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The Constituent College

SHRI. B. M. PATIL MEDICAL COLLEGE, HOSPITAL AND RESEARCH CENTRE

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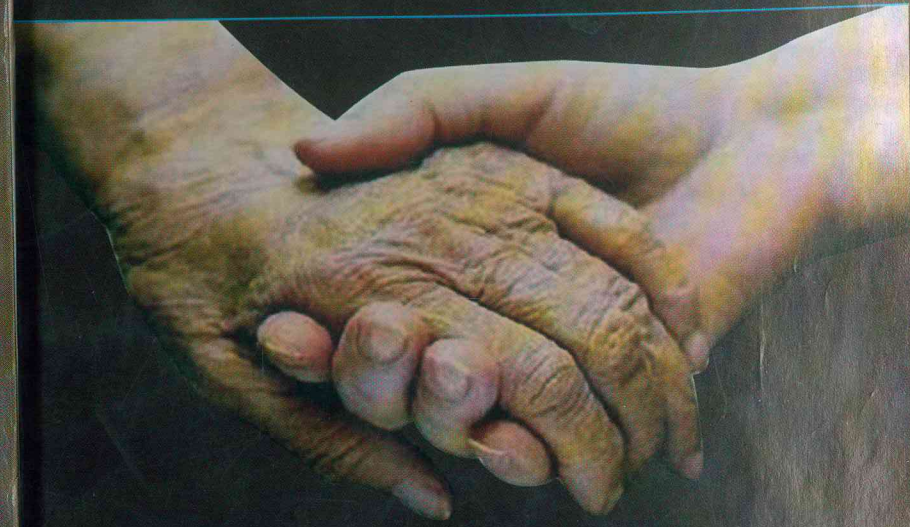
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CURRENT ISSUES IN GERIATRICS - 4



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CURRENT ISSUES IN GERIATRICS-4

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CENTRE, BLDE UNIVERSITY, VIJAYAPURA**

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PREFACE

The number of elderly is rising all over the world including India. The population of elderly persons in our country is around 90 million. It comprises people who have given their best during their productive years to the Society and to the Nation. These people are still a part of our main stream which is being benefited by their experience. However it is pathetic to see many of them are not cared. In the words of Victor Hugo, 'the misery of a child is interesting to a mother, the misery of a young man is interesting to a young woman, the misery of an old man is interesting to no body'. The elderly is living in a private Universe of physical weakness and mental decay. The words of Jonathan Swift remind us that 'everyone desires to live long, but no one would be old'.

There is a great need to focus our attention towards their medical and health needs. The big number of geriatric population is increasing day by day; year after year. Goethe has said, 'No skill or art is needed to grow old' the trick is to endure it'. The physician has to strive not to put more wrinkles in their minds than their faces.

Since ageing appears to be the only available way to live a long time, and the number of geriatric population is on increase in the country, there is an urgency to address the health issues of this growing mass of population as a separate segment. In advancing years many age-related disabilities begin to appear. Mobility suffers, hearing gets impaired; there is gradual loss of eye sight and loss of memory. The immunity declines making elderly persons more vulnerable to infections. Diabetes, heart diseases, cancer, enlarged prostate, Parkinson's disease, and Alzheimer's disease make their appearance. Often there is fall making them bed-ridden. Hence the aged require special medical attention. At the same time we must remember that 'there are no diseases of the aged, but simply disease among the aged'.

The rapid strides in the medical science, has enabled a steady increase in human life expectancy. The implications are that ageing is becoming a matter of concern because of the rapidly growing number older persons putting enormous pressure on health care service. Benjamin Disraeli jokingly has said, 'youth is a blunder, manhood a struggle, old age a regret'. Our aim is to take care of them through separate clinics and hospitals catering to the needs. If it is done with all seriousness the old age becomes a happy state in the life of every individual.

It is worth remembering the words of Tryon Edwards that 'some men are born old, and some never seem so. If we keep well and cheerful we are always young, and at last die in youth, even when years would count us old'

The words of James Cricton-Browne remind us that 'there is no short-cut to longevity. To win it is the work of a life time, and the promotion of it is a branch of preventive medicine'.

The annual conferences of Geriatric Society of India (GSI) were held at Gulbarga (now Kalaburagi) in 2007, Secunderabad in 2008 and Belgaum (now Belagavi) in 2010. I was associated in bringing out the presentations made during the conference in the form of book. Now the mid-term conference of GSI is being held at Vijayapura and leading academicians and geriatricians have contributed to produce this book. I express my gratitude to all contributors who have made this project a success. My thanks are to my editorial team who helped me at every stage in the production of this book.

