

Needs of frail elderly people in informal settlements

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Abstract

The frail elderly in informal settlements find themselves in an extremely vulnerable position due to a number of factors, namely, their increasing dependency status, limited resources and adverse physical environment. Various aspects that influence the aged in their present environment will be highlighted.

A survey method was used to explore and to describe the world in which they live in informal areas. The attitude, expectation and needs of the elderly in respect of their care was also determined. A random cluster sample was taken. Data was collected by means of interviews in terms of a semi-structured questionnaire.

It appears that the frail elderly were happy in the environment in which they received care in spite of their unfavourable physical environment and limited resources. The communities where the frail elderly lived were largely unaware of the valuable inputs they can make regarding the care of the aged. This necessitates the development of programs in the heart of communities, owned by communities, where all role players in the care of the aged participate.

Opsomming

Die verswakte bejaardes in informele nedersettings bevind hulle in 'n uiters kwesbare posisie weens 'n aantal faktore, naamlik, hul toenemende status van afhanklikheid, beperkte bronne en hul ongunstige fisiese omgewing. Verskeie aspekte wat 'n invloed op bejaardes in hul huidige omgewing het, sal toegelig word.

'n Opname metode is gebruik om die wêreld waarin hulle in informele areas woon te verken en te beskryf. Die houding, verwagting en behoeftes van die bejaardes wat betref hul versorging, is ook bepaal. 'n Ewekansige trossteekproef is uitgevoer. Data is deur middel van onderhoude met behulp van 'n semi-gestruktureerde vraelys versamel.

Dit blyk dat die verswakte bejaardes, ten spyte van die ongunstige fisiese omgewing en beperkte bronne, gelukkig was in die omgewing waarin hulle versorg is. Die gemeenskappe waar die verswakte bejaardes gewoon het was grootliks onbewus van die waardevolle insette wat hulle ten opsigte van die versorging van bejaardes kan maak. Dit noodsaak die ontwikkeling van programme in die hart van die gemeenskappe en in besit van die gemeenskappe waar alle rolspelers aan die versorging van bejaardes deelneem.

Introduction

Old age may appear to be a period of rest and freedom from trouble. However, the opposite is true today. Ageing in informal settlements is often associated with many needs and lack of opportunities for old people as a result of their increasing dependency status, limited resources and poor living conditions.

Elderly black people in townships are particularly susceptible to social and environmental stressors due to the ageing process and limited learning opportunities (Hildebrandt 1993:3). These people find themselves in circumstances that differ radically from their expectation and what they imagined about their old age (Tout 1992:25-33). Care in informal settlements is given mainly by families in the absence of the necessary resources and support systems. These family members are often needy themselves.

Several factors already mentioned lead to the needs of frail elderly people and influence the opportunities at their disposal accordingly. Their many needs can only be addressed and opportunities provided if they are thoroughly and correctly assessed within the context of their present environment. This ideal is attainable by means of community-based programs with the active participation of the elderly and their families in the assessment, planning and implementation of suggestions.

Research problem

Problems due to old age are a common phenomenon in society, but here the problems and consequent needs of the frail elderly in informal settlements will be discussed. Factors that lead to needs are an increased life expectancy, a drastic increase in the aged population, the unfavorable physical environment in which old people live, limited learning opportunities, the negative attitude of the community to old age and the disintegra-

tion of traditional values. The influence of policy makers should not be lightly regarded either as they play a role in the provision of resources and can thereby enable families to care for their frail elderly.

Increased life expectancy is a feature of this age group thanks to the progress of medical technology and improved control of illness (Decalmer & Glendenning 1993:77). As a result the numbers of frail elderly are also increasing (Hatting; Van der Merwe; Van Rensburg & Dreyer 1996:52-53,60) and chronic illnesses and problems with the activities of daily living are becoming more common. Frail elderly people in informal settlements do not always have the necessary resources or funds to counter the problems.

