Abstract

Dementia is a deficiency characterised by memory loss, changes in behaviour, loss of executive functions of the brain among others. Research shows that an approximate population of 850, 000 people residing in the United Kingdom are suffering from dementia. Currently, the Alzheimer's disease, vascular dementia, and frontotemporal dementia are the most common types of dementia (Andrews, 2015, p.76). The study aimed at investigating the physical health needs of adults with dementia. It utilized PubMed as the search engine in reviewing the available literature. The study came with various findings such as food, shelter, sexual needs, pain management, appropriate body temperatures, and access to the toilets as the primary physical health necessities of adults with dementia.

The research found that a balanced diet is crucial for the health, well-being, and independence of adults with dementia. Dementia is one of the reasons why people migrate to residential care homes because they offer quality care as compared to other places. High temperatures increase the risks of dehydration, heat stroke and heat stresses in dementia patients and thus the caregivers need to be more careful to ensure that the victims access suitable temperatures. The adults with dementia have loose bowels, and therefore public toilets should be constructed in such a manner that the patients can easily spot and use them with ease. The research recommends that the prescription of drugs to dementia patients should be done with caution to avoid medications which hinder the body's ability to regulate heat because heat has some adverse effects on the victims.

Rationale

Limited research has been conducted on the physical health needs of an adult with dementia. This study seeks to consolidate contemporary literature to offer an extensive knowledge to the caregivers on the needs of patients, therefore, improving the quality of care for dementia patients. World Health Organization (WHO) defines dementia as a disorder which arises from a brain disease and disturbs proper execution of cognitive functions such as thinking, judgment, comprehension, orientation, learning, memorization, and calculations (World Health Organization, 2012). The aim of conducting the study is to review the literature on some of the physical health necessities of seniors with dementia such as food, shelter, access to toilets, sexual needs, and suitable body temperatures. Many healthcare institutions lack a proper understanding of dementia, and management of the disease is often complicated. Therefore, reviewing the literature will be of great benefit not only to the nurses and healthcare givers but will also create a good foundation for in-depth research on the topic of dementia.

CHAPTER ONE

Introduction

Dementia is a continuous and irreversible disorder characterised by extensive impairments of cerebral functions which impact memory and intellect. This literature review will explore the Physical Health Needs of Adults with Dementia by identifying and synthesising the relevant literature in relation to the topic. This is presented in three (3) chapters.

Chapter one includes an explanation of the review process and search strategy used to extract information. It also incorporates a list of the standard electronic databases used. Furthermore, chapter one highlights essential background information on dementia, followed by information on Alzheimer's disease, including symptoms, causes and risk factors that trigger or precipitate the disease, followed by the complications and prevention of Alzheimer's disease. It also incorporates information on types of dementia like vascular dementia and Lewy Body dementia.

Chapter two deals with the physical needs of adults with dementia as derived from the physiological and safety needs of humans under Maslow's hierarchy of needs. It also synthesises information on the need for shelter and housing, food and nutrition, sexual needs, maintenance of appropriate body temperature and the role of hydration. Finally, chapter two also explores the impact of accessibility to washroom facilities on dementia patients.

Chapter three targets pain management in patients with dementia, deals with communication and speech difficulties and therapeutic interventions for dementia patients and their families. It continues with a conclusion summarising the salient and outstanding issues

deriving from the review, and finally culminates in recommendations arising from insights gained from the literature review.

Search Strategy

A literature search is one of the crucial aspects of the academic life of learners, especially with the advancements in the technology. The literature search is an organized system of searching which performs a significant role in identifying information appropriate to the topic in question. Besides, it accomplishes a crucial task in offering support to medical specialists intending to keep up with the growth of evidence-based practices in the health sector (Gonzalez-Garcia et al., 2015, p.3025). Evidence-based practice is a term referring to a collection of evidence which promotes the quality of data and information related to clinical and patient interests (De Braon and Perce-Smith, 2011, p.278). A proper search technique is vital for retrieving data and information more efficiently. The process assists the physicians in getting the best medical resources. The primary objective of this sub-topic is to explain a suitable search strategy by defining of databases and justifying the reasons for selecting that specific database in this assignment. Furthermore, the sub-section will describe the searching steps used in the identification of an article concerning some of the physical health needs of an adult with dementia.

The most critical aspect of conducting a literature search is to formulate a question which can undergo an efficient search, and this assists in sourcing of its answer from the chosen database. According to De Braon and Pierce Smith (2011, p.280), the database is a term referring to system reviews which contain electronic collections of data that is easily accessible and well

organized. Numerous search engines which facilitate research exist and each one has its unique way of identifying data and information.

The primary search engine used for this research is PubMed despite the fact that there are databases for searching information. The main reason for selecting this particular database is because the internet offers a platform for obtaining different sorts of information and therefore it is not limited to information. Additionally, the internet can be used by anyone, whether a beginner or an expert. However, one of the limitations of the internet is that it does not guarantee reliability and validity of the data collected. As a consequence, it is essential to choose trustworthy sources when sourcing information concerning healthcare topics. According to Nordenstrom (2016, p.311), PubMed presents one of the primary medical sources of information, usually connected to MEDLINE which is the central medical database. PubMed is easily accessible primarily through the National Library of Medicine, and hence the site is reliable. Furthermore, it offers an opportunity to people for easy access to data and the information obtained is free of charge. Additionally, most of the articles of PubMed are evidence-based justifying the reasons why the research extensively applied the method.

