



Title of Degree Thesis: Use of Aromatherapy for older People Living in Institutions, Contributing to Quality of Life.

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Förnamn Efternamn

DEGREE THESIS	
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Title:	Use of Aromatherapy for older people living in Institutions, Contributing to Quality of Life
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<p>Abstract:</p> <p>The aim of this thesis is to find out through use of books, literature reviews, articles and journals, if aromatherapy can be used to treat or manage mood disorders such as: anxiety, depression, stress .In this thesis the author attempted to use Maslow's behavioral theory to shade more light that behavior whether pleasant or unpleasant is a result of unmet needs. An attempt was made to answer the following research questions :(1)What effects has aromatherapy in reducing mood disorders such as: anxiety, stress, depression in elderly clients suffering from dementia and thereby increasing quality of life? (2) Can aromatherapy be used as a non-drug therapy for certain mood disorders or ailments's?(3)How safe is aromatherapy?The method: used in this thesis was qualitative literature review.My choice of methodology is humanistic, to improve quality of life of elderly clients suffering from dementia. Result obtained includes: evidence that aromatherapy is widely used. That the world health organization supports the use of traditional medicine.</p>	
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OPINNÄYTE	
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Koulutusohjelma:	Ihmisen vanheneminen ja vanhusten palvelut.
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Tekijä:	Joy Karjalainen
Työn nimi:	Käyttää aromaterapiaa hallitsemaan yleisiä mielialahäiriöitä kuten: levottomuutta, masentuneisuutta ja stressiä vanhuksilla jotka sairastavat dementiaa ja asuvat hoitolaitoksissa, sekä parantamaan heidän elämänlaatuansa.
Työn ohjaaja (Arcada):	Sundell Solveig
Toimeksiantaja:	Kustaankartano
<p>Tiivistelmä:</p> <p>Tarkoitus tällä opinnäytteellä on löytää hyväksi käyttämällä kirjoja, kirjallisuutta, lehtiartikkeleita ja journalistiikkaa voidaanko aromaterapiaa käyttää hoitamaan tai hallitsemaan mielialahäiriöitä kuten levottomuutta, masentuneisuutta ja stressiä. Tässä opinnäytteessä tekstin kirjoittaja yritti käyttää Maslowin käyttäytymisteoriaa valottaakseen että käyttäytyminen olipa se miellyttävää tai epämiellyttävää se on tulosta tapaamattomista tarpeista. Yrityksellä oli tarkoitus vastata seuraaviin tutkimuksen kysymyksiin: (1) Voidaanko aromaterapiaa käyttää vähentämään mielialahäiriöitä kuten: levottomuutta, stressiä, masentuneisuutta vanhuksilla jotka sairastavat dementiaa ja toisaalta parantamaan elämänlaatua? (2) Voidaanko aromaterapiaa käyttää lääkkeettömissä terapioissa joihinkin mielialahäiriöihin tai vaivoihin? (3) Kuinka turvallista aromaterapia on? Menetelmä: Minun valintani menetelmäksi on humanistinen, elämänlaadun parantaminen vanhuksilla jotka sairastavat dementiaa. Tulosten saaminen sisältää: todisteita että aromaterapiaa käytetään viisaasti. Että maailman terveys järjestö tukee perinteisten lääkkeiden käyttöä.</p>	
Avainsanat:	levottomuus, stressi, masentuneisuus, aromaterapia
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FOREWORD

I will like to use this opportunity to thank my Husband who's love and endless encouragements brought me this far. Thank you Jukka Karjalainen. I love you.

Your love and support is unquantifiable and unmeasurable.

I also wish to thank my sister Shola Dillon and will like to say to her 'what would I have done without you'?

This thesis is a product of my hard work so I dedicate it to myself.

I also use this opportunity to thank my supervisor Sundell Solveig for been so patient and tireless in her guidance.

I will also like to thank the library staffs of the Arcada University of Applied Sciences, for their efficiency, helpfulness, friendliness and patience and endless support during the writing of this thesis.

1.1 **Introduction.**

This survey seeks to examine ways in which aromatherapy can be used as a complimentary alternative drug therapy for managing, certain generally occurring mood disorder's like anxiety, depression and stress, associated with elderly people suffering from memory impairment's such as dementia.

According to Cox et al (1999) dementia and related disorders are diagnosed on the presence of cognitive impairment's, these incudes' a variety of behavioural disturbance's such as stress, anxiety, aggression etc.

The origin of aromatherapy can be traced to hundreds of years ago, and since then it has been evolving in use. From being used on trial and error base's ,now some aspects of aromatherapy has been perfected that the efficacy and usefulness of aromatherapy is beginning to receive international recognition's all over the world.

The world health organization has recently in (2002-2005) launched a complimentary alternative medicine strategy to look into the widespread use of aromatherapy by both orthodox and un-orthodox medical practitioners all over the world.

According to Van der Watt and Janca (2008),The use of CAM in the treatment of people with mental health problems in the western world has prompted much debate. They were of the opinion that aromatherapy is one of the fastest growing CAM therapies.

According to WHO traditional medicine is widely used and of rapidly growing health system and economic importance.

In Africa up to 80% of the population use traditional medicine to help meet their health care needs. In Asia and Latin America, population continue to use traditional medicine as a result of historical circumstances and cultural beliefs.

In China traditional medicine accounts for 40% of all health care delivered. And in many developed countries CAM is becoming more and more popular.

The treatment using aromatherapy is holistic in approach which means it combines aromatherapy often with massage, exercises, diet, relaxation etc. But my paper will focus on the role aromatherapy plays in treatments of certain ailments commonly associated with behavioural problems in elderly people suffering from dementia.

1.1.1 Definition of concepts.

CAM: Complementary alternative medicine. (www.WHO.com)

Aromatherapy: A form of alternative and complementary medicine based on the use of very concentrated 'essential' oils from the root of plants with healing properties. Www.allnaturalprevention.com.