Old people represent a substantially larger part of the total population. Elderly black people of 65 years and older comprised 3.6% of the total population in 1995. It is calculated that this number will comprise 6.5% in the year 2026 (Van den Heever 1996). This puts additional pressure on the South African government which already has to meet the many needs of young members of the population.

Limited learning opportunities for members of previously disadvantaged communities in all stages of development result in a wide variety of negative consequences for the elderly that become a chain reaction. Elderly black people in general have had less formal education, earned lower incomes and were exposed to unemployment for longer periods. They were therefore unable to make adequate provision for care in their old age (Staab & Lyles 1989:9,14). A state pension is often their only source of income and they have no option but to turn to welfare services and welfare organizations. Especially in the case of elderly black people welfare services in South Africa are not well-developed, with the result that many of them live in utter poverty (Lund & Madlala 1993:1). The lack of housing in urban areas leads to the formation of informal settlements with detrimental consequences for humans and their environment. These unfavourable living conditions in South Africa are the result of large population migration to urban areas (Kibel & Wagstaff 1995:11). Structures without adequate facilities where the mental and physical health of humans cannot be maintained or promoted, are erected. After an investigation of informal settlements the findings were that the average temperature in the homes in summer was 36°C and in winter, 13°C. Ventilation was poor due to an inadequate number of windows. Floors allowed moisture to penetrate and were not washable. Walls and roofs let in wind and rain even if they were made of waterproof material. Unhealthy living conditions occurred on premises due to inadequate waste removal and air pollution could be observed and smelt due to the use of coal stoves (Schulz 1992:3-8). The frail aged in previously disadvantaged communities live in unfavourable circumstances that are not conducive to their health.

The physical environment in which the old people live is not only unfavorable, but attitudes towards old age in the Western culture in general tend to be negative. This negativity is not limited to Western culture, it also occurs in black communities

in South Africa. Elderly black people (51.5%) indicated in a study that they are treated with less respect by their children and significant other than in the past (Hildebrandt 1993:19-20).

Cultural change accompanied by the disintegration of traditional inculcation also contributes to the negative attitude towards the aged. Traditional inculcation means the clear role description according to age and status obtained in the traditional world of black elderly people. These old people were, for instance, involved in the transfer of customs, traditions and beliefs to the younger generation. The old people were, in turn, cared for by the younger members of the family (Ferreira; Gillis & Moller 1989:37-38). Elderly black people, if they became frail, depended on care mainly within the family and they did not keep abreast of the process of westernisation that led to the disintegration of the traditional support systems of elderly black people.

Although this was not the intention, the influence of policy-making structures have not always been positive in terms of health services for the black population. The reason for this lies in the historical development of health services in South Africa that developed in an unplanned and haphazard way out of two systems, namely Western medicine and the traditional medicine (that was not recognised) of the Africa cultures (Dennill; King; Lock & Swanepoel 1995:29). Services for the black population were, therefore, not well developed, for instance, of all the old age homes in the Free State only 4% made provision for black old people (Van den Heever 1996). Resources such as clinics are lacking in informal settlements and those that do exist struggle under masses of patients and nursing staff can no longer make home visits to old people (Gericke, 1997:7). In 1994 the present government proposed an appropriate health care system by means of the Reconstruction and Development Plan (Okoro 1995:145-146), but the ideal of providing affordable, comprehensive care to the population is a slow process.

The assumption may therefore be made that the involvement of health workers and the presence of resources for the aged in communities, is minimal. Old people often depend on their families for care. Although care at home is regarded as an advantageous alternative by family members and policy makers, families are often unprepared and not skilled to care for frail old people. The number of family members who are available to care for these people and to serve as a support system is also dwindling due to the increasing number of smaller and single parent families. Thus there are many factors that contribute to the needs and opportunities of the frail aged in informal communities.

