Practice concept

An environmental assessment of Divine Providence Home in Lusaka, Zambia

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Abstract

This paper examines the physical and social environment of Divine Providence Home (DPH), a residential care facility for older persons in Lusaka, Zambia. It also assesses the home's future function and capacity in anticipation of an increasing demand for admissions as a result of AIDS-related deaths, whereby numerous older persons will be left without traditional support. An assessment of the physical environment of the home showed that in the planning and design of the home, neither people knowledgeable in gerontology nor prospective users were involved in the three steps of programming; as a result, problems which residents of advanced age may experience were not taken into account in the design and less physically competent residents were found to experience environmental press. An assessment of the social environment showed that the residents suffered boredom but also lacked initiative to start programmes to interest them; they preferred to wait for the appointment of a programme officer, yet are capable of organizing social and income-generating activities themselves. It is proposed that residential care facilities be designed at the outset to meet the needs of residents whose physical and mental capacity will decline with advanced age. It is also proposed that the residents at DPH be encouraged to arrange their own social programme, rather than wait for the appointment of a programme officer.

Introduction

The concept of old people's homes is relatively new and not well understood in Zambian society. Traditionally, older persons have lived with their children in extended family households where all members contribute to the survival of the unit. Those whose productive capabilities have declined, such as older persons, are supported through the work of children and grandchildren. However, some older persons are not integrated in this system – particularly those who have never had children, whose children have died, or whose children cannot provide for them. Urbanization and family nucleation have also impacted on older persons' relations with family members. Nowadays, destitution among older persons is not only caused by broken family ties, but also by AIDS-related deaths and job redundancies of family breadwinners due to company closures.

In Zambia, older persons without care and support from family, and who are destitute, may be taken into an old people's home. This paper gives an assessment of the environmental conditions at Divine Providence Home (DPH), a home for destitute older persons in Lusaka. The objectives of the study were (1) to assess the effectiveness of the home in serving the residents, and (2) to examine the home's viability in view of an increasing number of older persons who will need formal care and support.

Divine Providence Home

Divine Providence Home is the newest of seven old people's homes in Zambia. Two homes, namely Sepo Home in Mongu and John Chula Home in Lusaka, only cater for elderly Holy Cross nuns and Jesuit priests, respectively. The other five homes – Chibolya in Mufulira, Mitanda in Ndola, Divine Providence in Lusaka, Maramba in Livingstone and Kandiana in Sesheke – are multi-racial facilities which accept coloured, black and white residents, both Zambians and foreigners, irrespective of their religious denomination (Ministry of Community Development and Social Services, 1991). DPH is a not-for-profit home for destitute older persons, and is heavily dependent on charity and government funding through the Department of Social Welfare. The one-level home was purposely built on a 60 000m² plot in Chawama Compound, Lusaka. It initially accommodated 20 residents but due to difficulties in maintaining the home, the number of residents has been reduced to 16.

According to the administrator of the home, DPH was built by the Franciscan Fathers in 1990-91 with funds from Italy and was handed over to the Sisters of the Holy Family in 1994. Although the initial decision was to build a small home for an elderly, destitute woman who was living with the fathers, a decision to build a 20-unit home came about because of the growing number of older persons with no one to care for them in their communities, and the influx of destitute persons in a number of old people's homes.

For instance, Mitanda Home in Ndola, run by the Salvation Army Church, has a capacity of 40 but the average number of residents in a month is 45. Maramba Home, run by the government in Livingstone, has a capacity of 40 but accommodates on average 50 destitute persons a month.

This demand for residential care, albeit from destitute persons, suggests a need to assess conditions in homes around

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the country with a view to making proposals for improvements to the homes, if required. Before undertaking a country-wide survey of conditions in care homes in Zambia, an exploratory study was conducted in DPH.

Methodology

Data were obtained through unstructured interviews with all 16 residents, a housekeeper, the administrator of the home (DPH) and her assistant, between January 1998 and February 1999. The interview data were supplemented by field observations of the built-environment and the person-environment. Qualitative analytical methods were used to determine the effectiveness of the home in serving the residents and its viability in view of an increasing population of older persons without traditional support. The person-environment was analysed using both qualitative and quantitative methods to determine the nature of social interaction among the residents and types of on-site and off-site programmes organised by or offered to the residents.