It can also be defined as the use of fragrance's to affect or alter a person's moods or behaviour

Olfaction: The sense of smell, part of the chemical sensing system, or the chemosenses. Sensory cells in the nose, mouth, and throat have a role in helping interpret smells and taste flavour's. Microscopic molecules released by substances (foods, flowers, etc.) stimulate these sensory cells. Once the cells detect the molecules they send messages to the brain, where the smell is identified.

Aroma: A quality that can be perceived by the olfactory sense. Www.aromas.com/articles.

Essential oils: Are aromatic liquids derived from shrubs, flowers, trees, herbs, seeds and bushes. Www.allnaturalprevention.com

Stimulation: is the action of various segments (stimuli) on nerves, muscles or sensory end organ, by which activity is evoked, especially the nervous impulse produced by various agents on nerves, or a sensory end organ, by which the part connected with the nerve is thrown into a state of activity. Www.en.wikipedia.org/wiki/stimulation.

Odour: The property of a substance that gives it a characteristic scent or smell. Www.thefreedictionary.com/odour.

Mood disorder: A group of mental disorders involving a disturbance of mood, along with either a full or partial excessively happy (manic) or extremely sad (depressive) syndrome not caused by any other physical or mental disorder. Mood refers to a prolonged emotion.[www.medical-dictionary.com/mood disorder](http://www.medical-dictionary.com/mood-disorder).

Anxiety: is a multisystem response to a perceived threat or danger, it reflects a combination of biochemical changes in the body, the patient's personal history and memory, and the social situation.

www.medical-dictionary.com/anxiety.

Aggression: behaviour leading to self-assertion; it may arise from innate drives and/or a response to frustration, and may be manifested by destructive and attacking behaviour, by hostility and obstructionism, or by self-expressive drive to mastery.
[Www.mediterms.com](http://www.mediterms.com).

Depression: Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration.
www.who.int/mental_health/management/depression/definition.

Stress: Is the body's reaction to a change that requires physical, mental, or emotional adjustments or responses. Stress can come from any situation or thought that you feel frustrated, angry, and nervous or angry.www.mediterms.com.

1.1.2 Theoretical Framework.

My thesis will be based on theories of the philosophical points of views of:

Abraham Maslow's motivation and learning need's theory which is one of the most popular holistic oriented motivation theories and according to Maslow: needs formed the foundation of humanistic psychology.

Maslow's theory of human behaviour is based on these universal needs which serves as a primary influence on behaviour, as needs arises, tension either pleasant or unpleasant develops, which motivates behaviours Blattner (1981:22).

Most dementia patients go from communicating excessively to withholding communication altogether which on its own is a form of communicating; even silence can mean an urgent unmet need. Any change in the way a person communicates whether from been irritated, agitated or even angry to been excessively quite and withdrawn is still a form of communication. Oliver(2008:5).

As Rho et al (2006) stated, the most frequently occurring mood disorders in elderly people are depression, anxiety

,and mood fluctuation.

According to Donaghy et al (2008 :7), 'Avoidance is repeated and as a consequence anxiety is repeatedly reduced, the learnt behaviour becomes established'. She further establishes in her book that in behaviour therapy, the feared response has to be unlearned.

The author feels that knowledge of Maslow's theory can be used to combat maladaptive behaviours by been able to anticipate a need or desire of a client and taking care of that need .Most maladaptive behaviours like agitation, aggression have external causes could be for example pain, hormonal problems, emotional problems etc.

The specific content of thoughts is likely to be related to specific disorders, the content of thought is likely to be related to personal psychological threat or danger. Donaghy(2008:6).

The assumption we hold about the world and others help's to guide our response's to situations and to behave in ways that are adaptive to our environment .Donaghy (2008:6).

The author feels that this response can be managed be application of aromatherapy to either counter balance this behaviour or to prevent it.

The author feels that the calming effect of aromatherapy compounds makes them suitable for changing moods or diverting attention, from an unpleasant memory to pleasant memories or feelings.

In support of using complimentary medicines to reduce chronic drug therapies Van Der Watt and Janca, quoted a survey carried out by Perry and Perry (2006) where they found that lavender or Melissa oil can be used for agitation in dementia and it compared favourably with the use of commonly prescribed anti-psychotic drugs.

According to WHO(2002-2005), life expectancy level increase in the first world countries has resulted in more patients developing serious diseases like mental disorders ,cancers and other age related illnesses and CAM offers a gentler means of managing such disease's than allopathic medicine.

According to Van Der Watt and Janca, effects of essential oils are not necessarily linked to the aromas alone, but it is an intervention to threat body, soul and spirit.

This brings to the authors mind that these compounds that make up essential oils also have medicinal values which can be beneficial to treatments of certain disorders.

1.1.3 Purpose of the Survey.

The importance of this survey is in contributing to quality of life of elderly clients by helping to alleviate their wellbeing and wellness in general, by reducing stress, agitation, anxiety, inducing positive responses in their behaviour's to situation's.

It also will aim to highlight the usefulness and safety of aromatherapy, in mental health care, by reviewing some researches and books which deal with aromatherapy, wellness, communication and dementia etc.

And relating these to Maslow's theory of human behaviour: 'Is based on these universal needs which serves as a primary influences on behaviour, as needs arises ,tension either pleasant or unpleasant develop's which motivates behaviour's'.

With these in mind, the author will attempt to answer the following research question's:

(1)What effects does aromatherapy in reducing mood disorders such as: anxiety, stress, depression in elderly people suffering from dementia and thereby increasing their quality of life?

(2). Can aromatherapy be used as a non- drug therapy for certain mood disorder's or ailment's?

(3) How safe is aromatherapy?

1.1.4 Methodology and Research Plan.

The planned methodology involves the use of literature reviews, articles and books of other researcher's.

The advantage of using literature review in my study is because most literatures that deal with mood disorders like anxiety, depression, stress etc have a philosophical and also medical approach to reporting the benefits of aromatherapy on this mood problem's.

My choice of methodology is humanistic, to improve quality of life of elderly clients suffering from dementia.

According to Bowling (1997b:355), the key themes and concepts are identified in the transcript and these are categorized. A frequency count of the number of issues and views are expressed by type and is undertaking, taking into account the none verbal behavior.