Anyone assessing PubMed should follow the appropriate search techniques to obtain useful information. A search strategy technique is composed of a list of databases and relevant terms which form crucial elements of the research (De Braon and Pearce-Smith, 2011, p.283). As mentioned earlier, formulation of the research question is one of the vital parts of a search strategy. The problem used in this study is “what are some of the physical health needs of an adult with dementia?’ The question was broken down into identified keywords hence building smaller items which were easily managed leading to an efficient search strategy. De Braon and

Pierce-Smith (2011, p.284) pointed out that PICO is a favorite technique for the management the question. PICO stands for Problem, Intervention, Comparison, and Outcome respectively. In our case, the problem is dementia, the intervention is the standard treatment, for instance, the use of medicine to treat dementia, comparison refers to alternative forms of administering dementia treatment, and finally, the outcome is the results expected after therapy administration. Some of the anticipated results, in this study, include restoration of appetite, memory recovery, and improvement in thinking capacity among others.

Computers control the databases which in turn controls the search results in words previously typed by the researcher. According to Nordenstrom (2016, p.316), searching wide is the best approach since it ensures inclusion of the articles of interest. For instance, feeding the keyword "dementia" in the inquiry box returns an extensive collection of resources. Searching by the use of the thesaurus is the next step which is useful in the search strategy. Thesaurus search is the use of words with an associated set of phrases and synonyms in finding of the appropriate articles (De Braon and Pierce-Smith, 2011, p.286). In the project, a word such as 'Alzheimer' was used instead of dementia since the two are closely related. The technique of thesaurus search reduces the search results significantly hence improving the chances of getting the required articles.

Observation of correct terminologies is essential in the medical field since changing a letter in the term leads to a change in the meaning of the diagnosis. Another search technique is the thread step which is crucial since it entails the use of wildcards and truncations hence saving the time used in doing the literature search and the overall time in researching in general. Truncations, or the use of symbols like asterisks (*) helps in reducing the number of steps in the

search whereas on the other side the technique may lead to an increase in the number of articles displayed. Wildcard entails the utilization of question mark (?). The method is useful when handling plurals and also performing differentiation of various English spellings. It is particularly interesting because PubMed does not make use of wildcards (De Braon and Pierce-Smith, 2011, p.287). The research applied truncation in several ways such as in the word 'adult.' In this case, the suffix is removed, and the stem of the word is used. Asterisks are then added to the stem so that the search term becomes adult*. Keying the character 'adult*' in the search engine instructs the system to looks for information relating to adult, adulthood, etc.

Combination of words is also another essential step used in strengthening the search. The process is known as Boolean logic. It improves the relevance of words to the formulated question in the search by use of joining words such as not, and, with, or, inverted commas and brackets. Employing AND in a search displays articles that are composed of both words, for example, Dementia and Adults. Feeding these words in the system commands it to search for materials containing both words. Conversely, the use of OR instead of AND instructs the system to show the documents that comprise of either word or both of them. The use of NOT does not restrict the search. For instance, searching for adults NOT children (De Braon and Pierce-Smith, 2011, p.289).

The last stage of the search strategy is the limitation, usually accomplished by filtering of the search results. The process involves searching by use of specific structural units like full text or abstracts only, age, year of publication among others. In the paper, the search limit in the study of physical health needs of dementia adults was carried out by choosing articles with full text and published within ten years (Kuzma et al., 2017, p.1180). The PubMed system helped in

reducing the number of selected materials by retrieving the ones which met the limits above. The number of results obtained dropped from 21501 to 35 which is a manageable number as a result of using this technique.

In summary, a good search strategy is crucial for obtaining information of high quality in evidence-based practice. A clear question, selection of relevant databases, lists of synonyms and keywords, use of wildcards and truncations, the combination of Boolean operators and applications of limits to search results are some of the leading principles of success in finding articles addressing the evidence-based practice.

Background Information

Dementia

Dementia is a condition characterised by loss of memory, loss of executive functions, changes in behavioural traits and other intellectual deficiencies. According to WHO dementia is a syndrome resulting from a brain disease which interrupts proper execution of cognitive tasks such as thinking, judgment, comprehension, orientation, learning, memorization, and calculations (WHO, 2012). Dementia describes a combination of symptoms which occurs when the cells of the brain stop functioning correctly and thus not a disease by its name. Dementia affects specific areas of the brain hence hindering the process of communication, thinking and remembrance.

One of the primary causes of dementia is the Alzheimer disease (ref). Currently, it is widely the recognized cause of dementia and accounts for about 67% of cases in adults with dementia (ref). Apart from Alzheimer's disease, there are also other defects which result in dementia. Vascular dementia, frontotemporal dementia, and dementia with Lewy bodies

comprise some of these conditions. Research shows that a significant percentage of old people suffer from two or more of conditions of dementia described above. In some instances, Alzheimer occurs with dementia with Lewy bodies or vascular dementia. The state is often called “mixed dementia.” Other rare causes of dementia include alcohol, HIV/AIDS and CJD (Creutzfeldt-Jakob disease).