Kalaburagi
Feb 29, 2016

P S Shankar

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Geriatrics in Indian Scenario

O P Sharma

Historic Background

In 1947, when India saw the dawn of independence, life expectancy was only 30 years. One third of the country's population was in the paediatric age group. Deaths due to tetanus neonatorum, cholera, smallpox, puerperal sepsis, gastroenteritis and other infectious diseases were rampant. With the help of world bodies like WHO & improvement in economy, education, sanitation & availability of medical services, the menace of diseases reduced & people started living longer.

The gain in life expectancy among Indians, is quite a remarkable achievement. It was 32 years at the time of independence which rose to 67 years currently. This dramatic increase in life expectancy has resulted in population ageing to an extent that the number of people above 60 years has tripled in the last 50 years. The newest of all census (2011) stated that 103.83 million (8.6%) Indians were above 60 years of age; of them 51.07 million were males and 52.77 million females.

According to "The Comprehensive Morbidity report on Older persons", 75.68% of elderly suffer from one or more diseases, 53.63% of those who were morbid had one chronic disease, 20.83% have at least two chronic diseases, 3.01% had three chronic diseases. 40% of the elderly had one or the other disability, 5.88% had three disabilities. According to CEHAT (Centre for Enquiry into Health and Allied themes) who analysed the NSS (National Sample Survey) data of the 52nd round stated that 13-17% of the survey population without any sickness reported ill health. Most elderly people think that it is absolutely normal to be in a condition of ill health. This further

- c) Limited educational or intellectual abilities
- d) Emotional state
- e) Pain , fatigue and other symptoms
- f) Unmet physiological needs
- g) Attitude or beliefs held about the topic
- h) Prior experience with issue
- i) Feelings of helplessness and hopelessness

Future of nursing care of older adults

The specialty of geriatric nursing offers multiple opportunities to use a wide range of knowledge and skills in variety of settings. Increasing number of nurses are finding nursing care of older adults to be a dynamic specialty that affords significant opportunities for independence and creativity. The various settings such as acute hospitals, nursing homes, palliative care centers, adult day treatment centers, and rehabilitation provide challenging opportunities to nurses.

Conclusion

Geriatric nursing knowledge is continuously expanding, disproving past beliefs and offering new insights. Nurses must keep abreast of new findings. They can engage in independent study, formal courses and continuing education programs to keep abreast. Nurses must ensure that care of older adults is holistic involving physical, emotional, social and spiritual aspects.

References

1. Rose KM. The 2014 Doris Schwartz. Journal of Gerontological Nursing Research Award Heather m Young- Living her legacy of caring for older adults. Jour Gerontol Nursing.2015: 41(10); 11-12.
2. Eliopoulos C. Gerontological Nursing. 8th edn, Philadelphia: Lippincott Williams & Wilkins, 2015.
3. American Nurses Association. Gerontological nursing scope and standards of practice. Silver Spring MD: 2010 Nursebooks.org, <http://www.nursesbooks.org>
4. Stockslager JL, Schaeffer L Handbook of geriatric nursing care. 2nd edn, Philadelphia: Lippincott Williams & Wilkins. 2003
5. KK Gulani Community Health Nursing Principles and Practice Delhi: Kumar publishing house

Home care model for person living with dementia

Ambali AP

Introduction

The senior citizen in India constitutes 8 % of total population and the number is rising, so will the people living with dementia. The fastest growing population group is the seniors who are eighty years and more. This age group is more vulnerable to Alzheimer's Disease, Stroke and Falls.

The state of dementia is identified either when it has set in or is in mild form. Diagnosing dementia in minimal cognitive impairment stage is challenging. As there is no cure for dementia and only way of treatment is to assist the people living with dementia to lead a good quality of life.

The best place for the people living with dementia is their own home, where they have spent most years of their life. The concept of place and space in the person's life plays a vital role in well being.

As the person grows old, the physical and social needs change. If in such situation dementia occurs, there is sea of changes both in behaviour and requirements. The care giver is the most important person in making dementia care and dementia friendly environment for the person with dementia.

The hospital and nursing home and dementia care homes are also required to take care of seniors when acute diseases like Urinary tract infection, Falls, Pneumonia, Myocardial infarction and Stroke occur. But the stay during acute disease will be for a short duration and after recovery the senior will be back to his home. It is difficult to create dementia friendly environment in hospital and nursing home as the set up is created to cater needs for a larger population than a selected group. Hospital may not be familiar for person living with dementia.