One of the disadvantages of using literature reviews is the lack of relevant research in the area of aromatherapy and one of the disadvantages of using content analyses is the possibility of error's associated with interpretation's.

1.1.5 Data Collection.

Data was collected by searching through databases like EBSCO, Alkens, Arcada university of applied science library, Metropolia and and public libraries like Töölöön library located in Finland as well as use of Google and websites of organization's involved in Elderly care and healthcare.

The literatures and books were categorized under the following headlines and core concepts: efficacy, safety, uses, maladaptive behaviour's, limitation's etc. Hence it is going to be a qualitative literature review.

Most of the study did refute themselves by concluding that aromatherapy is effective in managing certain mood disorders, even though all the results were not obtained under the same circumstance's the results were still relatively same.

Literature were categorized according to content, and sorted under headings such as anxiety, stress depression, communication and drug therapy etc Literature were selected on the basis of scientific proofs such as experiment's, and books and journal were limited to nursing journals in healthcare and therapy.

Analyses of data: was done by analysing statement's, citations and paragraph's in relation to evidence given or cited by the researchers of the materials. Statements were then grouped using similarity of words, situation's dealing with the areas of interest and divided further into subareas and then a coding system was developed.

The group of statement were analysed and interpreted based on common sense reasoning, and statements from the study of the other authors were analysed according to their subject areas.

The advantage of using this kind of method to analyse my data is because it reduces the occurrences of errors that comes by trying to re-interpreted other authors statement's leading to faulty logic as stated below by Bowling.

There are many bias and errors as listed by Bowling (1997b:135),but the most important and relevant to my research is assumption (conceptual bias)she defined it as error arising from the faulty logic of the investigator, which leads to faulty conceptualization of the research problems, faulty interpretations and conclusions

The disadvantage of using this kind of data analyses is the possibility that the authors of the studies used may themselves have made, some conceptual errors, during their investigation and research interpretation and conclusion.

Collection of material: literature studies :My Search criteria was limited to articles written in English, nursing journals and articles, abstracts and books which have a

humanistic and psychological, social approach to caring for dementia patients, and dealing with cognitive impairment's, behavioural therapies and communication.

Data was then categorized based on relevance to research goals. Content of material was differentiated based on topic and elderly care.

It also included studies which use varying research methods, randomised controlled or uncontrolled trials, interventions, regimes and reported successful outcomes with the use of aromatherapy.

The literatures was then analysed by use of qualitative literature analyses by extracting objective contents and patterns in text, sentences and paragraphs and associating social and psychological indexes in a scientific manner .e.g relating stress, ,anxiety to mood and state of wellbeing. Hence a sub-category was developed under the following headlines: stress, anxiety and depression total of 22 materials were used,and of this 13 were books,6 were journals and three were articles..

1.1.6 Presentation of List of Materials.

1	Bowling,Ann.1991a, <i>Measuring Health: A review of Quality of Life Measurement Scales</i> . Open University Press. Buckingham. Second Edition	The author is currently a professor of Health service ´research in the department of primary care and population science, university college of London. The book measuring health is a review of disease specific quality of life measuring scale. The book uses both quantitative and qualitative methods to measure the quality of life of people living with various health challenges. It also provides a theoretical framework to issues related to quality if life.
2	Bowling,Ann.1997b, <i>Research Methods in Health, investigating health and health</i>	Use of quantitave research that involved sampling and methods, hypothesis testing, experiments, and use of descriptive analytical

	services. Open University Press Buckingham, Philadelphia.	methods. The book provides an overview of a range of research methods used in investigation of health and health services.
3	Bell ,Judith.1987, <i>Doing your Research Project</i> . Open University Press Milton Keynes .Philadelphia.	This book provides information about research methodologies and theoretical orientation needed to do a research correctly. It is a step by step guide on how a research can be carried out. It highlights the different stages involved in doing a proper research. It covers areas from formulating a research question to structuring the research and how to measure the validity and reliability of the research.
4	Blattner,Barbara.1981, <i>Holistic Nursing</i> .Prentice -Hall inc. Englewood Cliffs ,N.J.07632.	This book provides an in-depth use of various nursing and holistic care theories and how they can be put into practice, using various methods of holistic care. It deals with care as comprising of body, soul and spirit to contribute to wellbeing. It uses various theories to shade more light on the use of non -pharmacological interventions such as meditation, exercise etc and their contribution to wellbeing.
5	Bond, John & Lynne, Corner.2004, <i>Quality of Life and Older People</i> . Open University Press McGraw-Hill Education Berkshire England .	Their book shaded more light on definitions and concepts relating to quality of life, How to access quality of life, personal and internal influences that affect quality of life of older people. The book examines the meaning of quality of life in a postmodern world. It also examines the impact of continues personal and social changes in the life's of older people. It draws a range of behavioral and social science knowledge to present a new way of thinking and understanding quality of life

		and older people.
6	Cox,Burns I,& Plant.H.2000, <i>Liesure or Therapeutics?Snoezelen and the Care of Older Persons with Dementia</i> N:International Journal of Nursing. Practice vol 6:Ebsco Academic Search Elite.	It is a scholarly paper that provides the history of multi-sensory work with a variety of client groups. It uses literature review of various studies to shade more light on use of snoezeleen. Their study involved use of controlled group experiment. It also uses of various evaluation instruments.
7	Dewing ,Jan.2010, <i>Respondig to Agitation in People with Dementia</i> . Volume 22, Number 6.	The author is head of person centered research and practice development. It focuses on non-pharmacological interventions as part of treatment for agitated behavior in elderly people in order to provide a more person centered care. The article held nurses to broaden their understanding of agitation ,it's causes including trigger factors in the environment.
8	Donaghy,Maria,Maggie,Nicol,Davidson,Kate.2008, <i>Cognitive-Behaviour Interventions in: Physiotherapy and Occupational Therapy</i> . Butterworth Heinemann Elsevier	This book is an evidence approach which provides a model of cognitive behavioral interventions in the practice of physiotherapy and occupational therapy.it provides a theoretical framework on the application of cognitive behavioral therapy. It uses case studies to highlight the boundaries of cognitive behavioral therapy
9	Downie, R.S & Telfer, Elizabeth.1980, <i>Caring and Curing</i> .Mathuen Limited ,London and New York	The aim of this book is to provide a philosophical view of caring to care professionals. It uses meta physical view on the meaning of human life. It also uses experimental methods such as quantitative research to investigate the nature of values and value judgment.