DPH was chosen as a study site because of its proximity to the Ministry of Community Development and Social Services' headquarters in Lusaka and because it is the newest, non-denominational old people's home in Zambia. Moreover, it is located in Lusaka, where there are a large number of NGOs, charitable organisations and other business organisations which could be expected to make donations to the home.

Findings

At the time of the study, nine females and seven males resided at DPH, all of whom were destitute. Some had living children who could not afford to look after them; others had children who were abusive towards them; and yet others had no traceable relatives. The results of the assessment of the micro environment at the home are discussed below, according to the physical (or built) environment and the social (or person) environment.

Physical environment

Bedrooms and sitting rooms

The home has two wings. Males and females are accommodated in separate wings: an eastern wing for women and a western wing for men. A bedroom in the female wing has been turned into a library, which the residents were unaware of at the time of the study. A bedroom in the male wing has been converted into a police post for security reasons. Since the residents are destitute, they are each provided with a bed, two blankets, a pair of bedsheets, a stool, a table and a locker. Each 3m x 3m bedroom has a sitting room with similar dimensions, and is furnished with a chair, a writing table and a reed chair. Both bedrooms and sitting rooms are accessible to wheelchairs and users of other walking aids, since the rooms are sparsely furnished. Each room has two windows, 65cm wide, located 1.58m above the floor. The windows do not allow for a view from the bed or the chair. It was noted that the residents do not open the windows, which was attributed to the height of the windows and the residents' poor health. The windows should ideally be placed 100cm above the floor to allow for viewing from a sitting or a lying position.

While the interiors of the rooms are accessible to wheelchairs and users of other walking aids, the entrances to the rooms are not. On the verandah, are 17cm risers and at the entrances to the room are more risers, measuring 19cm. Unless a wheelchair user has someone to help him/her over these risers, he/she will not be able to leave the room.

Lavatories and shower rooms

Each wing has two 1.7m x 1.2m pit lavatories, which previously had flushing mechanisms but which were damaged some years ago and not repaired. Residents draw water in a bucket from a tap outside the lavatory to pour into the pit so that waste material may be disposed of hygienically. One lavatory has a wooden seat with a height of 54cm and the other lavatory has no seat. Raschko (1982) recommends a height of 48cm for lavatory seats for older and disabled persons. The low height of the lavatories makes it difficult for some residents to lower themselves onto and up from the lavatory. The doors, which are hinge type, have an inward opening of 74cm. At the doorways to the lavatories is a 5cm riser and where the pit is mounted is a 21cm riser. The lavatories are located 35.9m and 4.3m from units 1 and 10 on both wings, respectively. Due to the distance from the bedrooms, the residents do not use the lavatories at night, but use chamber-pots; the waste matter is then disposed of in the morning, either by the resident or the housekeeper, depending on the frailty of the resident.

Each wing has a shower room which is slightly larger than the lavatories. They measure 1.2m x 1.6m and have a hinge door with an inward opening of 65cm. The floors are smooth concrete which are slippery when in contact with soap and water. There is no hot water as there are no geysers, and residents must boil water in the kitchen and carry it in a bucket to a shower room, with which to wash themselves. Neither the shower rooms nor the lavatories have prosthetic aids nor safety features, such as grab bars. There is no space for the installation of prosthetic aids in the future, nor for the rooms to be made accessible to wheelchair users.

Lounge

The distance between the lounge and units 1 and 10, an uncovered stretch, is 39m and 58.4m, respectively. The lavatories are located 69.4m from the lounge. There are 17cm and 21cm risers at the lounge. The furniture in the room is inappropriate for use by older persons. The chairs are low and residents find it difficult to rise from a chair when seated.

Activity/dining room

The activity/dining room is located 41m and 60.4m from the nearest and furthest units, respectively, and 76.9m from a lavatory. This social recreational area is not used at all. The furniture in the room is inappropriate, as the wooden benches cannot be re-arranged to allow for active or passive participation, according to preference, in activities. (Some people enjoy being in a common area but prefer not to interact. Lawton (1975) recommends that space be set aside for such people, through the design of the building or the arrangement of furniture.) Although the room also serves as a dining room, no residents partake of meals there. They explained that they prefer to take their meals in their rooms. Residents attributed non-usage of the activity/dining room to a lack of organised activities and the distance of the room from the units and lavatories. They explained that moving along the uncovered stretch between the lavatories, the bedrooms and the activity/dining room is difficult for them, particularly during the rainy season. Several residents who had difficulty in controlling their bladder also referred to the distance between the activity room and the lavatories.

