Karen Charlton Guest Editor

Health, health care and ageing in Africa: challenges and opportunities

There is a sparsity of research on health, health care and ageing in Africa. In the past, few articles relating to health and ageing and the delivery of health-care services to older clients in the continent have been submitted for consideration for placement in the Southern African Journal of Gerontology. As a result, the journal may be perceived to focus predominantly on papers dealing with topics relevant to the social sciences. The term "geratology," coined by Dr Sebastian Fairweather in Oxford, United Kingdom (Wilson, personal communication, 1998), is the study of discourse on ageing which includes both social gerontology and geriatrics, and reflects the need for a multidisciplinary approach to ageing. In this regard, the well-respected Journals of Gerontology, published by the Gerontological Society of America, comprise four sub-journals in the following areas: Psychological Sciences, Social Sciences, Biological Sciences and Medical Sciences. The journals, each which has its own editorial board, are produced as two concurrent publications, and incorporate psychology and social science related papers in one journal and the other two areas in the other journal.

Apart from SAJG, which is published in South Africa and read by gerontologists in numerous African countries, there is another medium for the publication of local research on geriatrics – The Journal of Age Related Disorders (JARD). However, this journal (JARD) is targeted at medical practitioners and essentially covers clinical research; it is less concerned with issues or areas of interest relevant to other health professionals, practitioners or carers.

To redress the imbalance in the number of articles relating to the health science topics versus those relating to social science topics published in *SAJG*, I was invited by the editorial committee to co-ordinate a special issue dealing with health issues of ageing in Africa. This special issue offers items of interest to serve the information needs of its widely varied, multidisciplinary readers.

First, though, I briefly consider the context of health care for older persons in South Africa. This context is paradoxical in that while the country has a well-established first-world health-care system with specialists at the forefront of medical technology, the health care of the majority of the population has as a result of apartheid policies been seriously compromised. A brief description of some issues relating to the transition from the provision of quality health care for a few, predominately urban dwellers, to expanded primary care coverage, particularly in the rural areas, and how the transition affects older South Africans specifically, will be of interest to readers.

Health-care services in South Africa

New health-care policies in South Africa have been targeted primarily towards women, children and the youth, and the elderly are not regarded as a priority. However, older persons are especially heavy consumers of health-care resources generally. Although the improvement of community-based care for older clients, together with improved detection and control of risk factors and chronic disease at the primary level were identified as two principal health priorities in the health reconstruction plan (African National Congress, 1994), there is scant evidence of any implementation of this policy goal. With the dismantling of former apartheid government healthcare structures in the transformation process, to effect a shift from tertiary and secondary care with their curative focus, to primary health care with a preventive focus, dedicated geriatric services have fallen by the wayside. The preventive, curative and rehabilitative needs of older clients have for the main part been integrated into general sessions at community clinics, at the primary care level. Numerous community nurses have been redeployed from geriatric services, for example, to assist with immunization programmes for children.

The current geriatric health service dilemma in the country needs to be urgently addressed, and for this there is a need for information on effective service delivery models. However, would the reinstatement of equitable geriatric services for all older South Africans be no more than a pipe dream?

First, it must be considered whether the government has the capacity, resources and political will to redirect some of its funds specifically to service the health care needs of older clients. Second, future demographic trends, whereby the number of older South Africans (60 years and over) is projected to increase from 2.7 million to 6.3 million over the next 25 years (Mostert, Hofmeyr & Oosthuizen, 1997), have major implications in terms of meeting the health care needs of a dramatically expanding section of the population whose members will live longer and suffer more morbidity.

In an editorial in an issue of the South African Medical Journal (September 1997) dedicated to ageing (along with 100 or more other medical journals world-wide during the same month), Professor Stephen Louw drew attention to the small number of health professionals with training in geriatric medicine in the country. He challenged medical schools "not to bury their heads in the sand," but to develop appropriate curricula to equip future cadres of medical and allied health professional students with the skills to deal with the increasing numbers of elderly people and the accompanying burden of disease (1997: 1099).