10	Farrer-Halls, Gill.2005, <i>Aromatherapy Bible</i> , A definitive guide to using essential oils. A Gods field Book.	This book looks into the different ways of using essential oils to manage various ailments and symptoms. It is a definitive guide to use of aromatherapy. It is a health and fitness guide to heal body, soul and spirit. It includes remedies that can be used to manage depression, agitation; stress etc. It uses some literature review to share some philosophical theories relating to care.
11	Kang-Ming Chang & Chuh-Wei Shen.2011. <i>Aromatherapy Benefits Autonomic Nervous System Regulation for Elementary School Faculty in Taiwan</i> . Hindawi Publishing Corperation, Volume 2011	The method was an experimental method using subjects from different elementary schools in Taiwan. The experimental group included one controlled group and one uncontrolled group. Parameters such as blood pressure, average heart beats. The result was that there was a significant change in all the physiological parameters of the subgroup's which were treated using aromatherapy.
12	Kirk Jerome & Miller, Marc .L.1986, <i>Reliability and Validity in Qualitative Research</i> . Sage Publication Inc	The aim of this book is to minimize jargons, make analytical premises visible in research. It elaborates on the use of qualitative and quantitative research and the intellectual ground where they stand. The result shows the overlap and inter lap of quantitative and qualitative research.
13	Lejonqvist, Gun-Britt.2009, <i>Scientific Theory , Research Methods and Research Ethics 2</i> .Arcada university of Applied Sciences,Blackboard Learniny Systems.	This study shows how different research process can be used. It also highlights some different theories that govern research. It compares qualitative and quantitative research methods. It also shades some light on scientific methods and general knowledge. It also provides an over view on mal-practices and plagiarism and good scientific practices in Arcada university of

		applied sciences.
14	Lubinski,Rosemary.1995, <i>Dementia and Communication</i> . Singular Publication Group San Diego, London.	This book focuses on the neuro behavioral deficit of communication impairments associated with dementia. It provides intervention strategies for both audiology speech language pathology. It also addresses the need of education on age related dementing diseases.
15	Maddock,Wendy s& Jenny, Wilkinson.2004, <i>Aromatherapy Practice in Nursing:Literature Review N:Journal of Advanced Nursing</i> .Blacwell Publication Ltd.48(1)93-103.Ebsco Academic Search Elite.	The aim of the paper reports literature relating to use of aromatherapy by nurses and critically evaluates the evidence to support the practice. The method was qualitative literature reviews searched from data bases like EBSCO,CINAHL,MANTIS etc. The results found out that popularity of aromatherapy has to be balanced against potential risk related to allergies, safety and inappropriate use by in experienced users.
16	Noro,Anja.1997, <i>Long Term Institutional Care among Finnish Elderly Population</i> . Gummerus Kirjapaino Oy	This book focuses on institutional care among Finnish elderly. It uses a quantitative research method to measure the quality of life of elderly people who are in long term care in institutions.
17	Oliver,James.2008, <i>Contented Dementia</i> ,CPI Mackays,Chatham,MES 8TD,United Kingdom.	The author is a clinical psychologist, author and broadcaster. This book provides a practical guide to managing dementia, that will allow both the suffer and career to maintain the highest possible quality of life. He used life examples and tested methods to shade light on how a demented person relates to situations, how they think and react.
18	Rapley,Mark.2003, <i>Quality of Life Research,A Critical Introduction</i> . Sage	This book use a combination of research methods to compare different views about quality of life.it

	Publication, London. Thousand Oaks. New Delhi.	shows a deeper appreciation of relationship between social scientific studies and quality of life.
19	Rho et al. 2006, <i>Effects of Aromatherapy Massage on Anxiety and Self Esteem in Korean Elderly Women N: A pilot Study</i> . Intern Journal of Neuroscience. 116:1447-1455 Ebsco Academic Search Elite.	The study investigated the effects of aromatherapy massage on anxiety and self-esteem in Korean elderly women. The method was quasi-experimental, control group, pretest design was used. Results suggest that aromatherapy massage exerts positive effects on anxiety and self-esteem.
20	Van Der Watt, Gillian & Janca, Aleksandar. 2008, <i>Aromatherapy in Nursing and Mental Healthcare</i> . Contemporary Nurse (2008) 30:69-75. Ebsco Academic Search Elite.	The aim of the paper is to provide a focused review of recent literatures on the use of aromatherapy in nursing and mental health care of people suffering from anxiety and depressive disorders. Method was systematic literature review and results is that aromatherapy is beneficial in mental health care but there is a need for interest in aromatherapy to grow so as to prompt more research into the area.
21	VanDerWeert Julia, C.M., Alexandra. Van Dulman, M. Van, Peter, M.M. Jozien Spreuwenberg, Bensen .M. 2004, <i>Nursing Assistants Behaviour During Morning Care, Effects of Implementation of Snoezelen, Integrated in 24 -hour Dementia Care N: Journal of Advanced Nursing</i> . Blackwell Publication Ltd.	The aim of the paper is to report an investigation of the effects of the implementation of snoezelen or multi-sensory stimulation on the quality of nursing assistant behavior during morning care. Method was a quasi-experimental pre and posttest design was implemented in 12 wards for older mentally infirm patients at six nursing homes. The result showed a statistically significant increase in positive person work and decrease in malignant social psychology after

		implementation of snoezeleen.
22	World Health Organization.2002-2005, <i>Traditionl Medicine Strategy</i> . World Health Organization Geneva.	The aim of this research is to investigate the regional diversity in the use and role of traditional medicine, complimentary alternative medicine. It uses quantitative research method to measure the percentage of use of traditional medicine all over the world. It concluded that traditional medicine is very widely used and has been used for generations. It also develops a guideline to the laws governing the use of traditional medicine and patient safety.