Another reason for low usage of this room mentioned by the residents are 17cm and 21cm risers/steps into the room. All residents except one referred to the risers/steps as barriers. It was noted that residents with sensorimotor impairment crawl past similar barriers outside their rooms. Other residents cannot easily manoeuvre their walking aids over the

barriers without the assistance of the housekeeper. Some residents pointed out that the reason why they take their meals in their rooms and not the dining room is that they fear they may trip over the barriers and embarrass themselves.

However, the main reason for low usage of this recreational area by well residents was identified as a lack of organised activities. Some residents stated that they go to neighbouring communities to engage in social activities, such as beer drinking, through boredom at the home.

Social environment

Orientational aids

The home has poor orientational aids. No sign is posted at the main gate; only at the entrance to the grounds is there a board which reads "Welcome to Holy Family Sisters." A first-time visitor to the home would therefore think that he/she is being welcomed to the residence of the Sisters of the Holy Family (who are the owners of the home). DPH is only acknowledged on an exterior wall of the female wing with a board which reads "You are on holy ground, Exodus 3:5. Welcome to Divine Providence Home." Nowhere is it stated what the purpose of the building is or which gender occupies which wing.

No other orientational aids are available to direct people to various spaces, such as the lavatories, the lounge, the library, the police post, the activity room or the administration wing.

Gardens

DPH has two square walkway gardens with lawn, shrubs and flowers – one in front of each wing. The residents reported that they do not use these gardens because of the shrubs around the lawns. A vegetable garden is located behind the female wing, where vegetables and fruit are produced to meet the requirements of the home. According to the administrator, the residents do not help with the gardening as they want payment to do so; the home has a full-time gardener. There is also a residents' garden where those who have the energy, plant crop vegetables to sell for their own profit. Behind this vegetable garden is a park with various plant species. This area, which is hardly acknowledged by a sign, is seldom used by the residents because of its distance from the residences. It is located 123m from unit 1 and 154m from the activity room. However, it is sometimes, although seldom, used for functions, such as "get-together" parties with older persons in neighbouring communities. A concrete bench in front of the home is seldom used for viewing activities. Residents reported simply that there are no activities to watch.

Resident interaction

No recreational or physical activities, such as work and play, take place at the home, nor are any social programmes organised for or by the residents. The only activities which the residents engage in are chatting with one another, sleeping and visiting a sick resident. Few residents ever walk in the garden. Residents admitted that they seldom leave their rooms.

A single resident who used to help clean the grounds and wanted no pay was left bedridden after she sustained a hip fracture from a fall in July 1998. The residents tend to want payment for any work for which they do, such as watering the home's vegetable garden and keeping the surroundings clean. They argue that: "We have worked all our life, now is the time for us to rest and let the government and others provide and care for us." According to the administrator, a reason for the residents' inactivity is a lack of funds to appoint a programme officer to organise programmes and activities; the home is heavily dependent on donations.

Previously the lounge was a focal area for socializing. Physically-fit residents would meet to watch television programmes in the lounge – before the set was stolen, some three years ago. Although there is a radio in the lounge, the residents seldom go there to listen to radio programmes. The lounge and the radio are mainly used by the police officers on duty.

Interaction was found to be greater among the women than the men. During behavioural observation, women were found to chat in groups of three or four in front of their units, whereas each man kept to himself. Some interaction took place between the women and a few men. During conversations with male residents, it was learnt that some of the men keep to themselves because they perceive that they are suspected by fellow residents of practising witchcraft. These accusations and suspicions force some to prepare their own meals on a charcoal brazier and not to eat the home's meals, for fear of being bewitched.

The residents have no access to community programmes and services nor agents, such as home-care workers, medical staff and other agency staff. However, when a resident is sick, the housekeeper and the administrator take him/her to Chawama Health Clinic, which is the clinic nearest to the home. Fees are paid by the administrator and if the prescribed medicine is not available at the clinic, the administrator buys it for the sick resident. Although there is very little interaction between the residents and people in the community, when a death occurs in the home, members of neighbouring communities help with the funeral arrangements. This arrangement should be encouraged, as should programmes such as friendly visiting, social dancing and drama presentations, which draw both DPH residents and older persons in the neighbouring communities of Chawama, John Howard, Kuomboka and Makeni be encouraged.