Third, what of the elderly themselves? How are they affected by the changes in health policy? Findings from a qualitative study conducted among older residents of Mitchell's Plain in the Cape Peninsula reported a high level of dissatisfaction with the quality of health care which they receive at the primary level (Ferreira & Charlton, 1996). The subjects' main complaints related to an inefficient appointment system; the long waiting time; the apparent disinterest of staff in the clients' health problems; and transport problems in getting to the facility. Similarly, dissatisfaction with public health services was found in a study of 181 older residents of three farming towns in the Western Cape (Ferreira, Charlton & Mosaval, 1998). Even though 73% of the subjects reported having "financial difficulties," a quarter of all subjects stated that they chose to consult a private doctor and to pay the doctor's fee of about R50-R60, rather than to use a government facility where as social pensioners they are entitled to free health care.

Health statistics data

Reliable information is required on morbidity and mortality patterns of different sections and age groups of the population, including the older section, to inform policy regarding the provision of services. However, mortality trends have been difficult to ascertain due to the poor quality of death certification data, resulting from extensive under-reporting of death in the rural areas and extensive misclassification of the cause of death. As a case in point, even when data on rural blacks is excluded, in 1990, 29.9% of mortality in urban blacks was attributed to "ill-defined" causes, whereas the corresponding figure for the white population was about 10% (Bradshaw, Bourne, Schneider & Sayed, 1995). Nevertheless, certain trends are demonstrated: In 1990, after "illdefined" causes of death (which accounted for 23.3% of total mortality) and infectious diseases (20.4%; includes respiratory, other than respiratory cancer and pulmonary circulation, TB and certain perinatal deaths), chronic diseases such as cerebrovascular disease (7.4%) and ischaemic heart disease (4.9%) were among the top ten causes of death (Bradshaw et al., 1995).

Opportunities for new research

To date, the large epidemiological surveys which have been conducted in the country have typically not included individuals older than 60 or 65 years. The only comprehensive database on the older population is a household survey conducted among 4 400 persons aged 60 and over in 1990/91 (Ferreira, Moller, Gillis & Prinsloo, 1992). In this survey, urban black persons reported far higher levels of impaired health than subjects in other groups.

Chronic diseases of life-style

It is estimated that more than 75 % of South Africa's population will be urbanized by the turn of the century. The adoption of western life-style behaviour, such as an atherogenic, high fat, high salt diet and reduced physical activity, which accompany urbanization, has potentially devastating health consequences. Hypertension is already common and severe in urban blacks of all ages and is associated with stroke mortality (Steyn, Jooste, Bourne *et al.*, 1991; Mollentze, Moore, Steyn *et al.*, 1995; Rosman, 1986). However, ischaemic heart disease rates remain relatively low in this population. In this regard, a large body of evidence in the United States demonstrates that African Americans have higher blood pressure earlier in life than do their white counterparts, and have a higher incidence of hypertension that is manifested earlier,

which is more severe and which is associated with a greater risk of target organ damage (Weinberger 1996). This evidence may provide clues regarding the prevention and management of hypertension in the local situation.

Hypotheses which warrant further investigation are whether black South Africans have a similarly increased susceptibility to salt sensitivity (individuals who respond to a high salt intake with an increase in blood pressure, as against others who do not respond to high salt intakes); whether other dietary factors such as calcium and potassium are implicated in the salt-blood pressure link; and whether genetic markers may predict sensitivity to salt and thus identify those individuals most at risk to certain dietary patterns. Indeed, this area is a present focus of the Medical Research Council's Chronic Diseases, Ageing and Cancer thrust.