Dementia is of health importance since it is often complex and challenging to manage. The disorder is increasingly becoming prevalent in our societies today. Research shows that approximately 850, 000 people in the United Kingdom have Dementia (Alzheimer's Association, 2016, p.470). Majority of the people who have dementia are aged 65 years and above. However, an approximated population of 40, 000 of adults with dementia are of 65 years of age and below. Dementia condition in people with 65 years of age and below is usually known as early onset dementia, and the most frequent causes are frontotemporal dementia and the Alzheimer’s disease at its early onset stage (Alzheimer's Association, 2016, p.470). The disease diagnosis is incredibly complex, and thus the exact number of people who have dementia is yet to be established.

Alzheimer’s disease

Alzheimer’s disease is the most frequent type of dementia. The disease is characterised by a slow deterioration, sinister onset, and comprises of impairments in behavioral traits, memory, speech and executive functions. A person with Alzheimer’s disease shows initial signs of mild confusions and difficulties in remembering. As the disease progresses, the condition becomes worse, and the people may even fail to recognize their close friends and relatives. Alzheimer’s disease causes loss of social and intellectual skills. The diagnosis of the disorder

occurs after all other neurological, systematic and psychiatric dementia causes have been excluded clinically and by laboratory investigations (Prince et al., 2013, p.63).

Symptoms

Initial signs and symptoms include mild confusions and increasing rate of forgetfulness. With time Alzheimer's disease patients show increased signs of memory loss. The memory decline portrays itself in several ways such as repeating the same questions and statements over and over again because the victims never recognize that they had asked the same questions before. The patients develop a tendency of completely forgetting conversations, events, and appointments (Prince et al., 2013, p.64). Additionally, the victims develop difficulties in identifying objects, expressing thoughts and taking part in conversations.

People with Alzheimer’s experience challenges in thinking and concentrating. Such adults may also find it hard to multitask and manage their finances, difficulties in paying off bills and balancing of cheque books. As the disease advances, the victims experience challenges in dealing with numbers. People living with Alzheimer’s disease are unable to make right judgments and decisions. The patients are also unable to plan, and execution of ordinary tasks becomes a challenge (Alzheimer's Association, 2016, p.485). They struggle to perform duties that involve passing through various sequential processes such as playing their favorite game or cooking a meal (Prince et al., 2013, p.65).

Behaviour change is another common symptom among the people living with Alzheimer’s disease. The alterations in the brain functions that are common in adults with Alzheimer’s disease significantly impacts the manner in which such patients feel and act ref . Common behavioural changes include depression, change in moods, irritability, apathy,

wandering, aggressiveness, loss of inhibitions and changes in the habits of sleeping (Alzheimer's Association, 2016, p.490).

Causes

Changes in genes, environment, and lifestyle are some of the factors which impact the brain over time ref. Medical check-ups of adults with Alzheimer's disease shows two kinds of anomalies which forms the hallmark of the disorder; namely plagues and tangles. Plaques are composed of protein clumps known as beta-amyloid which destroys the brain in numerous ways, including the interference of communication between the cells. The cells of the brain depend on internal support and transport systems which assists in carrying nutrients throughout their long extensions (Alzheimer's Association, 2016, p.492). The systems require the standard structure and proper functioning of a protein by the name tau. The tau protein threads in Alzheimer's disease twists into abnormal tangles in the inner parts of the brain cells, and this fails the functioning of the system (Alzheimer's Association, 2016, p.493).

Risk Factors

Age, genes, family history, sex, Down syndrome, mild cognitive impairments (MCI) and past head traumas are the most common risk factors for the Alzheimer's disease. According to research, Alzheimer's disease rate doubles each decade for the victims of 60 years of age and above, and this explains why age is a risk factor (Kuzma et al., 2017, p.1180). The risk of contracting Alzheimer's disease is higher in cases where a first-degree relative especially a parent or child is suffering from the disorder ref . Alzheimer's disease is more frequent in people with Down syndromes as compared to the ones that do not have. Alzheimer's disease signs present themselves 10-20 years earlier in victims of Down syndromes than they appear in the

general population ref. The vulnerability of women to Alzheimer's disease is much higher than that of men because women tend to have a longer lifespan ref. Seniors with MCI have increased risks of developing dementia in later stages of their life. People with a history of head traumas are in danger of suffering from the disorder (Kuzma et al., 2017, p.1180).

Complications

The progression of Alzheimer's disease to the last stages causes significant impacts on the brain which hinders physical processes like food swallowing, balancing, bowels and the control of the bladder. The health effects increase the risks of falls, bedsores, malnutrition, fractures, and pneumonia in Alzheimer's disease patients (Alzheimer's Association, 2016, p.500).

Prevention

Currently, there is no standard method of preventing Alzheimer's disease ref. There is ongoing research aimed at establishing the strategies of avoiding the disease. According to a study, eliminating the factors which cause heart attack reduces the chances of suffering from Alzheimer's disease. Some of these factors include excess cholesterol, high blood pressure, overweight, and diabetes ref. It is claimed that Mediterranean diet comprises of foods which are fresh and low in fat content minimizes the risk of contracting cardiovascular diseases and these, in turn, eliminates the dangers of suffering from Alzheimer's disease (Alzheimer's Association, 2016, p.500).

