ALZHEIMERS DISEASE: A NURSING PERSPECTIVE

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Abstract:

Introduction

Alzheimer's disease presents a challenge for nursing, nurses, formal and informal carer's of person's with Alzheimer's disease. Theoretical knowledge provides insight and understanding into the bio-psycho-social dimensions of behaviour exhibited by the person with Alzheimer's disease. Theoretical knowledge alone, cannot prepare nurses and family members as carers, for the practicalities and coping skills required on an ongoing daily basis.

Family members and carers may at first deny the symptoms they observe and pass it off as part of the ageing process. Cognitive decline is progressive as standards of hygiene, self care and independent living becomes more evident and interferes with activities of independent, daily living.

The bio-psycho-social-safety and security needs are individualized and unique to each personality with Alzheimer's disease. This provides a challenge to all nurses and carer's of persons with Alzheimer's disease.

This literary study aims to provide practical insights and humane coping skills for family members as carer's and nurses both formally or informally trained, as carer's of persons, with Alzheimer's disease.

Conclusion

Living with, and caring for an Alzheimer's parent or person draws every bit of physical and emotional strength from the family and carer's.

Key words

Alzheimer's disease, carers, nurses, coping skills, clinical features.

Introduction

Gerontology is the study of old age. The word comes from the ancient greek, "geras"- meaning old age or "geron"- meaning old man and "logos" meaning a study or description (Hattingh, Van Der Merwe, Van Rensberg & Dreyer, 1996). Ageing is a progressive decline in physiological function and performance that accompanies advancing years (Potocnik, Page & Hugo. 2001:323). Hattingh et al (1996) refers to ageing, as simply growing older with gradual organ

impairment or failure as well as failure of the immune system to provide protection against disease and infection (Hattingh, 1996:9).

The demographic effects described by Potocnik et.al (2001) relates that the international trend is to describe "elderly" as those persons, aged 65 years and over (Potocnik et al. 2001:323). In South Africa, elderly coincides with the retirement age of 60 years for women and 65 years for men. It is also the age at

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which elderly persons can apply for old age or government pension if the person does not receive a pension from his/her-former employer.

Classification of chronological ageing

Chronological ageing is classified by Neurtagen into three categories:

- 1. Youthful aged: 55- 65 years where persons are relatively energetic, healthy, physically and socially active and in the prime of their lives. Health problems may or may not be present. It depending entirely on how healthy a lifestyle the person has lead throughout the previous lifespan years. They have often gained invaluable occupational or work experience in their chosen careers as well as gained "life skills" and are experienced mentors, for the younger generation.
- 2. Middle aged 65-75 years are persons who have retired, enjoy life to the full and do the things they have always wanted to do e.g. travel, indulge in hobbies, volunteer work, are socially active but are aware that their physical and mental abilities and energy levels are slowly, failing them. Again, this depends on the previous healthy life styles they had implemented.
- 3. Old age is 75 + years. These persons have long been retired and are less active socially, physically less healthy and require care. Elderly persons may be deprived of family, friends and social contacts leading to isolation and being alone which seems to hasten their decline (Neurtagen. 1976:7-8).

Chronological ageing is however, not indicative of the degree of ageing that has taken place, each person is different - based on their genetic make - up, lifestyle, diet, hobbies and interests, exercise and the environment in which the person lives which differs

from person to person, culture to culture and from community to community.

Populations, world-wide indicate an increase in elderly persons of 65 years and over. In South Africa, this demographic transition presents 2.5 million elderly which will double over the next 25 years (Mostert, Hofmeyr & Oosthuizen, 1997).

In general, this increase in life expectancy is due to reduced fertility rates, decreased mortality (death) rates and improved health care services (public, private and natural or homeopathic health facilities) (Potocnik et al. 2001:324).

Basic needs of the elderly are those enjoyed by all people throughout their lifespan, such as nutrition, shelter, warmth, comfort, safety and security as well as the need for hygiene and cleanliness. Psychological needs include love, respect, dignity, self-esteem, self-determination and security in terms of physical, financial and emotional needs.

Morbidity and Mortality

The major cause of chronic disease and death in those 65 years and over are:

- Cardio-vascular disease which includes the heart and bloodvessels and account for 53% of deaths.
- Neoplasm or cancer, accounts for 17% of deaths.
- Respiratory diseases due to the high consumption of tobacco, occupational and environmental pollution accounts for 14% of deaths.