The prevalence of dementia in India is 3.7 million among senior

citizens (>60yrs) as reported in year 2010 (1). Hence, the home where the senior lives needs to be modified as and when there is requirement.

The modifications shall be carried out with due consideration to two important aspects: I) the modifications should preserve cultural factors, safety measures, feasibility of assistive devices, provide comfort, preserve independence and dignity of senior.

II) the modifications should be planned according to stages of dementia, a senior undergoes over period of time. The stages like mild, moderate and severe dementia occurs over years. Hence the step-wise changes and bird's eye view is required while modification measures are undertaken.

In a country like India, due considerations are to be given to financial implications towards modification in home. Most of the time the senior is made to live with existing infrastructure while the care giver faces problems, adjusting with the behaviour of people living with dementia. Minimum modifications are possible in middle class families in Indian context and people living with dementia may not have an opportunity to be in a dementia friendly community. A compromise shall be on cards with respect to dignity and independence of senior.

Living in own home shall make senior short of health care needs. It can be provided as and when required for short time using hospital or nursing home services. (2).

Why care in Home?

The people with dementia are cared in home, because it is the place where the person has spent most of his life and has memories, familiarity and attachments even to the mundane objects. I feel in our country where facilities for regular disease are still not adequate, hence looking for dementia friendly hospital or day care facility is beyond imagination.

The person with dementia must be cared in his own home and the following authors have brought out research in this aspect of dementia care. Following are few studies which favour home care is the better care.

1. The care of person with dementia will be best in their home than a day care centre. The physical care needs were unmet

and behavioural disorders were troublesome in day care centres. Hence most of the person with dementia had dropped from day care facilities (3).

2. In India, 72% of person living with dementia live with adult children in urban area and 67% of live with adult children in rural area. The main care giver is female in 69.3% which is very good in Indian context. Among females, 40% in urban and 70% in rural are daughter or daughter- in-law respectively. This indicates that the person with dementia lives with family in his own home. Looking at this figure , my plan to care the person with dementia in his home hold true in both rural and urban areas in Indian context.(4)
3. Twigg 1999 in her study showed that privacy, security and identity are by no means lost due to receipt of home care (5).
4. Sometimes care givers are required to cross what are considered appropriate personal boundaries as well as entering the more inmate spaces of home(6). In such situation if the person is in home and the care giver is also happen to be relative, issues of boundaries does not arise.
5. The home, objects it contains, and the way they are arranged in space serve as a sort of memory deposit (7). The author further supports stay in home by proving that it offers "material connections with the past".
6. Hospital and nursing home are not dementia friendly.

My Plan

I outline a plan of dementia friendly community for seniors living in their own home. The senior here are from the middle class family residing in a semi-urban area living with children and grandchildren. There is shortage of dementia care homes, or dementia friendly community base services in India. The home of the senior itself becomes a place to live and spend his whole life with whatever diseases he succumbs to. Hence, I prefer to make a plan for dementia friendly community, mainly the HOME where the senior is living.

Concept

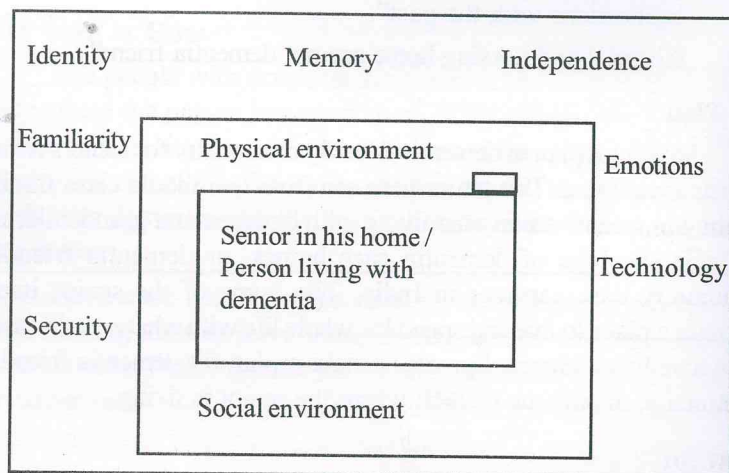
The families belonging to middle class in semi-urban area shall be facing the situation where in the senior or people living with dementia

will be staying with them. The three biggest challenges for middle class families are space in home, finance and availability of caregiver. Most of families are living in one bed room or two bedroom flats with both husband and wife working and children out for school. In such instances the senior is left alone with spouse and it is difficult to find paid caregiver. It is commonly observed that in a situation where senior is suffering from dementia, the daughter-in-law quits the job and dedicate herself towards care of senior.