Regarding other chronic diseases, the prevalence of diabetes among older coloured South Africans (28.7%) is among the highest reported for this age group world-wide (Charlton, Levitt & Lombard, 1997). Currently, routine treatment for diabetes at primary care facilities frequently involves little more than the dispensing of medication on a monthly basis; there is little opportunity for patient education regarding lifestyle management. Obesity is highest in black South African women. In the Cape Town BRISK study, 57 % of women aged 45-54 years had a body mass index (BMI) of ≥ 30 (Steyn et al., 1991). It was previously thought that obesity in older adults did not carry the same cardiovascular risk as in younger age groups. However, findings from recent largescale studies have provided sufficient evidence for a collaborative group of the World Health Organization, in its effort to prevent and manage the global epidemic of obesity, to have developed new guidelines for the classification of obesity, which are independent of age (WHO, 1997).

Health promotion

In the light of the projected demographic and urbanization trends, it will become increasingly important to adopt non-pharmacological population-based preventive approaches (i.e. life-style management strategies) to combat a potential explosion in the prevalence of chronic diseases.

In terms of the prevention of functional impairment, even in the frail elderly, there is evidence that appropriate interventions may lead to remarkably improved outcomes. For example, in a nursing-home setting, a modest exercise programme, in conjunction with adequate nutrient intake, can significantly improve muscle strength and mobility (Fiatorone, O'Neill, Ryan et al., 1994). Muscle mass is a major determinant of mobility, the ability to continue an independent existence and the ability to prevent disabling falls. Similarly, in a hospital setting, aggressive nutritional support of malnourished elderly surgery patients can result in a 15 to 30% reduction in rehabilitation time and a 40% reduction in the duration of hospitalization, as well as a significant reduction in morbidity (Delmi, Rapin & Bengoa, 1990).

Given the diversity of life-styles of South Africa's population, opportunities for research on healthy and thus "successful" ageing, and on the interaction between the effects of nature (genetic susceptibility) and nurture (environment) on health abound.

Special Issue

Articles in this Special Issue on health and ageing in Africa come from a broad spectrum of disciplines and the articles reflect a wide range of topics. Three contributions deal with the maintenance of good health.

Remaining active is a key component of successful ageing which minimizes the loss of functional independence in the elderly. An investigation of the role of gender in the analysis of gait of older people by Macfarlane, Nicholson and Muller provides important methodological information which may be applied in practical outcomes-based assessments. The development of a reliable tool to assess gait, as a measure of lower-extremity function, is thus pertinent.

There is growing evidence that good nutritional status is an important determinant of optimal cognitive and physical functioning in older people and influences both quality of life and health status. In a study of institutionalized elderly women in Cape Town, **Charlton**, **Joosen** and **Jaffer** report a high prevalence of suboptimal vitamin C status. The authors make out a case for low-dose micronutrient supplementation in residents of homes for the aged, particularly in homes where a cook-chill catering system is operated. They suggest that ongoing nutritional assessment should be an integral part of the care of older residents.

In keeping with the topic of nutrition, Walker, a prolific author on public health issues in Africa over the past 50 years, has contributed a guest column in which he addresses the nutrition-ageing paradigm from an epidemiological viewpoint. He highlights opportunities for high-quality research on the association between life-style factors and healthy ageing in the continent.

Moving on to a specific form of health-care delivery, Makoni examines language practices in the care that is rendered to older residents of a Cape Town nursing home. He describes barriers in communication between nursing staff and residents from different ethnic backgrounds, which compromise the quality of care that is rendered and which may result in conflict and tension between staff and residents.

In her article, **Tlou** evaluates a community-based programme in which older women who live in rural areas of Botswana are trained to educate members of their communities in the prevention of the spread of the HIV/AIDS virus. The findings demonstrate the benefits of targeting lay persons for health education activities in rural Africa and the utilization of older persons, in this case women, as a valuable resource.