Residents have control of their own space (their bedrooms and sitting rooms), although being destitute they have very few possessions. Although the home is not suited to persons with dementia, some of the residents are demented. These residents tend to personalize their rooms with objects such as flowers, leaves, and empty cans and boxes picked from garbage ditches, to the extent that some rooms resemble the places where the items were salvaged.

Staffing

The home has a female housekeeper who lives in the neighbouring compound of Chawama. Her responsibilities are to clean the rooms, to do the residents' laundry, and to bath and feed the frail and sick residents, irrespective of gender. Though not a trained counsellor, she offers emotional support to the residents and is an important link between the religious sisters who are the administrators and owners of the home and the residents on any issues concerning the residents. There is a female cook who is responsible for the preparation of meals. No refreshments other than the three meals are given to the residents. Residents have no say in the planning of menus.

Discussion

The findings suggest that the physical environment of DPH does not take into account the effects of age-associated declines in biological health, sensory and perceptual capabilities, motor skills, cognitive capacity and ego strength. It may be argued that because neither older persons nor gerontologists were involved in the three steps of programming in the design of the facility (Canada Mortgage and Housing Corporation, 1987), the home was consequently designed for a more youthful age group. During functional programming in the design of the home, a stage at which administrators, own-

ers and users of a proposed building specify their objectives and requirements, only the administrators and owners had made input. Prospective users of the home did not participate in the social programming, when all services, activities, programmes and amenities which would be needed by the users were identified. As older persons were not involved in the first two programming stages, the architects simply translated their perceptions of prospective residents' needs into the design, which has caused environmental press on the less competent residents (Lawton, 1982). An example of physical envionmental press is the location of the lavatories in relation to the activity room and the gardens. Motivation to go to the activity room or the gardens for socializing purposes was significantly related to the distance between the lavatories and these amenities. In this case, distance may be regarded as press, which tends to reduce participation if it is great and to increase participation if it is slight, and also depends on the health and motivation of an individual.

However, Lawton's (1982) theory incorporates an adaptation zone which occurs when a combination of press and competence produces positive affect and adaptive behaviour. In the above example, if a resident is mobile and an interesting activity or programme is scheduled to take place in the activity room or the garden, the environmental press caused by the distance between the lavatories and the activity room, the garden and the units, as well as the presence of risers/steps around the home will put the individual well within the adaptation zone and he/she will indeed either watch or participate in the programme. As it is now, a lack of ramps would make wheelchair-bound residents and users of other walking aids experience environmental press and have to forego participation in attractive programmes, if they were offered, and moreso if there was no one to assist them with their walking aids.

When buildings to house older persons are designed, it is important that attention be paid to the specific needs of older individuals, and that environmental adaptations be made to provide for levels of physical incapacity and, most of all, to benefit their health and well-being. Designs should maximize residents' independence, by ensuring that all relevant areas of the building are accessible, or providing enough space for the future installation of prosthetic features, such as grab bars, hand rails and ramps. At DPH, most amenities, if not all, are not easily accessible to all residents and the designers have left no room for future adaptations. For instance, the lavatories are not fully accessible because of their distance from the bedrooms and other amenities, steps and risers into and inside the lavatory cubicles, and the dimensions of the cubicles. It is important that older persons have a lavatory that is conveniently located and safe to use; the routes between the bedroom and other areas and the lavatory should be direct and unobstructed. The lavatories at DPH have an inward opening of 65cm. CMHC (1987) recommends an outward opening of 81cm. Lavatory openings at DPH are therefore too small to allow free access to wheelchairs and users with walking aids. With these dimensions, even if an individual with a walker managed to enter the lavatory cubicle, he/she would not be able to close the door behind him/her as the door opens inwards. Were an accident, such as a fall, to occur, it would be difficult to rescue the victim from the lavatory for the same reason. As physical impairment develops in an older person, through stiffening joints and decreased strength, a higher toilet seat is required. To achieve this, DPH installed wooden seats in two lavatories – one in each wing, with a height of 54cm; however, the seats are higher than the recommended height of 48cm for wheelchair users (Raschko, 1982). Grab bars need to be installed to help the residents rise from the lavatory seats.