The whole concept of dementia friendly community in such a scenario is need of the hour which overcomes the problems of place, manpower, networking and financial implications. Such a home needs certain modifications to certain extent, create awareness among family members and train the caregiver.

The table 1 shows three squares. The inner small square represents the home in which senior person with dementia resides. The square overlying it, represents physical and social environment which constitutes important part of life of person living with dementia. These two environments in coherence play a significant role in maintaining dignity, independence and well being of the senior. The outer square mentions various components of care that are to be maintained, provided and assessed.

Table 1



The care of senior in his home adds to the benefits of ageing in place, person centered support and maintains dignity (8). It also reduces the use of pharmacological measures.

The design shall be made to ensure independence, self esteem, confidence and compensate for disability, while it will not depend on memory, learning and reasoning by senior. Access to external environment like a visit to garden or play ground is also explored. The disabilities in senior will be assessed before making changes in home and design is prepared accordingly. Heylighen and colleagues have emphasized on disabilities in seniors to be taken in account (9).

Definition

The idea of creating dementia friendly community is welcome. There cannot be an ideal dementia friendly community, but we can maintain independence, provide comfort, security and dignity for people living with dementia through this initiative. The four cornerstones like places, people, networks and resources needs to be established (10).

It focuses on retaining cultural values, help exposure to environment and maintain quality of life. The dementia friendly community is defined by a person with dementia as ‘An integrated society where people with dementia live in ‘normal’ home-like situations throughout their lives with support to continue to engage in everyday community activities’. Choudhary, 2008 states that ‘Home is important not so much because it is more likely to be remembered than other places or experiences, but because memories of the place the individual has lived are more likely to reveal what home means for that person, whether as a physical place, an experience or people in his or her life’ (11).

Stake holders

The stake holders in this dementia friendly community home are family members living in the house along with person with dementia. The care giver, usually daughter-in- law plays important role in it while the son manages finances. The person living with dementia is the main receiver and has to adjust with changes made in internal and external environment. The children, spouse and other family members also part of care giver team. Officials of City Corporation will also be involved in designing external environment.

Project

The modifications in home and surrounding will be discussed here under following headings: 1. Interior changes, 2. Outside space, 3. Security, 4. Mobility, 5. Cultural factors and 6. Technology.

1. Interior changes

The room in which the person with dementia lives will be modified as follows.

The bed will be placed adjacent to the window of the room so that the orientation of day and night is maintained. It also helps to have access to external environment, exposure to sun light, noise of traffic and singing of birds. This helps in maintaining sleep pattern. The linen on bed will be of contrast colour from rest of the room, as it makes easier to find where bed is. The door to the gallery will be locked and will paint the same colour as on the wall. The bathroom door and the door of room entrance shall be painted with different dark colours. The door of bathroom will have long handle for easy to use and adequate light is provided during night hours. Such easy access to toilet will have positive impact on a ability of the person to independently manage continence. (12). A sensor mat shall be placed by the bed. It will activate the alarm and alert the care giver when the person steps on it in night.

The whole of the room and bathroom will have hand rails and non slippery flooring. There will be no clutter like wire on floor and the tables with sharp edges will be removed. The mats are not used commonly in our set up. TV will be wall mounted.

The tea cups and water glass will be of plastic material having two handles and bigger in size. The plastic spoons with large and long handle will be used to avoid spillage. The toothbrush handle will be thick for easy handling. The use of modified every day objects will facilitate daily living of people with dementia. It also promotes the abilities the person has.