The special issue also includes two opinion pieces and an item which opens debate. In separate contributions, Wilson and Duodu examine challenges facing effective health-care service delivery systems for older persons in African countries and express their opinions in this regard. Wilson's suggestions for multidisciplinary specialist teams, including incontinence teams, nutrition teams and vision teams, and for the development of training for lay people to become generic "rehabilitation assistants," are examples of appropriate community-based African solutions to health service delivery needs of the older population. Duodo makes similar suggestions to those of Wilson, specifically regarding geriatric care service delivery in Ghana. He also highlights the common practice of traditional self-medication in rural-dwelling older Ghanaians. Readers are invited to comment on, and indeed to augment, the authors' opinions in Letters to the Edi-

To date, very little work has been done in South Africa on biological aspects of ageing. In a short contribution on the free radical theory of ageing, Van Rensburg and Potocnik open debate on this topic. Once again, readers are invited to contribute to debate in this area in letters to the editor, for publication in the following number of the journal.

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References

- African National Congress. 1994. A national health plan for South Africa. Johannesburg.
- Bradshaw, D., Bourne, D.E., Schneider, M. & Sayed, A.R. Mortality patterns of chronic diseases of lifestyle in South Africa. 1995. In: Fourie, J. & Steyn, K. Chronic diseases of lifestyle in South Africa. MRC Technical Report. Parow: Medical Research Council.
- Chariton, K.E., Levitt, N.S. & Lombard, C.J. 1997. Prevalence of NIDDM and associated risk factors in elderly coloured South Africans. South African Medical Journal, 87: 364 - 367.
- Delmi, M., Rapin, C-H., Bengoa, J., Delmas, P., Vasey, H. & Bonjour, J-P. 1990. Dietary supplementation in elderly patients with fractured neck of femur. *Lancet*, 335: 1013-1016.
- Ferreira, M., Møller. V., Gillis, L.S. & Prinsloo, F.R. 1992. Multidimensional survey of elderly South Africans, 1990-91: key findings. Cape Town: HSRC/UCT Centre for Gerontology.
- Fetteira, M. & Charlton, K.E. 1996. Towards an integrated, communitybased social and health care programme for older residents of Mitchell's Plain: a study report. Cape Town: HSRC/UCT Centre for Gerontology.
- Ferreira, M., Charlton, K.E. & Mosaval, Y. 1998. Retired farm workers, farm evictions and the "dop" system: an exploratory study in three towns in the Western Cape Province. Cape Town: HSRC/UCT Centre for Gerontology.
- Fiatorone, M.A., O'Neill, E.F., Ryan, N.D. et al. 1994. Exercise training and nutritional supplementation for physical frailty in very elderly people. New England Journal of Medicine, 330: 1769-1775.
- Louw, S. 1997. Geriatric medicine in South Africa the onus is on medical schools. South African Medical Journal, 87(9): 1099-1100.
- Mollentze, W.F., Moore, A.J., Steyn, A.F., Joubert, G., Steyn, K., Oosthuizen, G.M. & Weich, D.J.V. 1995. Coronary heart disease risk factors in a rural and urban Orange Free State black population. South African Medical Journal, 85: 90-96.
- Mostert, W., Hofmeyr, B. & Oosthuizen, K. 1997. Demographic projections for South Africa. Unpublished data. Pretoria: Human Sciences Research Council
- Rosman, K.D. 1986 The epidemiology of stroke in an urban black population. Stroke, 17: 667-669.
- Steyn, K., Jooste, P.L., Bourne, L., Fourie, J., Badenhorst, C.J., Bourne, D.E., Langenhoven, M.L., Lombard, C.J., Truter, H., Katzenellenbogen, J., Marais, M. & Oelofse, A. 1991. Risk factors for coronary heart disease in the black population of the Cape Peninsula. The BRISK study. South African Medical Journal, 79: 480-485.
- Weinberger, M.H. 1996. Racial differences in renal sodium excretion: relationship to hypertension. American Journal of Kidney Disease, 21(Supplement 1): 41-45.
- Wilson, A.O. 1998. Personal communication. Amersham, UK. October.
- World Health Organization. 1997. Obesity: preventing and managing the global epidemic. Report of a WHO Consultation on Obesity, Geneva, June 3-5.