56) had problems associated with burns, 3% (n=48) had chest related problems, 1% (n=8) had osteoarthrosis, 0% (n=2) had rheumatoid arthritis and 2% (n=33) had other unspecified problems. 94% (n=1323) had 1 diagnosis and 6% (n=85) had multiple diagnosis. 12% (n=172) were patients with chronic problems and 86% (n=1213) had acute problems (no data in 2%, n=23). Of the 786 cases with data 1% (n=10) were referred to hospital, 96% (n=754) were not referred anywhere and 3% (n=22) were referred elsewhere. Referrals were more common for burns and osteoarthrosis (p-0.00).

The low rate of referral is a credit to the ability to cope with the work at local level.

## Key Words: Physiotherapy, Community Based Rehabilitation, Health Information System.

#### INTRODUCTION

Planning the operations of primary health care centres in South Africa is hampered by a lack of the most basic data on the profile of the patients seen at that level. A health information system, that has been partially discontinued<sup>1,2</sup>, provided us with information extremely useful to gain insights on the patients attending a physiotherapy department at the Alexandra Health Centre and University Clinic (AHC), serving the population of Alexandra (Alex).

Most of the health services for the community are provided by the AHC, a privately funded non-profit facility. The AHC is the only provider of rehabilitative care in Alex<sup>3,4,5</sup>.

#### REHABILITATION SERVICES

At the AHC we are developing a Community Based Rehabilitation (CBR) programme<sup>6</sup>.

The CBR programme at the AHC has 4 components: research; mobilising the community; education and training; and clinical work. In this article we address the clinical component only.

Comprehensive though basic clinical services have, for many years, been provided at the AHC on a part time basis. These services include: physiotherapy, speech and hearing therapy, podiatry, optometry and psychology. They are being developed in the context of

the philosophy of the CBR programme. This means a strong commitment to outreach, to continuity of care, to cost-effectiveness and for support of appropriate referral centres. The only major recent change in clinical work has been the impact of the appointment of a full-time physiotherapist to the pattern of work.

Between May and December 1989 part-time physiotherapists, working 10 hours a week, provided episodic clinical care to 417 patients. The age distribution was 4%: 0-4 years of age, 5%: 5-14 years, 84%: 15-59 years and 8% over 60 years. Four percent were referred to hospital. Two percent were patients with chronic problems and 98% had acute problems. Of those with acute problems, 60% were first attenders and 40% repeat attenders. For the equivalent period in 1990, a physiotherapist working 15. clinical hours a week, saw 740 patients with a similar age profile, but only 1% were referred to hospital; 39% were seen with chronic problems and 61% with acute problems. Of the acute problems, 29% were first attenders and 71% were repeat attenders. The major changes were therefore in the direction of more patients with chronic problems, more repeat attendances by patients with acute problems and less hospital referrals.

During 1989, the AHC experimented with a health information system to determine a profile of the patients presenting at the AHC<sup>1,2</sup>. Although the system was reviewed in 1990, data collected in the physiotherapy department between 1988 and 1990 have been recently analysed and this analysis is reported here.

#### POPULATION AND METHODS

A standard form was used to collect data. Data were both department and patient specific. Each column has one patient's data. The data include age (in six categories), sex and diagnosis (categorised as acute new, acute repeat or chronic and in nine more clinical categories), source of referral to the physiotherapy department and referral from the physiotherapy department to other services.

The analysis was done using BMDP programmes, on the IBM 4381 computer of the Medical Research Council. Statistical significance was tested with Pearson chi-square, Yates corrected chi-square or the Fisher exact test as most appropriate.

#### RESULTS

Data were analysed for 1408 patients.

The age distribution was 2% (n=33): 0-4 years of age, 5% (n=74): 5-14 years, 84% (n=1186): 15-59 years and 8% (n=108): over 60 years (no data on 1% (N=7)). Young children (0-4 years) were more commonly seen in June and less frequently in October; older children (5-14 years) were more commonly seen in August; the elderly were particularly common in December and less common in February and August (p=0,00).

From the 923 patients with data on source of referral, 78% (n=717) were referred from casualty, 13% (n-124) from the adult outpatient department, 4% (n-34) were self-referrals, 2% (n=19) were from the paediatric outpatient department and 1% (n=7) were from other sources.

Thirty one percent (n=439) had neck and back problems, 30% (n=419) had problems related to the arms, 22% (n=303) had lower limb problems, 13% (n=185) had hand problems, 4% (n=56) had problems associated with burns, 3% (n=48) had chest related problems, 1% (n=8) had osteoarthrosis, 0% (n=2) had rheumatoid

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arthritis and 2% (n=33) had other unspecified problems.

The occurrence of burns decreased with increasing age (p,00). Lower limb problems are particularly common in the 5-14 years age group (p=0,0). Neck and back problems are uncommon before 15 years (p=0,00).

Ninety four percent (n=1323) had one diagnosis and 6% (n=85) had multiple diagnosis. Multiple diagnosis is relatively more common before the age of 5 years (p=0,00).

Twelve percent (n=172) were patients with chronic problems and 86% (n=1213) had acute problems (no data in 2% (n=23)). Of those with acute problems, 49% were first attenders and 51% repeat attenders. Of 842 patients with data, 17% had problems related to trauma at work. Chronic diagnoses are relatively more common over the age of 60 years (p<0,05).