Arrangements will be made so that the senior will have direct visual access to dining room and part of kitchen and puja room. A wall clock with voice alarm will be placed in room. There will be no mirror placed in the room. Self reflections in late stages of dementia lead to confusion (13)

A cushioned bed will be placed on the ground by side of bed during night hours to prevent falls related injuries. The bathroom will have big buckets and jugs with two different taps one each for hot and cold water. Such arrangement is better to use than mixed taps. This avoids confusion. The self regulated water heater will be installed in bathroom to control temperature of hot water used. This prevents hot water related injuries. Drinking water, fruits and snacks will be always kept on table in a see through containers in Dining room. The senior will be freely moving in all rooms of the house and the main door shall be locked from inside. The inner side of main door shall be painted as the colour of wall. This will prevent the senior going out of the house as identification of door becomes difficult. The wardrobe will be having minimum number of clothes so that there is no difficult in decision making (14). The wardrobes will have no doors. The room will have pre-recorded announcement system that announces certain reminders like "time to take medicine", "tea time", "time for lunch" etc. The voice recorded will be of the spouse. This acts as reminder and maintains familiarity and avoids fear.

The person with dementia will be taken out for a walk and allowed to meet people in neighbourhood. This helps reduce wandering and attempts to leave environment (15). The attempts will be made to clean the stair case and contrast colour stickers will be pasted at edge of each step. Hand rails will be placed on both sides of staircase.

The hobbies of the senior will be given due importance and necessary arrangements like provision of indoor games or participating in outdoor games will be done. Daily house hold chores like sweeping or washing utensils will be allowed to be carried out by person with dementia if they were doing earlier. The aim shall be to put all senses in use.

In the later stages, when the person forgets to close the tap in bathroom which leads to flood. If such a situation arises, a sensor will be fitted on floor of bathroom, when water level touches the sensor it gives alarm and shut off the water flow (13).

2. Outside space

The person with dementia will be taken to garden or small playground in the vicinity every day by care giver. The way to playground will be modified with even surface of walk way, sign boards

with easy visibility and bench on side of walkway .The garden will be rich of local flora, fruits and vegetables. Of course toxic plants if present will be removed. The view of children playing will benefit the seniors. The exposure to outside space will help improve appetite, reduce agitation, promote physical activity and reduce incidence of falls (16). Due to co-morbid conditions like osteoarthritis which hinder mobility, the outside space shall be very near to home. Also the senior will be able to meet his friends in garden.

3. Security

The people residing in neighbourhood and the family members are informed about the person with dementia. Awareness is created among the friends and family members about how to behave with people with dementia and not to get angry on any of remarks given by such person. They are also informed about such person may be found lost or have problem with behaviour, in such situation he should be reached to his home. The main door in the house will be secured by lock, a hanging bell which makes noise when door is moved and the colour of door shall be same as the wall colour, which makes the senior no difficulty in finding the main door from inside. In late stage of dementia, bed monitor shall be installed with aim to prevent falls and related injuries. There will be constant degree of light in the room to avoid anxiety of dusk.

4. Mobility

The basic right of person with dementia is to be socially and physically active. Being allowed to move in community keeps them active, improve their appetite, reduce agitation and cater the social needs (17). In my model, I will permit only for a walk and not to use transport system as they are not very senior citizen friendly. The quality of foot path and walk way will be improved with the help of representative of corporation. The senior will also be able to move around in his house and adequate safety measures mentioned in interior design will be implemented.

5. Cultural factors

The senior in home will be allowed to offer *puja* and all rituals every day that they have been doing for years. There will be provision of music player chanting mantras for two times a day. The *puja* room will be separate from the room of senior. Devotional songs will be played everyday afternoon and the favourites songs of the person

with dementia will also be played every day. Maintaining the cultural values ensures self identity (18). The person will be allowed to participate in various festival programmes.

6. Technology

The everyday technologies will be implemented in phased manner. Financial aspects and utility of assistive device shall be taken in consideration. It also depends up on how best the senior will be able to use the new device. Various factors like level of literacy, self motivation, attitude, ability to learn new things will be considered before implementing new assistive device. Also there is scarcity of assistive devices in helping people who remain at home (19-21).

Care Giver

The care giver in home will be daughter-in-law, spouse, son and grand children. These people are oriented towards dementia care which consists of medical and social aspects of dementia, its progress and the problems that the care giver likely to face. Also emphasis will be on self care and prevention of burnout in them.

Care giver system in typical middle class family in India is shown in Table 2.