Table 1

1.1.7 Background and Choice of Study Problem.

The reason for choosing this area of survey is the seemingly un-ending maladaptive behaviour's exhibited by elderly clients in dementia home's and the need for the author to find alternative means of dealing with these problems of maladjustments.

According to a pilot study carried out by Rho et al, which study examined the effects of aromatherapy massage on anxiety and self-esteem in Korean elderly women. In their study, they went ahead to show how aromatherapy can be used to reduce stress and stress related behaviours like anxiety and agitation

In another study carried out by Dawing (2010), looked at ways of responding to agitation in people with dementia. In his study he went ahead to try to prove that behaviour is a form of communicating an unmet need.

The author feels that, limitation in communication skills of elderly people suffering from dementia, often results in frustration on the part of the client who really wants to communicate his need's but finds himself limited by word's and thus resorts to behaviours that are considered uncooperative.

In another study carried out by Van Der Watt and Janca ,in their survey titled, aromatherapy in nursing and mental health. The aim of their study was to provide a more focused review of recent literatures on the use of aromatherapy in nursing and mental healthcare of people suffering from anxiety and depressive disorders.

If mood disorders in dementia clients can be managed effectively by use of complimentary alternative medicine, it will result in a more patient oriented care, and will work positively both for caregivers and elderly clients. It will result in a calmer friendlier environment and also remove some barriers in communication between the clients and care givers.

; Anxiety, agitation, dementia, stress, safety, therapy.

1.1.8 Ethical Considerations.

Proper citing and referencing of all author's was be adopted. No plagiarism was practiced.

Most professional bodies such as those representing the different branches of medicine and social sciences have developed a code of ethics for carrying out research Bowling (1997b:139)

According Lenjoqvist (2009) in scientific theory, research methods and research ethics 2 ,while describing violations of good scientific practice said that insufficient or incorrect referencing of sources in written work, incorrect interpretation of result's, use of language expression's that could cause harm or suffering to person or party subject of the research are all violations of good scientific practice. She also stated some principles to observe and the author of this thesis did observe principles of non-malevolence (not causing damage) and principles of trustfulness and honesty were observed. Proper citing and referencing of other people's work was adopted,

The author did not use any language or expression that could cause harm to others; all languages were scientific, expressive and straight to the point.

1.1.9 Implications of the Survey for working Life.

The importance of this survey is in contributing to quality of life of elderly clients by helping to alleviate their well-being and wellness in general, by reducing stress, depression ,anxiety, inducing positive response's.

The author feels that, if mood disorder's (like those mentioned above) in dementia clients can be managed effectively by use of aromatherapy, it will result in a more patient oriented care, and will work positively for elderly client's.

It will result in a calmer friendlier environment and also remove some barriers in communication between the clients and others.

2.0 Mode of Application of Essential oil.

Olfaction: The sense of smell, part of the chemical sensing system, or the chemosenses. Sensory cells in the nose, mouth, and throat have a role in helping interpret smells and taste flavour's. Microscopic molecules released by substances (foods, flowers, etc.)

stimulate these sensory cells. Once the cells detect the molecules they send messages to the brain, where the smell is identified (www.aroma.com/odour).

On the skin: Essential oils can be used on the skin as a lotion, soap, or in combination with massage. This is often picked up by the motor neurons on the skin and sent into the blood and in turn into the brain and subsequently to areas where they are needed. Aromatherapy bath, wear mood perfumes created from subtle meditative essential oils. Sprinkle oil into tissue, burners vaporise the essential oil effectively, but gradually. Also room spray or oil with massage. Gill Farrar -Halls (2009:220-221)

Inhalation: The drawing of air or other substances into the lungs.

2.1 Theoretical Framework: Theoretical Perspective Theory and Concepts.

In this section the author will attempt to use Maslow's theory of human behaviour which is based on universal needs which serves as a primary influence on behaviour: as needs arise, tension either pleasant or unpleasant develops, which motivates behaviour's.

With this theory in mind the author will attempt to answer the research question: What effect does aromatherapy have in reducing mood disorders such as: anxiety, stress, depression in elderly clients suffering from dementia?

2.1.1 History and Pre-understanding of Aromatherapy

Aromatherapy is a form of alternative and complementary medicine based on the use of very concentrated 'essential' oils from the root of plants with healing properties'.

Aromatherapy was originally considered an ancient religious practice. And trial and error was the mode with which aromatherapy was practiced. It has been in existence for nearly one thousand years and the term aromatherapy is a recently adopted term.

Early civilization also discovered that burning twigs and leaves from certain plants could produce interesting effects.

Some of these smoky aromas made people drowsy, while others cured ailments. Some stimulated the senses and a few gave rise to mystical, religious experiences Farrer-Halls(2009).

The Chinese culture were the first to use plant extract for wellbeing and their practice involved burning incense to create balance and wellbeing.(www.aromaweb.com).

Later Egyptians invented rudimentary distillation machines that allowed for the crude extraction of cedar wood oil, it is also thought by some that Persia and India may also have invented crude distillation machines but little is known.(www.aromaweb.com).

The Greek learned a great deal from the Egyptian's but the Greek mythology apparently credited the

Gift and knowledge of perfumes to the god's. Hippocrates commonly called the father of medicine practiced fumigation for both aromatic and medicinal benefits.

A major event for the distillation of essential oil came with the invention of coiled cooling pipes in the eleventh century. Within the 12th century an Abbess of Germany named Hildegard grew and distilled lavender for its medicinal properties' (www.aromaweb.com).

By the 16th one could start purchasing essential oils as a 'apothecary' and by the 17th century perfume was considered an art form.

In 1920's a French chemist Rene Gattefosse, experimented with essential oils and realized their great healing potentials. After burning his hand in a laboratory experiment, dipped his hands into lavender oil and the miraculous effect of healing he got prompted further researches into aromatherapy, hence the word aromatherapy was coined in 1928 . Farrer-Halls (2009).

The contemporary practice of modern aromatherapy originated within the last hundred years. Ferrer-Halls.