Vascular Dementia

This disorder presents itself in the form of stepwise deteriorations in the cognitive functions with or without language and motor dysfunctions. Various risk factors such as

arteriosclerosis, diabetes, smoking, and hypertension accelerates the disorder. Although the deficiency often presents itself in the form of stepwise progressions, it can also manifest in a more sudden onset as compared to Alzheimer's disease ref. Moreover, vascular dementia exhibits a patchy picture of cognitive defects. Inadequate flow of blood destroys and kills cells in any part of the body. The brain is easily vulnerable because it is rich in blood vessel networks hence its cells are attacked in most of the cases resulting in vascular dementia ref. The defect causes a sudden change in thinking arising from blockage of major blood vessels in the brain by strokes. In other cases, the thinking problems begin as mild changes that become worse with time due to multiple minor strokes that impact smaller blood vessels leading to cumulative damages (Andrews, 2015, p.77).

Lewy Body Dementia

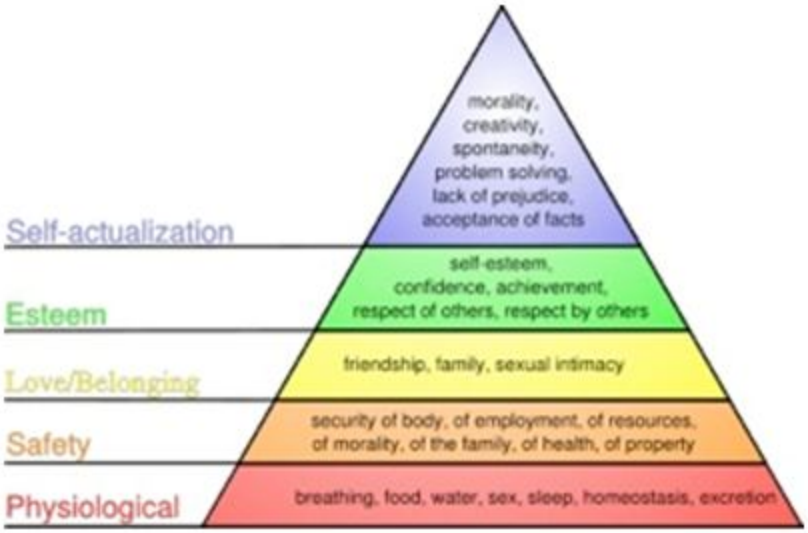
Lewy body dementia is a deficiency involving sinister impairments of cognitive functions with Parkinsonism, fluctuations of cognitive capabilities and visual hallucinations. The defect is linked to abnormal deposits of alpha-synuclein protein in the brain. The deposits are usually referred to as Lewy bodies and have a significant effect on the chemicals present in the mind. The alterations in these brain chemicals result in challenges in thinking, behaviours, moods, and movements. It also leads to disturbances during the night hours and also increases the risk of falls ref. The diagnosis of Lewy Body Dementia is challenging due to several reasons, for instance,the early signs of the disease are easily confused with similar symptoms portrayed by other disorders such as the Alzheimer's disease (Andrews, 2015, p.78).

CHAPTER TWO

Physical Health Needs of Dementia Patients

According to Maslow (2014), the hierarchy of needs can be pictorially presented in the form of a pyramid, with the most critical needs occupying the bottom part. The first layer is known as “physiological” or “physical.” For survival in this world, food, air, and water are required primary commodities. Shelter and clothing offer necessary protection from various elements. There exist numerous essential physical needs which are essential for human survival. Failure to meet these necessities leads to malfunctioning of the human body. Thus it's crucial to consider fulfilling the requirements every day especially for adults with dementia (Thielke et al., 2012, p.470).

The figure below shows the Maslow’s hierarchy of needs pyramid.



Human beings have critical physical needs and generate powerful messages within the brain which assists in regulation and meeting of the internal needs. The signals generated helps people to adapt to the environment ref. The various crucial physical needs for adults with dementia include shelter, food, drinks, sexual needs, suitable body temperatures, and access to the toilet. When such requirements are met for adults with dementia, they can remain calm and relaxed (Thielke et al., 2012, p.471). Failure to comply with these needs forces dementia patients to show discomfort in various ways ref. The subsequent sections discuss some of the physical necessities for adults with dementia.

Shelter

A survey conducted on the aged showed that old people desire to enjoy the best possible quality of life ever. One of the essential elements affecting the quality of life for adults with dementia is the place in which they reside ref. A study conducted in 2014 by the Alzheimer's society on adults with dementia showed that only 50% of the people surveyed felt they are living

well with the disease (Bartlo and Klein, 2011, p.220). Another research points out that the components of housing in the National Dementia Strategy and other proposals of the government are somewhat underdeveloped ref.

The most common choices made by adults with dementia is to remain in their own homes of course with support provided by caregivers or to move to the nursing or residential homes. The dementia adults residing in their own homes experience various challenges such as social segregation and loneliness. According to the Alzheimer's society (year) survey, 40% of the victims reported feelings of isolation as one of their most significant challenges. Besides, the kind of care and support offered in homes is limited and often fails to meet the standard conditions (Bartlo and Klein, 2011, p.221). Furthermore, the maintenance of houses is sometimes challenging, and the costs of running such residential become an enormous problem.