Clarification of concepts

Informal settlements are areas where homes are erected that do not necessarily conform to building regulations. Squatting is commonplace. Homes are erected mainly from cheap materials such as corrugated iron, cardboard, plastic and mud. Basic municipal services such as water piped into homes, electricity and garbage removal may be absent. These living areas occur mainly on the outskirts of formal residential areas but may also

arise in vacant land within such areas.

Frail elderly or aged is an old person, 60 years or older, whose physical and/or mental state is weakened to such an extent that he/she can no longer carry out one or more activities of daily living.

Basic activities of daily living (Stanhope & Lancaster 1996:593) indicates basic activities that the aged person carries out daily in order to exist independently, namely:

- Dressing, walking, using toilet facilities, eating, bathing, getting out of bed or a chair and moving from inside to outside the home.

Aim of the study

To:

- Describe clearly the world in which the frail elderly live
- Determine the attitude, expectation and needs of the old person towards his/her caregivers
- Propose a recommendation for the effective care of the frail aged

Methodology

Research design and method

The research design that was followed was non-experimental. The survey method was used in which the researcher asked questions and described a phenomenon as it occurred naturally (LoBiondo-Wood & Harber 1994:232-234) and attitudes, opinions, behaviour and characteristics of the aged population were described.

Course of the research

The research was carried out in five phases, namely, exploration, obtaining consent, the research process and completion of the research. One of the researchers was already visible in the community as a member of a community partnership program. Exploration of the communities occurred by means of a process of informal as well as formal conversations. During these conversations many needs of the frail elderly family members were identified. It is important for communities to determine their concrete needs themselves and that these needs are set as priorities (Swanepoel & De Beer 1996:44). After a number of meetings it was decided that research regarding the frail aged was essential. After obtaining consensus in this regard the researcher explained the aim of the study and obtained the approval of the community to carry out the research. The community was, therefore, actively involved in the entire process and approved and welcomed research in this regard. First of all interviews in terms of a partially structured questionnaire were conducted with frail old people. During the interviews the living environment and the plot were observed. At the conclusion of a visit to a home the old people were thanked for their cooperation and leave was taken. No false expectations were raised, for instance that the researcher would visit them regularly. Since each frail elderly person was cared for by a family

member, this person (lay caregiver) was also involved in the study, but only a few references will be made in this article.

Research techniques

A variety of research techniques was used to gather data, namely direct observation, questioning (Massey 1995:82) and physiological measurement.

Data collection

Content of the questionnaire

An instrument was developed that enabled the researcher to collect facts and opinions of respondents as well as observations regarding the care environment. The instrument consisted of sections that focused separately on the care environment and the frail elderly person. Section A evaluated the physical structure of the care environment, i.e. the plot, lavatory, home and interior environment of the elderly person. Section B reflected general information regarding frail elderly people, their health status, social habits, attitudes and expectation of the care they received at home.

Validity and reliability of the instruments

Validity

Validity confirms that an instrument meets the content it is supposed to measure (Burns & Grove 1993:342). After a thorough review of the literature the content validity and face validity of every domain of the developmental stage was determined.

Questionnaires were submitted to a panel of seven domain experts for adjudication. Six of these experts were senior nurses with practice and research experience. One was also a member of the community to be studied. A doctor who worked in the community also served on the panel. The commission of these experts was to determine the following in terms of the broad research aim:

- whether the questions were representative of the do-main as specified in the aim;
- whether the aim was satisfactorily built into the questions, and
- whether the appearance of the questionnaire was satisfactory.

After receiving feedback from the domain experts, the necessary corrections were made by the researcher and carried out in a pilot study.

Reliability

Reliability is the ability of an instrument to deliver the same results after repeated testing (LoBiondo-Wood & Haber 1994:373). A pilot study was carried out to purify the methodology, test the instruments and to determine whether the respondents understood all the questions.

The size of the pilot study was 10% of the size of the sample (Treece & Treece 1982:176). The questionnaire was, therefore, tested in the pilot study. Testing took place at two different times on the same group of persons, i.e. during the pilot study and three weeks later. The test-retest method was therefore followed to determine the reliability of the instrument.