There is a mutual relationship between old age and disease, which are often chronic. Disease hastens ageing and, ageing renders old people more vulnerable to chronic, degenerative disease (Potocnik

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et al. 2001: 324). By contrast, Alzheimer's disease at 10%, is the fourth leading cause of death in the Western World and the prevalence, increases with advancing years (Potocnik et al. 2001:324).

Alzheimer's Disease

Age related cognitive decline also known as "age associated memory impairment" describes those forgetful, elderly individuals. 30% of this group of people will go on to develop, Alzheimer's disease.

Alzheimer's disease is a chronic, progressive form of neuronal degeneration in the brain and is irreversible. It is the most common cause of dementia in people of all ages, both men and women. The degeneration of neurones in the brain is accompanied by changes in the brain's biochemistry which manifests as the loss of intellectual capacity such as memory, judgement, orientation and consistency of the mental process.

The cause of Alzheimer's disease remains unknown. Research being conducted in terms of diet i.e. supplement trace elements and complementary medicine have not come up with a specific answer or remedy. Alzheimer's disease is irreversible and there is no effective treatment (Weller, 2005: & Benner, 1997).

Alzheimer's disease generally has three behavioural stages; forgetfulness, confusion and dementia. Forgetfulness is characterised by progressive memory loss, lack of spontaneity, impaired reading, writing and speech. Neglect of their physical appearance and personal hygiene becomes noticeable to family members or carer's. The person with Alzheimer's disease may or may not have any insight into this behavioural stage. Forgetfulness, causes extreme anxiety for the person with Alzheimer's disease as they become aware of the lapses in memory and

utilize defence mechanism to cover up the lapses, especially in short term memory loss.

Confusion is characterised by a loss of awareness of current and recent events, emotional lability, inability to manage their personal affairs, senseless wandering about, restlessness, repetitive behaviour, constant agitated pacing and the inability to recall relationships and names of family members or events e.g. death of a spouse, births of grand or great grandchildren, having had a meal or taken medications etc. (Hattingh et al. 1996:149).

Dementia is an impairment in memory (cognitive functioning) which in turn affects personality, intellect as well as social and occupational functioning. Dementia does not affect the level of consciousness of the person. The prevalence of dementia in the general population is 5–10% and doubles every five years, rising to 30 – 40 % for those, over 85 years.

Dementia can only be diagnosed once the cause of dementia has been established. There are more than 70 different kinds of dementia e.g. Alzheimer's disease, Parkinson's disease, Pick's disease, Huntington's Disease, HIV/AIDS, Vascular dementia e.g. multiple strokes or substance abuse - e.g. alcohol, inhalants etc.

Dr Rae Labuschagne, in her paper "Where would we be without memory"? defines "memory as referring to a mental process by which information is received, retained and later recalled". She elaborates that "memory is the storehouse of our knowledge and life experiences". Labuschagne exposes that "Memory refers to the past but it is actively engaged in our future, as without memory we have no past and no meaningful present and future. Memory is essential for our survival (Geratec symposium: notes, 2005).

Memory impairment in Alzheimer's disease is sufficiently poor to interfere with activities of daily living and functioning as an independent being no matter how hard they try to control their lives and the environment where they find themselves. Their ability to have episodes of rational thinking interspersed with memory lapses may fool family and carer's into believing they have understood the message or conversation or explanation.

Clinical features of Alzheimer's disease:

The first to go is self-care: personal hygiene and dressing appropriately according to the climatic conditions. The person neglects to bath, shower, shave, comb the hair, oral hygiene, care of the feet. Neglect of perineal toilet often makes people smell of urine or faeces as they forget to clean themselves, after toileting or do not change their under wear or clothing, on a regular basis. The elderly person lacks insight and is unaware of his/her neglect regarding his/her personal hygiene and self care.

Increased appetite with or no weight gain indicates that the dementia has reached stage II of the behavioural characteristics as they forget that they have just had a meal and complain that they have never had food or may want to go out shopping for food. This obsession with food puts them at risk to being mugged or robbed while shopping or the alzheimer's person may never reach home, after a shopping expedition.

Food that is bought must be adequately washed, prepared and stored to prevent them from ingesting harmful organism leading to gastritis and possible, diarrhoea as hygiene and self-care is negligible. They forget to wash their hands after visiting the toilet or before and after mealtimes or in the preparation

meals, which are often under-or over cooked since burnt food is economically expensive for a person living on a pension, leading to wastage. Memory impairment requires 24 hour supervision as it put the elderly person at risk for infections e.g. mouth, skin rashes especially if it occurs between folds of skin or between the toes of diabetics or persons with poor blood circulation or who are immunologically compromised. Memory impairment causes security and safety needs for the alzheimer's person when preparing meals or going shopping. Family and carer's need to prioritise the safety and security needs of the Alzheimer's person, as a matter of urgency.