The world health organization in 2002 launched the traditional medicine strategy between the year 2002-2005 to look at the growing use of non-conventional, traditional complementary and alternative medicine all over the world.

According to Rho et al commercially available essential oils has been in use for hundreds of years and are regularly used for stress management and minor ailments.

Many researches also points to the direction that olfactory stimulation leads to changes or reduction in psychological parameters such as blood pressure ,heart beats, pulses etc.

The use of CAM in the treatment of people with mental health problems in the western world has prompted much debate in the western world among members of the health professionals including mental health nurses . Van Der Watt and Janca .

The main objective of WHO organization through the CAM strategy is to provide a framework for the use, efficacy, safety and quality of aromatherapy.

2.1.2 History and Pre-understanding of Dementia.

Dementia” is a word we got from a French physician named Philippe Pinel.

The word dementia derives from the Latin words Dis meaning 'away' and men's meaning 'mind' first used in the 18th century Oliver (2008:7).

Today the word dementia indicates a person having cognitive impairment significant enough to interfere with daily functioning and describes one of more than 48 types of these diseases in the brain.

The commonest dementia known as Alzheimer's affect 4% of all retired people and fifth of over 85's.

All forms of dementia result from the dysfunction or death of large numbers of neurons in the brain. The human brain is a very complex and intricate machine, and many factors can interfere with its functioning.

There is an increasing awareness of the need for basic and applied research into the brain related diseases and disorders and this awareness became more intense in the 1990's than ever before and that decade was declared the '**decade of the brain**' Lubinski (1997:2).

One of the reasons that dementia stands out as a major health and societal problem is the increasing number of older individual's in industrialized countries' that suffer from dementia Lubinski (1997:2).

In Finland in 1991 those aged 65 years accounted for 13.6% of the population of Finland, and this percentage is estimated to rise to 16.7% by 2010 Noro (1998).

As of 2009, about 6000 people die from dementia including Alzheimer's yearly in Finland (www.stat.fi).

In plain language, people with dementia are often using past experiences to make sense of the present Oliver (2008:4).

It referred to the mental deterioration and idiocy caused by the death of the brain tissues Oliver (2008:7).

In the absence of new information which they have not been storing they (dementia patients) naturally search for past situations to provide them with a context Oliver (2008:4).

According to Oliver (2008:5) quoted 'make a present of the past' signifying how dementia suffers can be made to live in the present like as they have lived in the past like nothing has changed.

Researchers have uncovered many of these factors, but they have not yet been able to fit these puzzle pieces together in order to form a complete picture of how dementias develop (www.stanford.edu/d)

2.1.3 Concept of Quality of Life.

In 1990's following the rapid growth of the ageing population in Britain and other countries lead to a dramatic increase in the academic and professional interest in gerontology.

By 1970's and 1980's there was a steady increase in the publications of research studies which attempted to define and describe the characteristics and needs of older people.

The term quality of life began to be in use in 1960's and was mostly attributed to the social indicators Land (2000) cited by Rapley (2003:5).

The phrase 'quality of life' is now widely used both in academic and everyday life. It is one of those taken for granted terms, of which we think we know the meaning Bond and Corner (2004:1).

Quality of life as defined by WHO is: happiness, life-satisfaction, wellbeing, self-satisfaction, freedom from want, objective functioning, a state of complete physical, mental and social well-being not merely the absence of disease WHO (1991).

Quality of life can be seen as a dynamic interaction between the external conditions of an individual's life and the internal perception of these conditions Noro (1997:23).

The author feels that Noro's perception of quality of life closely related with how individuals even those suffering from memory disorders like dementia still somehow perceive their state of wellness, from indices such as absence of anxiety, pain, agitation, depression, hunger and etc and in fact the author feels that, all these negative feelings such as anxiety, agitation ,stress etc exhibited by those suffering from memory disorders like dementia is a response or a way of showing that they are dissatisfied about something in their condition or life in general.

While there exist several ways of measuring quality of life, few indicators attempt to measure patients perception's of improvement or satisfaction with the level of performance,yet this element is responsible for predicting whether individuals seek care, accept treatment and consider themselves to be well. Bowling(1997b:7).

Determining the quality of life remains problematic as said by Bond and Corner (2004:8),they further stated that 'we would probably all agree that a high quality of life is better than a low one'

The preference satisfaction theory holds that good life consist in the satisfaction of desires and preferences, with what is good being understood as people getting what they want and prefer with a minimal number of unsatisfied needs Rapley (2003:22) .

The author will like to relate this notion to indexes of measurement of quality of life stated by WHO organization as constituting quality of life were as :physical health ,psychological state , level of independence, social relationship, and their relations to the salient features in their environment are all interrelated, but that not all these aspects of life must be a hundred per cent satisfactory before a person can be classified as having a good quality of life. Some aspects might be lacking while others are fully fulfilled. WHO (1990).

The definition of quality of life benefits from comprehensiveness and efforts to relate the idea to cultural, social and environmental context and to local value systems Rapley (2003:50).

While a plethora of quantitative tools exist which operationalize and attempts to

measure aspects of quality of life which are regarded as pertinent to health status ,such as satisfaction, well-being and morale, functional ability, social interaction, stress and psychiatric disturbances attempts to combine them into a single tool has been less successful Bowling(1997b:8).

According to Rapley (2003:50), it is however unclear how quality of life....as an individual's perception of their position in life 'or a subjective evaluation cannot be simply equated with mental state'.

The author feels that this statement is trying to describe how to evaluate the quality of life of those suffering from mental disorders eg dementia, and the author supports Rapleys quotes because the author through experience with working in institutional homes has seen that a person can be said to have a good quality of life despite their mental wellbeing, if the other parameters such as psychological wellbeing, social wellbeing, physical health etc are in adequate order of wellness.

Improving a person's quality of life may increase his or her sense of wellbeing or may not Raply(2002:222)

This is a very contradictory statement, but Rapley's argument was that the intention to increase a person's wellness might be accepted or rejected and this in turn determines how satisfied a person will feel about their quality of life.