No contradictions regarding the determination of reliability were found in the questionnaire. After a final review after the second testing, slight changes were made to the questionnaire as indicated by the pilot study and second testing.

Sample

It was estimated that the population consisted of approximately 1200 elderly people of 60 years and older, living in three informal settlements. It was, however, impossible to determine the number of the population of frail aged. The estimated figure was provided by the health committee as no statistics were available and the informal settlements received new residents daily. This committee kept account of the elderly people in their ward.

The age of sixty years was selected as the admission criterion because of the lower life expectancy of black old people as opposed to that of whites. The sample comprised 4% of the population (Department of Internal Medicine 1987:2). This percentage served as a guide-line in consequence of the finding that approximately 4% of black elderly people in the Free State were dependent regarding the activities of daily living. Cluster sampling was applied on a geographic basis. The number of homes per cluster visited was calculated according to the floor space of the settlement and comprised 30 homes.

Results

Data accumulated were processed statistically by means of a computer to reflect frequencies and percentages.

General information about the aged

The ages of the frail aged varied between 61 and 92 years with 60% in the age group of 71-80 years and 76.7% being women. More than half, 67% were widowed. Only 30% of the respondents could read or write. The low literacy rate may be accounted for by the fact that the majority of respondents had had no schooling. Low literacy can limit the ability of the elderly to live a healthy life. It includes limited access to medical services, limited identification of health problems, reading prescriptions and the degree to which health education is understood (Lueckenotte 1996:11).

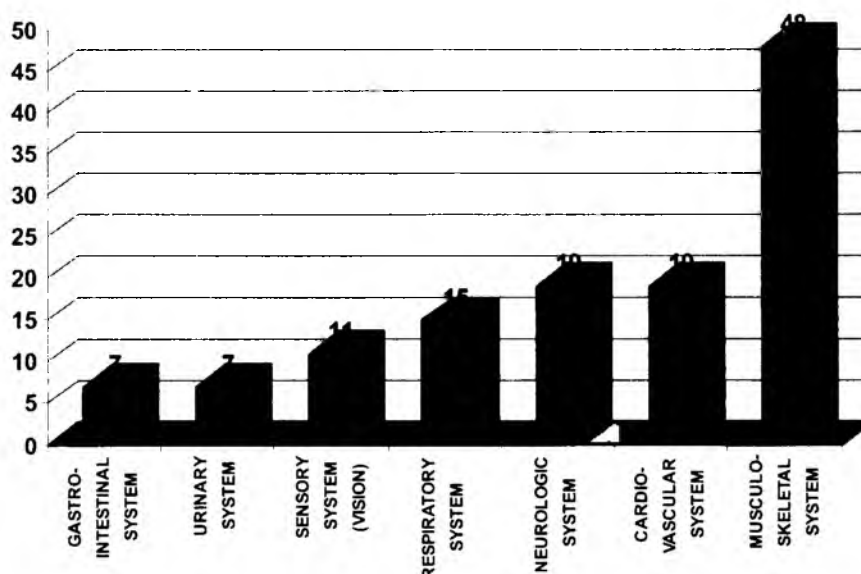
Income

A state old age pension was the only income of 86.6% of the respondents and 10% had no source of income. Old people must increasingly turn to welfare services and welfare organisations in their residential areas or lean more heavily on their children for financial support.

Services/person consulted by the elderly

The frail aged visited the outpatients department (polyclinic) (46.7%) and a private physician (46.7%). Community clinics were visited by only 3.3%. None of the respondents made use of a mobile clinic, district surgeon or traditional healer. The respondents experienced a number of problems regarding consultations, namely: transport to services 76.7%, long waiting periods before consultations 63.3%, long waiting periods for medication 40%, medication out of stock 16.7% and no money for medication or

FIGURE 1: Complaints voiced by the elderly regarding different body systems



Houses in the clusters were systematically selected. If a house was visited in which there were no frail elderly people, the researcher moved on to the next home. Frail elderly were selected according to a specific criterion, i.e. those who could not carry out a basic activity of daily living without help. One person per home was interviewed and assessed namely 30 frail aged.

the consultation 43.3%. None of the respondents made use of the centre for the aged, mobile meals or home care services.