Judgement is the ability of a person to estimate a situation to arrive at a reasonable conclusion, and to decide on a course of action (Weller, 2005) e.g. a burning candle could fall on a bed and set them alight, a stove plate left on or an open fire can lead to burns, locking a door to secure some form of safety in their home or crossing a street puts the alzheimer's person at risk to being injured, and seriously affects their safety and security in their homes, their living environment and the community.

Disorientation regarding time of the day, day of the month, or year despite a glaring calendar or clock within eye level of the alzheimer's person adds to the confusion they are experiencing. They may also question whether they are in their own room or house, or not recognise familiar surroundings in which they have lived, for many years. Wandering and pacing indicates restlessness and irritability, which may exhaust them. Cat-naps restore and energize the person creating problems for family and carer's who often catch up on tasks left unattended and may lead to low energy levels, irritability and possible abuse i.e. physical or emotional abuse, of the alzheimer's person.

Articles are mislaid, faces are not recognised, statements need to be repeated and the person with alzheimer's disease is forgetful blaming carer's for items that may have gone astray leading to emotional lability, fear, agitation, temper tantrums, paranoia, aggressive and acting out behaviour identifies the confusion the Alzheimer's person is continually confronted with creating challenges for nursing care and carer's.

Decline in cognitive functioning becomes apparent when they have difficulty in learning new information indicating short term memory impairment i.e. reading and concentrating on a book or newspaper article, watching television, listening to the radio etc. affecting spontaneous social communication. Increasingly the person lives in the past, as the long term memory, is well preserved.

Personality changes become evident in anxiety and panic episodes, histrionic impulsiveness, aggressiveness, paranoid tendencies and socially unacceptable or repetitive, compulsive behaviour.

There is loss of initiative and the individual becomes increasingly apathetic and withdrawn. Carers must be observant for depression and listen actively for feelings of helplessness, frustration and fear.

The person may also become self centred, hypochondriac, cantankerous with bouts of irritability and aggression as they become aware of their inability to function as before and desperately try to regain or exercise some control over their lives and daily living.

Impaired social inhibition, clumsiness, inappropriate spending, or not realising the costs of food, newspapers and commodities etc. and become

miserly, blaming family and carer's for spending and wasting their money.

The mood is shallow – sensitivity, interest and affection may disappear. Sadness and crying maybe evident as they mourn the loss of loved ones in their aloneness.

Intellectual impairment: thinking becomes more primitive and the person cannot cope with novel tasks.

Dysphasia manifests with the person's inability to read, listen to the radio or watch television as they struggle to understand social communication.

Agnosia presents in patients inability to recognise well known faces, objects and difficulty in finding his way around a familiar environment.

Impairment in executive functioning becomes evident as persons with alzheimer's disease struggle with complex tasks e.g. using a television, video machine, computer. Managing their financial affairs and taking part in previously valued hobbies and games.

Gradually, the person reaches a state where they are unable to speak or respond to stimuli and enters a vegetative state. Physiological symptoms include loss of energy, fatigue, disturbed sleep, muscular twitching, ataxia making them susceptible to falls. Decreased reaction time to a full bladder or bowel leading to incontinence with nursing implications. Progressively the appetite decreases and eventual emaciation and death.

Care of the elderly, including those person's with Alzheimer's disease should include the bio-psychosocial and security needs of the person. Ideally, this should be provided by a multi-therapeutic health team

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as well as family members, volunteers and organisations who deal specifically with Alzheimer's disease.

The basic care includes:

1. Safety and security, free from harm in their homes or in residential community care facilities.

Provide a structured environment i.e. timetable and routine for bathing, meals, games and social activities, outings, walks, exercise, hobbies and recreation and meeting spiritual needs etc. Include the person with alzheimer's disease in the daily routine by delegating simple tasks which can be done together with a family member or carer e.g. peeling vegetables in preparation for a meal, setting the table, drying dishes and clearing up after the family meal, sweeping the yard and if the energy reserves allow, gardening or caring for a pet.

- Highlight events with family, church members, community and interest groups may help to give meaning to life and enhance their feelings of being included preventing boredom, isolation, loneliness and alones.
- Promote physical activity and self care for as long as possible.

Encourage the person with Alzheimer's disease to participate in his self care, with supervision from the family members or carer. Supervise water temperature for baths and or showers, using a bath mat or towel, ensuring a hand rail and non-slip floor coverings in bathrooms and toilets.