According to Bond and Corner (2004:17),'that health is an important aspect of older people's lives cannot be disputed'. Hence the author believes that keeping the elderly in good health should be an ultimate goal in improving or contributing to their quality of life.

Using aromatherapy to improve the quality of life of the elderly may be an end to a means, but it does not necessary guarantee that all who receive aromatherapy will enjoy a heightened quality of life that they did before, but the author feels at this point, that this is a source to improve quality of life of the elderly and should not be overlooked, because of the benefits of aromatherapy on the mental state, physical wellbeing, social wellbeing etc of elderly clients.

The author is of the opinion that aromatherapy can offer an alternative activity for elderly in institutional settings because of the use of the brain, senses of smells, memory

activity involved in enjoying aromatherapy is on its own an activity, that can contribute to the quality of life of older people suffering from memory problems like dementia.

2.1.4 Use of Aromatherapy for Anxiety Management.

Anxiety is defined as a multi-system response to a perceived threat or danger, it reflects a combination of biochemical changes in the body, the patient's personal history and memory, and the social situation (www.mediterms.com/anxiety).

This adds more credit to Maslow's theory of human behaviour which is based on an inversely needs which serves as a primary influences on behaviour, 'as needs arises ,tension either pleasant or unpleasant develops, which motivates behaviours'.

The author feels that the negativity talked about in the definition of anxiety can also correlate with Maslow's behavioural theory, supporting the fact that negative response can be directly caused by negative feelings, such as threat or danger.

Dewing Stated that: older people are especially susceptible to incongruence created by an environment that is unfamiliar, this may result in negative psychosocial outcomes such as anxiety and agitation cited by (Hall and Buckwalter 1987,Chang-Ming and Chuh-Wei 2011).

When people feel anxious or experience stress, heart rate and sympathetic activity will increase together with parasympathetic activity Marita et al as cited by Ming and Chuh-Wei .

Stevenson (1994) found that neroli oil reduced anxiety in patients in her randomized control trail on 100 post cardiac surgery patients.

Inhaling lavender or Melissa essential oils has been found to reduce some symptoms associated with dementia, especially restlessness. Cox et al, cited by Maddock et al(2004) in a nursing journal using various literature review's.

Van Der Watt and Janca, cited a clinical trial by Edge(2003)which studied the effects of aromatherapy on people with a primary diagnoses of anxiety and depression. The

result showed a reduction in anxiety and improved mood in the majority of patients over an 8 months period.

The author feels that the need to use complimentary alternative medicine like aromatherapy will not have arisen in this clinical trial, if the perceived mood of the patients were not interpreted as been unpleasant and resulted in behaviours that now prompted the study.

In a study carried out by Chang-Ming and Chuh-Wei ,the purpose of their survey was to measure aromatherapy benefits on the autonomic nervous system for school teachers in Taiwan, Bergamot essential oil was used for aromatherapy, and sprayed for 10minutes,blood pressure and autonomic nervous system parameters were recorded 5 minutes before and after application of spray, results showed that there were significant decrees in blood pressure, heart rates. The group were now divided into subgroups and there was a high anxiety group and moderate anxiety groups.And aromatherapy was applied to both groups and it was found to reduce anxiety levels for both groups.

Van Der Watt and Janca,cited Wilkinson et al (2007) who evaluated the impact of aromatherapy massage on anxiety and depression in patients with cancer. The study was carried out in four cancer centres and a hospice in the UK where 288 cancer patients with clinical anxiety and or depression were randomly allocated to a four week course of aromatherapy massage or usual supportive care.

Patients receiving the aromatherapy massage experienced a significant improvement in anxiety and depression symptoms for two weeks and this was maintained for 6 weeks.

In pilot study carried out in Korean, by Rho et al, they wanted to find our effects of aromatherapy massage on anxiety and self-esteem in Korean elderly women, the group was divided into experimental group and controlled group each made up of 20 members ,aromatherapy massage using Lavender, Chamomile, Rosemary and lemon was given to the experimental group only for a 6 weeks period with an intervening 1 week break.

Result showed a reduction in anxiety level and improvement in self-esteem for those in the experimental group. But no significant difference in blood pressure or pulse rate was recorded for both groups.

Buchbauer (2004) and Hongratanaworakit, Heuberger et al and Buchbauer (2006), Their study provides some evidence that certain inhaled essential oils may increase alertness and reduce anxiety in addition to assisting relaxation by affecting the autonomic nervous system, Chang-Ming and Chuh -Wei.

Sometimes a sharp, fresh clearing aroma can help shift sadness, peppermint and thyme are invigorating and refreshing nerve tonics and are very stimulating. They can lift your sadness by clearing the mind and emotions. Farrar -Halls (2009:123).

Selecting essential oils that echo's your strengths and positive emotions and helps redress your weakness and negativities deepens your understanding of yourself Farrar -Halls (2009:129)

According to Chang-Ming and Chuh-Wei ,the other factor that may affect aromatherapy performance is the odour of the preferences of different individual's, as subjects like's and dislikes can lead to different result's..

The author feels that to combat negative behaviour's like anxiety in elderly clients suffering from dementia, it will be essential to try to create a positive feeling, through the use of aromatherapy to heightens their alertness like as Farrer Halls said above or to generally distract them from focusing on this negative feeling of anxiety, to focusing on something else such as the memory evoked in their minds when essential oils is used.

The author believes that this will subsequently lead to a more positive response and thus fulfil Maslow's theory by anticipating behaviour one can influence it to be a positive or negative response or pleasant or unpleasant.

2.1.5 Use of Aromatherapy for Stress Management.

Stress: Is the body's reaction to a change that requires physical, mental, or emotional adjustments or responses. Stress can come from any situation or thought that you feel frustrated, angry, nervous or anxious about. (<http://dying.about.com/od/glossary/g/stress>).

Tension and stress are the body reaction to external stress factors. Farrar -Halls (2009:126)

Stress is viewed as the 'nonspecific' response of the body to any demand made upon it. as cited by Blattner (1981:27) when he cited Selye.