People who are unable to take care of themselves in their own homes experience several health issues. Some of the challenges include malnutrition, depression, increased risks of falls and urinary incontinence ref. All the above problems tend to be elevated when the aged people living in their own homes have dementia. Subsequently it is one of the reasons why older people migrate into care homes. Good practices on the principles of design for specialized housing and care environments for dementia adults is growing slowly and steadily with time. There is limited research which has been done so far in the identification of suitable care models and housing facilities for dementia patients and the impacts delivered by such commodities as compared to nursing or residential care, both regarding the quality of life and lifetime costs of care ref. Some countries are offering extra-care housing in attempts to improve the care efforts for adults with dementia (Bartlo and Klein, 2011, p.222).

There is development of a model based on a small group in independently supported living for adults who have middle to late stages dementia, and in the majority of cases, this continues through to end-of-life ref. The model provides an alternative residence to residential care homes, consequently reducing the need of migrating to nursing homes for end-of-life care. Some of the merits of using the model include: it offers high quality of life, control, and choices for adults with dementia. Additionally, there are low uses of antipsychotic medication in the model. The model offers no emergency and few non-emergency admissions in the hospitals. Furthermore, the model provides chances of earlier discharge from the hospitals and better reablement for adults with dementia. Finally, patients living in the models have higher chances of passing away in homely environments which is usually surrounded by their relatives and friends, and this is ultimately what majority of the people desire (Bartlo and Klein, 2011, p.223).

Food and Nutrition

Adults with dementia often experience challenges in eating, and this puts them at the risk of malnutrition ref. There are several reasons why adults with dementia find difficulties in feeding, including problems of coordinating movements to get food in their mouths and challenges in maintaining attention while eating (Aselage, 2010, p.621). Moreover, the feeding problems come along with other challenges such as agitation, depression, resistance to care and decreased level of intellectual capacity and physical impairments. The environment is one of the crucial factors that impact adults with dementia regarding the improvement of their quality of life ref. For example, a proper dining environment is essential in both residential and nursing homes. The caregivers should put the necessary efforts to create a setting that is comfortable, relaxing

and welcoming as this increases the food intake rate for the dementia patients (Kitson et al., 2013, p.8), and consequently minimizes the feeding challenges of adults living with dementia.

The prevailing rates of eating challenges among adults with dementia residing in both nursing and residential homes vary across different studies. Lin et al. (2010, p.53) recorded a rate of 30.7%, Slaughter et al. (2011, p.172) indicated a proportion of 40.8% whereas according to Chang and Roberts (2011, p.36) it is 60.2%. However, despite the variances in the prevalence rates, all studies agree that feeding problems and loss of weight are common to adults residing in care homes (Keller et al., 2016, p.42). According to a study conducted by Slaughter et al. (2011, p.173), a dining environment that is comfortable and welcoming has the capability of increasing the rate of food intake, arouses the senses and increases social interaction rates. The environment makes the eating experience more enjoyable thus minimizing feeding challenges in people living with dementia. Bosch et al. (2012, p.721) pointed out that dysphagia mostly affects the victims with more advanced conditions of dementia. The state (what do you actually want to say? What 'state'?) together with pneumonia is one of the primary indicators that adults with dementia are in the last year of life (Bosch et al., 2012, p.721).

Proper nutrition is crucial for the health, well-being, and independence of adults with dementia ref. This is because balanced diet helps to maintain the physical and mental wellness. Eating and drinking well assists in the prevention of sicknesses and provides the energy required for day to day operations of dementia patients. Various foods including fiber, sauces, seasoning, and gravy are crucial to adults with dementia ref. Dementia comes along with constipation in the older people hence it's essential for the patients to consume foods with plenty of fiber. Whole grain, cereals, brown bread, vegetables, beans, and fruits are some of the foods that are rich in

fiber (Chang and Roberts, 2011, p.37). Addition of gravy or sauces to the diet of dementia patients is useful in increasing the amount of saliva produced to facilitate chewing and swallowing of food ref.

Sexual Needs

One of the behavioural and psychiatric symptoms of dementia (BPSD) is sexual disinhibition and explains a favourite reason for referring adults to psychiatric services. The referrals often come from nursing homes and sexual disinhibition is one of the reasons for seeking alternative placements for the residents ref. People living with Alzheimer's disease recorded 7% cases of sexual disinhibition as presented by a study conducted by Burns et al. (2015) but the facts are more frequent in other dementia types like frontotemporal dementia. Sexual problems arising from dementia include false sexual allegations, inappropriate sexual acts in public, sexual abuse and inappropriate sexual talks (Haddad and Benbow, 2013, p.631). Increase or decrease in libido is one of the causes of the problems and the change in roles and identity of an adult with dementia dramatically impacts established relationships ref.

There are numerous causes of dementia-related sexual problems in adults which include neuronal loss in the temporal and frontal lobes, disturbances in moods, misinterpretation, psychosis, and misidentification of social cues arising from cognitive impairments (Haddad and Benbow, 2013, p.632). All human beings have a right to sexuality, and many adults with dementia continue to enjoy satisfying sexual relationships ref. The engagement in sex improves our wellbeing regardless of sicknesses or age. Sexuality, which is composed of romance, touch, companionship, and affection is critical in predicting the quality of life (Rheaume and Mitty, 2016, p.342). The World Health Organisation (WHO) (2012) emphasises that sexuality is a

"fundamental aspect of being human throughout the life." There are various ways of experiencing and expressing sex such as through thoughts, desires, attitudes, behaviors, relationships, fantasies, beliefs, values, roles and practices (WHO, 2012).