Health status of the respondents

In this study 90% of the respondents indicated that they did

not feel well. They voiced complaints to bear out this feeling, most of which were about the musculoskeletal system (see Figure 1). Figure I indicates that 19% of the complaints were about the cardiovascular and neurological systems. Forty per cent of the neurological complaints were attributed to headache and 60% to apoplexy. Complaints about the respiratory system were voiced by 15% of the respondents. In the case of sensory perception all complaints (11%) were about vision. The gastrointestinal and genitourinary systems were each responsible for 7% of the complaints. The complaints voiced by the elderly do not, however, indicate confirmed diagnoses, but the perceptions of the complainants. Confirmed diagnoses by physicians were also noted and the finding was that arthritis ("rheumatism") was the most confirmed diagnosis (70%) besides hypertension (60%). More than half (57%) of the respondents presented with hypertensive problems, i.e. a systolic blood pressure of 160 mmHg and higher or a diastolic reading of 90 mmHg and higher.

Few cases (6.7%) of bruising or wounds (10%) were observed. No pressure sores were observed, but 36.7% of respondents had oedema of the ankles or legs and ankles. Assessment of the eyes clearly revealed cataracts in 23.3% of the respondents. The highest degree of dependency regarding basic activities were in walking (96.7%), getting out of bed or a chair (90%), use of the lavatory (80%), washing themselves (73.3%) and dressing (66.7%). The history of body systems showed that occipital headache (73.3%) and dizziness (66.7%) that indicate hypertension, were the commonest general problems of the cardiovascular system. Gastrointestinal problems were indicated as loss of appetite (56.7%), constipation (56.7%) and abdominal discomfort (46.7%). Frequency (30%) and burning urine (23.3%) were complaints about the urinary system. Questions about the sensory observation of respondents showed that 76.6% could no longer see far and that 40% could not see close up. Hearing was mentioned as a problem by 43.3% of respondents. After the history was taken questions about taking medication showed that 43.3% of respondents regularly took medication, 62% of which was for the treatment of hypertension.

Social needs

The social assessment of frail elderly showed that most of them (93.3%) enjoyed chatting with others or listening to the radio (76.7%). However, sensory limitation and a high degree of illiteracy had a negative effect on their socialisation.

As regards the living arrangements of the frail elderly, their children were the head of the household in 43.3% of cases. In these cases they lived with their children. Children were present in 63.3% of homes as well as grandchildren in 53.3%. More than one or two generations therefore lived in one house. Families were often heavily burdened with the financial needs of the older and younger members of one household. Respondents showed a high degree of commitment to a spiritual lifestyle as 93.3% of them were members of local churches. In respect of awareness and use of community services the finding was that respondents were minimally aware of services and made very little use of them. They expressed a variety of wishes

for the creation of services in the communities, most of which (33%) were for a clinic in their vicinity.

Attitude, expectation and needs of the elderly regarding their care and role in the community

The vast majority, (96.7%) of the respondents were found to be happy where they lived. Only 3.3% would rather have lived in an old age home. The vast majority (93.3%) indicated that they got on well with their lay caregivers and in 90% of cases they described their feeling about these people in positive terms. Sixty per cent of the respondents indicated that they were satisfied with the care they were receiving. Eighty per cent also felt that they were still treated with respect by the younger generation and that they were still of value/importance (93.3%) to their families. In 96.7% of cases respondents indicated that they felt that children should care for their parents. If there were no children they indicated that this task should fall on the shoulders of the government (60%). Ninety-three per cent of the respondents still acted as advisers to their families. Their expectation of respondents of their care showed that more than 75% were satisfied with the way in which they were cared for and that in 90% of cases their caregivers did everything they requested.