4. Increase social interaction to provide stimulation, clear, concise unhurried verbal communication. State expectations simply and clearly. Allow to talk about his/her life and remote memories. Be patient about the response time from the person with alzheimer's disease to enable the person to communicate in a congruent, consistent and structured manner to

prevent confusion. Include the person in a group with friends and family e.g. exercise group, games, dancing, spiritual/religious needs etc. Spending time with family members and friends or visitations are essential but be alert that the person may tire easily and may need to rest or cat-nap.

5. Re-orientate the person with alzheimer's disease continually to the reality of the real world re-time, day of the week/month/year. Place a calendar with large print displaying days of the week, month and year within reach of the elderly person to consult and orientate themselves.

Encourage the person to wear his/her watch or see a clock which is large enough, visible and at eye level. Spectacles, hearing aids and walking-aides/devices enhance their ability to function in their environment.

- 6. Use a night light outside the bedroom of the person without disturbing sleep e.g. night lights along the corridor or passage to the toilet and bathroom. Night lights could prevent falls and confusion should the person wander from his/her bedroom or agitatedly pace, during the night.
- 7. Supervised medical care for chronic illnesses e.g. hypertension, diabetes, arthritis, respiratory and cardiac conditions. Observe for therapeutic and side effects of medications, especially newly prescribed medications as older persons react differently to prescribed medications.
- 8. Assistance is required if the person wears spectacles or hearing aids, or wears dentures or prosthesis or requires dental, chiropody/podiatrist, palliative or terminal care.
- 9. Supervision and skilled care respecting the person's self esteem, privacy and respect for the

alzheimer's person's human rights and dignity is essential.

- 10. The continuing care of pets is essential to maintain independent functioning. Encourage hobbies or handicrafts having interests outside the home so that the alzheimer's person can socialise with friends or interest groups of his/her age group to help them to maintain an interest in life and the wide world, out there.
- 11. The person should be encouraged to document their lives with photo-albums, oral story telling, life review or family tree illustrations, write their memoirs as a heritage for the family in the way they want to be remembered, by their loved ones as old people are our libraries who can relate our past, filling in the gaps of our memory banks (Labuschagne, 2005). Reminiscence of their past lives is a way of preserving their self esteem and re-inforcing some sense of identity (Labuschagne, 2005). Lubuschagne (2005) highlighted life review and reminiscence as described by Robert Butler as a normative process which all people undergo as they realise that life is coming to an end. Erik Eriksen calls this last period of life "egointegrity" where the elderly person tries to make sense of his/her life and achieve a sense of completion, and preparation to let go of life (Labuschagne, 2005).
- 12. Least but, not last assist the elderly to get their "business" in order while they still have time and are able to do so. The legal requirement of last wills and testaments needs to take cognisance of the elderly wishes. In view of the mental ability of the Alzheimer's patient a curator bonus is required to manage and supervise the legal and financial affairs of such a of person. Consultation with the Lawyer for Human Rights is essential to prevent abuse and exploitation.

Conclusion

Living with, and caring for an Alzheimer's parent or person is not easy. It draws every bit of physical and emotional strength from the family and carer's. There comes a time when you are faced with decisions about continuing to care at home or seeking assistance from frail care facilities. As a caring person you will know when the time has come to seek assistance from community resources.

I conclude with a manifesto for carers

Carer's need:

Recognition of their contribution

Recognition of their own needs, as individuals in their own right

Opportunities for a break either short or longer times Practical help to lighten the physical burden of caring Someone to talk to about their own emotional needs Information about support groups. (Ledger, 1992:13)

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The 2010 International Congress on Complementary Medicine Research

Tromsø, Northern, Norway.

The local host of the congress is NAFKAM (National Research Center in Complementary and Alternative Medicine) in conjunction with ISCMR.

As before, the congress will be a hotspot presenting and discussing the latest research developments in the field of CAM at that time. Researchers from around the world will have a chance to both share research findings and (re)establish important personal connections with others working in the same field.

While NAFKAM already is internationally known for arranging yearly workshops on CAM research methodology called "Northern Lights" workshops, the congress in 2010 will take place when the midnight sun is shining. Be sure to be here at that time to take advantage of the 24-hour sunshine and breath-taking beauty of the surroundings.

The congress will be surrounded in time by pre-congress symposia, satellite workshops and pre- and post-congress social events and tours. If you arrive in Tromso before the 17th of May, you will partake in the Norwegian national day celebration, an opportunity not to be missed.

I want to personally invite you to come in 2010, and urge you to mark your calendars already. We are planning for at least 600 participants!!

Vinjar Fønnebø Professor and director of NAFKAM