Some sensitive and complex issues arise in the attempts to balance individual rights to sexual life with the difficulties existing because of the nature of dementia. Some of the problems include clinical decisions like capacities to consent to sex, ethical dilemmas like consideration of the effect of sexuality of one person on another and also criminal issues like sexual discrimination. These challenges often become apparent when an adult with dementia is obliged to leave his own home and is admitted to nursing care or in hospitals (Andrews, 2015, p.80).

Appropriate Body Temperatures /Hydration

Hot temperatures have negative impacts on adults with dementia ref. Increase in temperatures elevates the risks of dehydration, heat stroke and heat stresses in dementia patients and thus the caregivers need to be more careful to ensure that the victims access suitable temperatures. Although heat should not prevent one from taking a dementia patient to exercises or fun, it is important to note the many factors which expose the seniors to heat-related sicknesses. Heat stroke is deadly, and dehydration worsens dementia symptoms such as dizziness, confusions, and irritability (Miranda-Castillo, 2013, p.43).

The seniors are more vulnerable to dementia as compared to the young people due to various reasons ref. As human beings grow old, the body loses the ability to secrete and regulate the body temperatures ref. The aged people sometimes fail to feel the heat and may overdress. In most instances, the adults with dementia are always underweight or overweight and have problems such as blood pressure and kidney diseases. These conditions increase the risks of

heat-related sicknesses ref. Besides, the skin of old people is thinner and offers less protection from the sun. Certain medications of dementia such as antipsychotic drugs administered to dementia patients often interfere with the body's ability to regulate heat (Sorensen and Conwell, 2011, p.492). Various habits may elevate a senior's risk of sicknesses resulting from heat mainly if such people reside alone. The adults with dementia may shut down the windows and forget to turn on the air conditioners or even forget to drink some water (Miranda-Castillo, 2013, p.43).

The caregivers have a responsibility to ensure that the seniors with dementia stay cool. They should encourage the victims to drink more fluids than usual but advise them to avoid alcohol, tea, and coffee. The caregivers should also ensure that patients remain indoors during the hottest times of the day that is usually from 11 a.m. to 4 p.m (Tsaroucha et al., 2013, p.30). Those driving should park close to the entrances of buildings to avoid walking long in the hot sun. The caregivers should ensure that whenever adults with dementia take a walk, they always rest in a calm and shady spot (Tsaroucha et al., 2013, p.30).

The seniors are advised to take light meals and should avoid using stoves if possible ref. Additionally, it is the responsibility of the caregivers to closely monitor their dementia sufferers as this helps them in establishing when such people are becoming overheated thus taking appropriate actions. It is also vital to keep bedding of seniors light and clean, mainly when they are bedridden. A bed frame also assists in the circulation of air beneath the bed (Tsaroucha et al., 2013, p.32). All the above measures ensure that adults with dementia overcome overheating hence minimizing the risks of worsening the disease.

Access to the Toilets

Many older adults avoid traveling and social interactions because public toilets are scarce and sometimes inaccessible ref. Moreover, where public washrooms are available, the facilities are poorly designed, and signage precludes free use especially for persons living with dementia. Some of the common problems for people living with dementia include urinary incontinence and fecal difficulties, and these are common at moderate to severe stages (Thielke et al., 2012, p.480).

There exists a gap between the present public provisions of toilets and toilet designs suitable for individuals with dementia, who usually portray changes in behaviour, reduced levels of motivation, manual dexterity and loss of mobility, or aberrations in visual processing of information ref. Many guidelines have been drafted aimed at informing and improving the design and independent usability of public toilets for seniors with dementia. For instance, the use of familiar or automatic flush systems, good lighting, sinks that do not look similar to urinals, non-reflective surfaces, well-labeled soap dispensers and taps, and the careful positioning of the mirrors (Thielke et al., 2012, p.481).

However, there is the absence of simple and clear way-out signs which negates any positive influences of well-designed toilet facilities as highlighted by a substantial amount of anecdotal evidence ref. The omissions result in distress, embarrassments, anxieties, and reluctance to utilize toilets in the future. There are some cases where some people have been forced to enter into washrooms of opposite sex to guide the users out, or the users going through the wrong door and sometimes into undesired locations ref. Sometimes a fire exit sign showing a

person running in the direction of the arrow is easily misunderstood as an exit sign, and this often results in misdirecting people to wrong places (Thielke et al., 2012, p.482).

Dementia patients are some of the people with the highest need of quickly spotting, and using of public toilets due to their weak bladder ref. However, such victims often face enormous challenges in doing so due to poor design of public restrooms. These impacts the capability or desirability of maintaining activities like attending social gatherings, going for shopping hence resulting in social segregation, loneliness, and loss of independence. The caregivers of the seniors living with dementia experience the impacts because they cannot leave dementia patients at home on their own (Thielke et al., 2012, p.482).

It is essential to adopt proper building techniques such as the appropriate placing of exit signs as this will significantly benefit everybody, not necessarily the dementia patients only ref. Professionals need to pressurize the private and public bodies to construct toilets which meet the required standards. The process will make it easier for dementia patients to access the washrooms because they often lose the control of their bladder and bowels. Caregivers should advise the seniors with dementia to visit the restrooms after every one or two hours because sometimes the victims may even forget about visiting the toilets (Thielke et al., 2012, p.483).