Of the 786 cases with data, 1% (n=10) were referred to hospital, 3% were referred elsewhere and 96% (n-754) were not referred anywhere. Hospital referrals are more common before the age of 15 years (p=0,00). Referrals were more common for burns and osteoarthrosis (p=0,00).

Hand problems were more likely to be work related (p=0,00).

The prevalence of the diagnosis varied with the month of the year. In January, "other" was more common, osteoarthrosis and rheumatoid arthritis were more common in February and March, arm and chest problems were more common in June, burns in June and July, hand problems in November and lower limb problems in January and October (p < 0.00).

Chest and neck and back problems are more commonly referred from the adult outpatient department, burns from the paediatric outpatient department, and hand problems from the casualty department (p<0,00).

Acute repeat cases are more likely to be self referrals, and chronic cases are more likely to be from the adult and the paediatric outpatients (p=0.00).

#### DISCUSSION

The method of data collection is well accepted and adhered to, but it has become apparent that further changes in the forms used for data collection would be appropriate. The age group 15-59 should be further split into finer categories; the chronic classification should differentiate between new and repeat chronic visits; the diagnostic classification should separate clinical/etiological diagnosis from anatomical siting of the disability.

Children under 15 years are under-represented in comparison with the age structure of the population<sup>3</sup>.

### **CASE STUDIES**

Authors are invited to submit articles in a new category – "Case Studies" – to the SA Journal of Physiotherapy.

Guidelines: Articles should be not longer than 1,000 words or 3 pages typed in double spacing.

The article should comprise

- Short abstract: 40 50 words
- Short background to the problem
- Description of case history assessment, treatment, results of treatment
- Conclusion summary and recommendations.

Violence, an endemic problem in Alexandra<sup>3</sup>, and its associated trauma, are probably responsible for the bulk of referrals to the physiotherapy department via casualty.

Chest problems are more common in the winter month of June. This is in-keeping with findings previously reported<sup>3,8</sup>.

Preventive work has its greater potential in relation to burns and work related cases. The work related problems are already addressed by a different service of the AHC<sup>9</sup>. There is a need to develop a burns prevention programme that takes into account the winter peak incidence.

The low rate of referral is a credit to the ability to cope with the work at local level. At the same time the temptation to keep as much work at the primary level, although making clinical and financial sense, removes limited manpower from other, probably as or more important, CBR functions. The primary care service must clearly define priorities, work out programmes and mobilise resources to achieve clearly spelt out objectives, keeping the tension between clinical and non-clinical work separate and under control. Clinical professional care is part of CBR. But, in the presence of limited resources what can be achieved, what must be addressed and what is going to be neglected? These must be conscious decisions rather than the result of pressure from demand for clinical professional care from other members of the primary care team and patients themselves. The results encourage us to recommend that rehabilitation workers in primary care practice should collect this type of information and share it in publications or conferences.

#### REFERENCE LIST

- Phakathi G, Ferrinho P, Robb D et al. Problems in the development of a health information system at the Alexandra Health Centre and University Clinic. CHASA Journal of Comprehensive Health 1992; in press.
- Ferrinho P, Buch E, Robb D et al. Developing a health information system for a primary health care centre in Alexandra. S Afr Med J 1991;80:400-403.
- 3. Ferrinho P, Robb D, Mhlongo A et al. A profile of Alexandra. S Afr Med J 1991;80:374-378.
- Ferrinho P, Phakathi G. Alexandra Health Centre and its patients: patient trends, age, sex and address profiles. S Afr Fam Practice 1991;12:50-55.
- Naylor CD. Alexandra Health Centre: primary health care for an impoverished black township in South Africa. Annals of Internal Medicine 1988;109:73-75.
- Cornielje H, Ferrinho P, Kemp S et al. Development of a community based rehabilitation programme for Alexandra. Conference paper presented at the 10th Conference of the Epidemiological Society of Southern Africa, Cape Town 1991.
- Dixon WY. BMDP Statistical Software. Berkeley, California. University of California Press. 1981.
- Ferrinho P, Reinach SG. A profile of patients attending the adult outpatient department at the Alexandra Health Centre and University Clinic in Alexandra. CHASA Journal of Comprehensive Health 1992; in press.
- 9. Rex G. Launching a problem service. The organisation of an occupational health service in the primary health care contest. The case of the Alexandra Worker is Health Outreach Programme. S Afr Med J 1991;80:404-406.

#### **BOOK REVIEW**

STROKE: CARING AND COPING Edited by: Vivian Fritz and Claire Penn

Published by: Witwatersrand University Press

Stroke is one of the leading causes of death and disability in South Africa at present. This locally produced resource book is a comprehensive guide for patients, family members, care givers and professionals of stroke victims.

The book includes chapters written by a member of each of the professionals that offer skills and services to patients that have suffered a cerebral vascular accident. Contributions from the disciplines of neurology, nursing, neuropsychology, occupational therapy, physiotherapy, social work and speech and hearing therapy are informative and relevant to the South African situation.

The book is written in a way that allows the lay public easy access to information that will encourage holistic rehabilitation. The chapter on gadgets and resources and the contribution from the multi-disciplinary team make this book the most practical and informative manual on the treatment and rehabilitation of such victims. An added attraction to this book is its reasonable price that will ensure a wide distribution.

Trish Wallner