The living environment

Informal plots

Most (56.7%) of the plots had uneven surfaces with visible soil erosion (60%). The surfaces of most of the plots were therefore not conducive to safe mobilisation of old people. Plots 46.7% had vegetable gardens which indicates that some residents attempted to meet their nutritional needs themselves. In 43.3% of cases garbage was dumped alongside plots. Water was piped to 50% of plots and communal taps were the main source of water in these informal settlements. Water had to be carried to homes and the aged depended on others to draw water for them.

Lavatories in informal settlements

Thirteen per cent of the plots had no lavatories and all the others were situated outside the homes. The bucket system was used in 70% of cases and the dry-earth system in 30%. Only 3.3% of the lavatories was accessible to a wheelchair.

Construction of homes in informal settlements

The majority 63.3% of houses were made of corrugated iron and 66.7% had only one room, and therefore had no bathroom. A lack of interior facilities for washing places additional stress on elderly people, especially in cold weather. The personal hygiene of such people also suffers if water is not readily available (Hildebrandt 1993:25). Structures were inadequate to withstand the elements of nature. Roofs leaked (46.7%) when it rained and only 43% of the floors were moisture proof. Wind and rain came in through the walls of 46.7% of the homes. Only

14.46% of the doorways were wide enough for a wheelchair to pass through.

The interior environment in informal settlements

The interiors were small with only 40% being accessible to wheelchairs. In 66% of cases all the residents slept in the only room which meant that family members forfeited privacy. There was no privacy in cases of incontinence. In one case a frail elderly with a gangrenous amputation wound lived with family members and the unpleasant odour permeated the whole place. Lighting was poor. Seventy per cent of the homes had windows but 24% of these could not be opened. Of the homes 73.3% were stuffy and the ventilation of rooms was unsatisfactory. Paraffin heaters (36.7%), drums with holes (26.7%) and coal stoves (23.3%) were mainly used. Air pollution was promoted by the heating methods. It is clear that the living environment was not conducive to the care and promotion of health of the frail elderly.

Recommendations

Findings regarding the needs of and lack of opportunities for the frail aged in informal settlements may be addressed by training lay caregivers and addressing deficiencies in infrastructure in the health and support services.

In the white paper for the transformation of the health care system in South Africa (Notice 667 of 1997:13) the following goal is set:

"Health teams and workers at all levels ... should not only be responsible for patients who attend their health facilities, but also have a sense of responsibility towards the majority of the population in their catchment areas".

This ideal can be attained by the development of programs in the heart of communities where the communities own the programs. These programs rest on making aware and active participation of all role players in the care of the aged. In this way lay care givers can be empowered to provide comprehensive care within the scope of their circumstances to the aged. Self help programs can also be driven by the community. In the latter case they can, for instance, negotiate for campaigns in the community, radio programs that focus on needs such as how to budget for monthly expenditure or healthy eating for persons with hypertension. However, this ideal requires committed health care workers who take hands with the community and are willing to walk the extra mile.

Conclusion

It appears that the frail elderly were happy in the environment in which they received care in spite of their unfavourable physical environment and limited opportunities. Resources were lacking and impaired mobility and illiteracy had a negative effect on their utilisation and awareness of existing resources. Although the role and experience of the lay caregiver (family

member) has not been addressed in this article, it was found that at least 50% of the caregivers were inclined towards a negative attitude to ageing and care of the aged. Findings regarding the lay caregivers also indicated lack of knowledge and skills regarding care giving tasks, for instance the management of pyrexia, constipation and diarrhoea, diet of the elderly and incontinence of urine.

Communities are also largely unaware of the valuable inputs they can make regarding care of the aged. This includes empowerment of the aged and their key position in self help programs.

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