CHAPTER THREE

Pain Management

Currently, an approximate population of 35 million are suffering from dementia, of whom 50% experience frequent pains (good statistic but how did you know this? Ref). The

patients with vascular dementia tend to receive little attention in research ref. Studies show vascular dementia is extremely painful ref. The limited use of pain medications imparts pain in dementia patients who reside in nursing homes ref. Patients with the mixed form of dementia receiving opioids as means of relieving pain show increased pain intensities more than in non-dementia patients receiving the same treatment (Achtenberg, 2013, p.1471). Additionally, the adults with mixed forms of dementia are more vulnerable to other types of diseases (Bray et al., 2015, p.29). As a result, they have a lower opioid tolerance.

International research on epidemiology pointed out that aged people in general, and especially those who have dementia tend to get fewer pain medications than non-dementia sufferers ref. The low pain medication dosage appears to take place consistently in residential, nursing homes and hospitals ref. There are studies which have noted that many residential homes overuse analgesics, especially paracetamols and this stresses the clinical challenges and uncertainties in pain assessment in the people with dementia ref. When patients with dementia are prescribed pain medications, the drugs are usually of low dosage, and products such as opioids which are used as medications for severe pains are avoided ref. For example, dementia patients with hip fractures obtain significantly lower opioids medication before and after surgical operations ref. In cases involving opioids prescriptions, only one-third of the dose is prescribed as compared to the amount used in healthy persons (Achtenberg, 2013, p.1471).

Evidence shows that patients in advanced stages of dementia express pain through demonstrating a challenging behaviour ref. As a consequence, various studies have been conducted to investigate the merits of medications for both response and pain on minimizing the symptoms associated with pain (reference the studies. Ref). Studies show that behavioural

medicines which target pain are effective in pain elimination and signs related to behaviours in people with dementia ref. Five randomized control trials (RCTs) have been in use since 2003 in investigating the treatment effect on pain intensity and behavioural signs in adults with dementia ref. The RCT studies show the existence of a significant relationship between agitation improvements and pain improvements as the primary therapeutic factor (Achtenberg, 2013, p.1471).

Communication Difficulties

Difficulties in communication are some of the earliest signs of dementia ref. The difficulties present themselves in various ways such as challenges in finding exact words, comprehension problems, anxieties and disorientation seen in adults with dementia. The people living with dementia exhibit a combination of language discrepancies and cognitive deficits such as loss of memory, poor judgments, abstraction, and insights ref. As a result of these deficits, the communication of adults with dementia becomes complicated which in turn leads to the establishment of disruptive behaviours (Paquay et al., 2017, p.286). According to research, 67% of adults with dementia in the United Kingdom live in residential and nursing homes ref. Effective means of communication between the people with dementia and the caregivers have a significant effect on the behaviour and well-being of the victims (Vasse et al., 2010, p.189).

Tom Kitwood's book, "person-centered care approach" highlights the importance of communication between the dementia patients and the caregivers. According to Kitwood, interaction takes place between two people, where one person makes an action and the second one responds to that action, and then the first person reflects on the feedback given. When interacting with an adult with dementia, the process of communication becomes more

complicated such that people portray inhibited inabilities in stating their intentions (Kitson et al., 2013, p.5). Sometimes the seniors with dementia rationally assume the persons they are communicating with already knows what they want and often end up in an altered emotional state. According to Kitwood, proper communication with a dementia patient needs substantial resources from the caregiver. Kitwood likens the interaction process to that of a tennis coach presented with the responsibility of maintaining a rally with a novice.

There is a considerable amount of literature which addresses the methods of training healthcare givers in person-centered care. However, the most significant limitation is that such documentation fails to pay attention to specific techniques of communication. A study conducted on communication between the dementia patients and the caregivers pointed speech characteristics like 'elder speak' and vocal tone control as the leading causes of resistance in adults with dementia. Effective communication in nursing homes is essential because it helps the nurses to understand the emotional and cognitive needs of the patients. The healthcare workers should be trained on the proper techniques of communication such as the use of short sentences as this helps in minimizing depressions and increases communicative behaviour in people living with dementia (Kitson et al., 2013, p.7).

Therapeutic Interventions for Dementia Patients and Family

Cognitive symptoms are core in defining dementia and interventions which target them have undergone several studies ref. Some effective interventions for healthcare workers of adults with dementia have been developed and tested by various researchers. Some of these include psychoeducational interventions, family support groups, and family counseling interventions (Müller, 2017, p.139). The family support program for healthcare workers of Alzheimer's

disease is typical and advocated by many groups. These open-ended groups are led professionally or through peers and offers emotional support to the families. Through engaging in these groups, the participants get an opportunity to learn new information, and many of them have reported higher levels of satisfaction (Müller, 2017, p.139).

The psychoeducational programs offer an extensive skill which assists the caregivers in the management of the common challenges associated with the patients with dementia. In RCTs, psychoeducational interventions have been found to eliminate emotional distress, the depressive signs of the caregivers and a sense of burden (Knifton et al., 2014, p.20). A classic example of a useful psychoeducational intervention for Alzheimer's disease has been established and undergone several tests in an RCT. The caregivers attended several problem-solving conferences in which they learned management of troublesome behaviours of Alzheimer's disease patients. The nurses could also access crisis intervention services which helped them in solving urgent problems. The study found out that the caregivers who received the interventions showed lower levels of stress and were healthier as compared to the ones who did not attend the sessions (Müller, 2017, p.140). Furthermore, the research found that, Alzheimer's disease patients cared for by healthcare workers involved in the intervention programs had a prolonged lifespan than those who were in the control group.