Improvements to spaces like lavatories and shower rooms are costly; in addition, improvements, including the fitting of prosthetic aids, will reduce space. The facilities would therefore need to be torn down and enlarged. Thus it would have been less expensive to design lavatories and shower rooms that are accessible in the first place, which take into account declines in physical and mental capacity of individuals in advanced age.

Finally, a lack of knowledge on the part of the residents of the benefits of physical activity, such as improved fitness and enhanced quality of life, and better physical and mental health – which benefits will delay functional decline and frailty, has resulted in a preference to be idle rather than active. Older Zambians tend not to be aware of the benefits of physical activity, and therefore do not value and integrate it in their daily lives. They tend to retire from all physical activities as they grow older and to simply look to adult children and/or grandchildren to take care of them. Not all programmes in an old people's home need to be initiated and arranged by a programme officer; for instance, sweeping one's room does not need to be organised by a programme officer. Residents could initiate their own programmes, such as story-telling, making door mats and fitness programmes – to mention a few, to be carried out in the activity room. The activities could also be carried out in front of the residents' units.

Conclusions

In general, the reasons for the residents' destitution were not related to HIV infection or AIDS-related deaths in their families, or to the Structural Adjustment Programme (SAP) which has led to job redundancies. However, the residents had some commonalities which contributed to their being at DPH, such as the death of a spouse, adult children being unable to care for them because of the high cost of living, having been married to a foreigner, the government being unable to trace their relatives in their country of origin, and having been rejected by extended family members due to accusations of witchcraft and broken family ties.

A study on the provision of housing and care for older persons carried out in five peri-urban compounds in Lusaka (Sichingabula, in this issue) found that in a sample of 121 respondents who were not in care homes, 57.1% wanted to move to a home. These persons had been worst hit by the effects of HIV/AIDS and the SAP. All residents at DPH agreed that when the effects of redundancies and AIDS-related deaths take their toll, the number of older persons in need of residential care will increase, and DPH will become crowded like all other care homes unless it is expanded.

It is therefore concluded that DPH is meeting its objective of housing destitute older persons, even though the home was not designed with the physical and psychological requirements of the residents in mind. All residents, except one, reported that the physical amenities of the home, such as the lavatories, the shower rooms, the lounge, the activity room and the gardens, were not easily accessible. They put physical barriers, such as threshholds to rooms and the distance between their rooms and amenities as second on the list. Areas such as the lavatories and the shower rooms which have no room for the installation of prosthetic features will at some stage have to be extended. However, with economic recession in Zambia, modifications to the home will probably not be possible in the foreseeable future. Nor indeed will such modifications be a priority for the government. The govern-

ment has in fact called for a return to "African culture," in which the extended family takes care of weaker members.

Some residents in the study were dissatisfied with life at DPH because of boredom experienced due to inactivity, the design of the home, and not having a say in the planning of the menus and the running of the home. Other residents were happy with life in the home because rather than being on the streets and begging, they had a home in which to live and were given three meals a day. Although all residents except one complained that physical barriers at the home restricted their mobility, these restrictions were less important than not having a place to call home and to going without food for days at a time. It is incongruous that although a great deal of space is available at DPH for social recreation, the spaces and facilities are not used by the residents or the staff.

Recommendations

It is recommended that charitable organisations such as the Hope Foundation of Zambia and Lions Club International be encouraged to adopt old people's homes in the way in which they have adopted certain hospital wards. This involvement will make the expansion of homes such as DPH less burdensome on the administration.

Specific recommendations for improvements at the home are as follows:

- Residents should be taught the benefits of physical activity and be encouraged to do manual work around the home and in the gardens.
- The plant/flower garden should be opened to the public for picnics, parties and wedding photo sessions at a fee, to enable the home to raise funds for its expansion and other requirements, rather than being dependent on charity.
- The administration of the home should arrange with the ministries of Education and Health to have students in professions allied to medicine (e.g. physiotherapists and occupational therapists) do practicums at the home.
- Both government and NGOs concerned with the well-being of older persons should educate the public on the need to help older persons.
- Although DPH is a not-for-profit home, some rooms should be hired to residents who can afford to pay rentals. This will be another way to boost fundraising for the home.

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