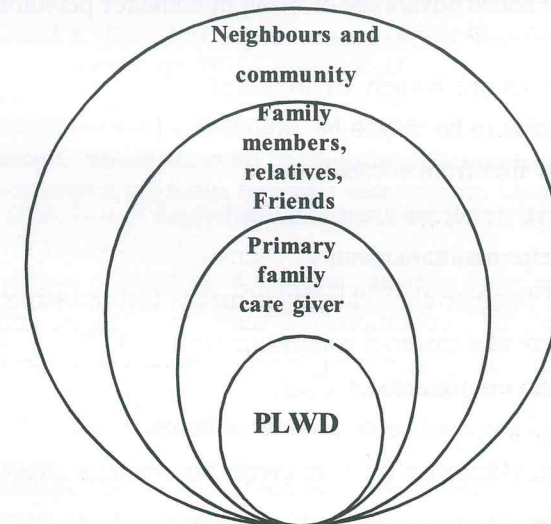


Table 2. shows that the primary care giver is daughter or daughter-in-law. The next are relatives and friends. Most of time these relatives and friends support for respite care. Neighbours and community at large are always there to lend a helping hand.

- with easy visibility. **ected to follow certain points.**
- rich of low **th the person with dementia**
- present **is aggressive or keep repeating the same**
- ange the topic.**
- in front of senior when in aggressive mood. The**
- y harm you.**
- or is harming self, he needs medical attention. Consult**
- cian.**
- e) **ys try to discuss new topics with the person.**
 - f) **Show old collection of photos frequently.**
 - g) **Take the senior for a walk frequently**
 - h) **Medication need to be managed carefully**
 - i) **If you feel depressed or burntout, talk to family members and arrange for another care giver or seek respite care.**
 - j) **Listen to the senior without interruptions.**

Advantages of Home care for person with dementia

There are lots of advantages of taking care of person with dementia in his own home. For a middle class family, concerns are finance, space and security. Taking care by own family members as a team have added advantage of being in home for person living with dementia.

1. It maintains homely environment
2. It helps to be free to be oneself
3. It is free from surveillance
4. Social relations are maintained
5. It helps maintain identity
6. The familiarity of caregivers makes feel the senior secured
7. It provides material connection with past (7)
8. It reduces aggression (22)
9. The individual needs are met in home.
10. It provides ease for care givers and reduces stress in them.

Conclusion

Dementia friendliness is an ongoing process. There cannot be an ideal community for people living with dementia. The care of person

with dementia can be in a home, care home, day care, nursing home and a hospital. The best place for their care is in own home. The majority of families in India are financially not strong to afford expenses towards care or devices. Most families cannot afford to pay for qualified caregivers and the availability of qualified care giver is sparse in our country. Dementia care is entirely home based in India hence it will be wise to strengthen home based care in India.

References

1. Dementia India Report 2010 Alzheimer's & Related Disorders Society of India (2010). The Dementia India Report: prevalence, impact, costs and services for Dementia. (Eds) Shaji KS, Jotheeswaran AT, Girish N, Srikala Bharath, Amit Dias, Meera Pattabiraman and Mathew Varghese. ARDSI, New Delhi 2010.
2. Digby, R, Bloomer, M. J. People with dementia and the hospital environment: the view of patients and family carers. *International Jour Older People Nursing*, 2014;9(1), 34-43.
3. Mavall L, Malmberg B Day care for persons with dementia: An alternative for whom? *Dementia* 2007, 6(1), 27-43.
4. WHO 2012. Dementia: a public health priority. World Health Organisation 2012. www.who.int. Accessed 10/10/15.
5. Twigg, J. The spatial ordering of care: public and private in bathing support at home, *Sociology of Health and Illness*, 1999; 21, 4, 381-400
6. England, K. Dyck, I. Managing the body work of home care, *Sociology of Health and Illness*, 2011; 33, 2, 206-219
7. Varley, A. A place like this? Stories of dementia, home and the self, *Environment and Planning* 2008; 26, 47-67
8. Cantley C. Wilson RC. 2002. 'Putting yourself in my place': Designing and managing care homes for people with dementia. The Press: Bristol Available online: <http://www.jrf.org.uk/sites/files/jrf/1861348118.pdf> (Accessed 18.11.15)
9. Heylighen, A. Bianchin, M. How does inclusive design relate to good design? *Designing as a deliberative enterprise*, *Design Studies*, 2013; 34, 1, 93-110
10. Crampton, J. Eley, R. Dementia-friendly communities: what the project 'Creating a Dementia-Friendly York' can tell us, *Working with Older People*, 2013; 17, 2, 49-57
11. Chaudhury, H. Remembering home: rediscovering the self in dementia, Baltimore: Johns Hopkins University Press, 2008
12. Namazi, K.H., Johnson, B. How familiar tasks can enhance concentration in Alzheimer's disease patients. *Am J Alzheimers Dis Other Demen*, 1992; 7(1):35-40.