The psychoeducational interventions for dementia patients and the caregivers have proved useful in improving the emotional and physical health of the victims and healthcare workers ref. Therefore, it is important to provide education and support to caregivers who will utilize the knowledge gained in caring for the adults with dementia. Effective communication is core in cultivating effective psychoeducational interventions and should be cultured between the

healthcare givers and the dementia patients (Müller, 2017, p.140). Person-centered communication (PCC) approach to dementia care was developed by Tom Kitwood, a psychology lecturer at Bradford University. He wrote a book "Dementia Reconsidered: The Person Comes First" in 1997 which explores the personhood concept, and this gave guidelines to thought leaders, policy makers and service planners on the best practices and interventions towards dementia patients. (how does this contribute to Therapeutic interventions?)

The Role of a Mental Health Nurse in the Care of a Dementia Patient

The community mental health nurse is also known as the community psychiatrist nurse (CPN) and is responsible for the care and support of people with mental health challenges. Some of the cognitive deficiencies within the ambit of the CPN include dementia, anxieties, depressions and psychotic illnesses ref. The mental health nurse performs medical examinations to establish the problems facing a patient and comes up with means of assisting that particular person. A CPN is responsible for offering care for victims with acute conditions. The nurse is expected to build strong relationships and respond accordingly to the emotional and physical health needs of adults with dementia (Willemse et al., 2015, p.404).

A community mental health nurse administers treatments and effective medications to people with dementia ref. The professional is expected to monitor patients with mental problems in the community and prescribe appropriate drugs ref. Besides drug prescription, the nurse may suggest practical ways which would be of great help to adults with dementia such as the use of dementia clocks and assistive technology. The specialist deals with particular signs and symptoms of dementia, de-escalate stressful situations and help the people living with dementia to overcome their challenges (Griffiths et al., 2015, p.1395). A CPN interacts with the families of

the patients and other healthcare staff, and in the process, they offer advice and share information on the conditions of the patients. The nurses also prepare and maintain the medical health records of dementia patients, and this helps to produce care plans and risk assessments ref. A community mental health nurse also organizes group therapy programs, including artistic and social events with an objective of promoting the psychological recovery of the victims (Willemse et al., 2015, p.408). A mental health nurse needs to be versatile, energetic, compassionate and perceptive to cope with the demands of the patients.

Conclusion

This literature review shows that dementia is an irreversible disability which causes cognitive impairments. It is a term used to refers to a collection of symptoms which develop when the brain cells stop functioning properly. According to WHO dementia is a syndrome resulting from a brain disease which interrupts proper execution of cognitive functions such as thinking, judgment, comprehension, orientation, learning, memorization, and calculations. The disease is characterized by various symptoms such as loss of memory, comprehension problems, confusions, forgetfulness, challenges in speaking and understanding concepts. Statistics indicate that alzheimer's disease is the main cause of dementia inter alia.

Significant memory loss makes it impossible for dementia sufferers to take care of themselves and their day-to-day affairs. Because of this inability, caregivers have the responsibility to provide those essential needs to ensure good health and well-being. The literature review also reveals that, to meet the physical and emotional needs of dementia patients, which could eliminate or minimize their challenging and sometimes disruptive behaviour, it is important to meet the food and nutrition, shelter/housing and access to washroom needs. It is

also essential that attention is paid to the sexual needs and sexual behaviour of dementia sufferers. Maintenance of appropriate body and room temperatures and good hydration are essential to good health and well-being.

Memory loss, communication difficulties and forgetfulness make it difficult to communicate pain and other discomforts and inconveniences. Difficulty in communication is one of the earliest symptoms of the onset of dementia. According to statistics, 35 million people have dementia globally (this stastic is outdated, 2010), of which half of this population experience severe pains. Untreated pain may manifest in agitation, distress, frustration, challenging and disruptive behaviour. Effective pain management, dealing with communication difficulties (healthcare workers need to adopt proper interaction strategies such as the use of short sentences as this helps in minimizing distress and cultivates communicative behaviour among the victims with dementia) and therapeutic interventions for dementia patients and families that make important contributions to the health and well-being of patients.

The ability to identify and meet the relevant needs of adults with dementia is critical to maintaining a good quality of life, health and well-being. These needs should be assessed, identified and met in the spirit of non-discrimination and genuine and valid consent in order to create an environment that is supportive and therapeutic.

Recommendations

Adults with dementia require informed and special care, and thus I recommend that victims relocate to nursing homes. This is because the quality and standard of care offered in such homes is much higher than in one's own home. Regular physical exercises are also suitable for dementia patients since it refreshes the mind. The physical exercises keep the mind alert, and

this eases the degree of execution of cognitive functions such as thinking, comprehension, calculations, memorization, and judgment which appear to be sophisticated for adults with dementia. I would also recommend that the caregivers should ensure that dementia patients have a balanced diet and enough fluids in every meal. The balanced diet should contain proteins, carbohydrates, and vitamins in adequate proportions. The designing and construction of public toilets should be done in a manner that makes such facilities accessible and easy for use amongst all the people and especially those with dementia. The drugs prescribed to dementia patients should not hinder the body's ability to regulate heat because heat adversely affects adults with dementia.

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