Glitz et al (2002) cited by Donaghy et al (2008:45) suggested that a link between the effects of chronic stress, tissue damage and impairment of working memory is evident in depression.

stress starts in the mind and emotions, but swiftly moves into the physical body causing tight muscles, shallow breathing, headaches, insomnia and loss of appetite Farrar -Halls (2009:120)

Inherent in the communication process is the cognitive stimulation of such interaction cognitive stimulation means the availability of and interaction with sensory and interpersonal stimuli Lubunski (1997:258)

The author feels that communication and cognitive changes generate feelings of frustration, agitation, stress, and this was supported by Lubinski when she said...'In an effort to try to hide changes associated with communication problems during dementia, patients experience anxiety and stress'. Lubinski (1997:243).

Lubunski (1997:145) indeed with ageing and dementia, older person's cannot behave in their previously competent manner.

Once embedded in the body, stress must be released physically as well as emotionally and mentally. Farrar -Halls (2009:120).

Many studies have shown that aromatherapy was useful for stress reduction, when limited to spray inhalation Chang-Ming and Chuh-Wei .

Bathing with calming essential oils also releases stress from the mind, emotions and body. Frankincense oil helps deepen your breathing which promotes calm and relaxation Farrar -Halls (2009:121).

According to study carried out by Calogens et al (1988) cited by Donaghy et al (2008:40)They explained that drugs associated with anxiolytic actions ,with anxiogenic properties improve the response within the brain to stress causing hormones by inhibiting or preventing it.

The author feels that it is of common knowledge in the aromatherapy fields of study, that one of the beneficial compounds of aromatherapy herbs and oils is their ant-oxidating and anxiolytic properties that is why they have been used for many years in relaxation therapies.

Early experiences may contribute to the establishment of a set point for stress responses which critically determines the magnitude of our stress response as an adult. Charney (2003) as quoted by Donaghy et al (2008:40).

The author feels that treatment is the modification of dysfunctional attitudes to break the cycle of negative autonomic thoughts, assumptions and reduce and finally eradicate the learned ,reinforced emotional response.

Donaghy et al (2008:35) also said the action of the hormones is to support body metabolic changes, to support the individual's response to stress. This response can occur even when there is no clear external stressor.

This in turn supports Maslow's behavioural theory which states that ' human behaviour is based on un iversal needs which serves as a primary influence on behaviour!'

This brings to the mind of the author, that since aromatherapy like essential oils effect the nervous system,it might also help in the secretion of certain hormones which might through age related responses are no longer secreted by the body or brain

Considering the body's response to stressful events, be it from memory or other sources is processed within the brain and evokes responses summarized as the fright, fight or flight response, Donaghy et al (2008:35)

According to Donaghy et al (2008:7) learnt behaviour becomes established. She further establishes in her book that in behaviour therapy, the feared response has to be unlearned.

Hypothetically speaking, the author is of the opinion that most people tend to express their inner- most feeling be it physical or emotional are expressed by an outward action, so it is not uncommon to experience dementia patients expressing an unmet need by been aggressive, anxious, depressive, wandering etc.

2.1.6 Use of Aromatherapy for Depression Management.

Depression is a common mental disorder that is present with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration

From the world of depression, it can be seen that once a dysfunctional assumption is activated negative automatic thoughts are associated with negative emotions such as depression and anxiety. Donaghy et al(2008:6).

Elderly individuals with dementia do communicate differently and this is more susceptible to social breakdowns that occur Lubinski (1997:145)

Memories associated with positive feelings in older people with dementia. This can also enable people to interact and connect with objects. He went farther to say that an added benefit is that people are also more likely to engage to some level with an activity or occupation, said by Dewing

According to Dimal et al (2001) cited by Donaghy et al (2008:45) Loss of neurons in areas of the brain important to mood and motivation lead to the classic symptoms of depression, this can also be linked to the definition of depression.

The more we expect of those with dementia the more opportunities we provide for positive behavior's to occur Lubiski (1997:147)

The author feels that the use of aromatherapy as an intervention is that is intended to prevent the elderly client's communication weakness from interfering with clients ability to use other means of communication, to express their needs or inner thoughts.

Since Maslow in his theory gave the option of either 'positive' or 'negative' or as he said it in quotes 'pleasant or unpleasant 'responses, The author feels that aromatherapy can be used to evoke a positive and pleasant response from clients suffering from memory impairment.

The most suitable essential oil in this instance are both sedative and anti-depressant. This includes Roman and German Chamomile, Neroli, Ylang Ylang and sandalwood Farrer -Halls(2008:127).

The most difficult symptom of dementia, to understand is the seemingly lack of ability of the clients to store new information's. Donaghy et al(2008).

And even though some school of thought have it that a person suffering from memory impairment like dementia cannot learn new things, yet the author believes that the already learnt response of the other senses such as the nose, ears etc can be manipulated to give a pleasant response by manipulating the emotions.

If you feel sad, diffusing, uplifting essential oils is one of the best remedies. The nebulous nature of the feelings is counteracted by creating a general atmosphere of uplifting fragrance Farrar -Halls (2009:123)

Bathing with calming essential oils at night promotes relaxation and if the body relaxes before sleep its own healing powers can come into effect Farrar -Halls (2009:127).

Although aromatherapy treatments help the aches and pains of the body of the elderly and are valuable and worthwhile in themselves, old age and decline of the body is often accompanied with fear and loneliness. This means that your company (caregiver), a sympathetic ear and caring attention will be most welcome Farrar -Halls (2009:216)

As Dewing said 'using aspects of familiar environment's such as object from home can stimulate remote memories associated with positive feelings'.

Aromatherapy massage can be effective treatment of menopausal symptoms such as hot flushes, depression and pain in climacteric women Chang-Ming and Chuh Wei .

Bagetta et al examined brain wave spectrum power and found that bergamot essential oil, correlates well with its exocytotic and carrier mediated release of discrete amino acids. Endowed with neurotransmitter function in the mammalian hippocampus. Hang-Ming and Chuh-Wei .Therefore bergamot essential oil are effective for anxiety reduction of mild depression patient.

3. Examining use of Aromatherapy and Chronic Drug Therapies for Elderly Client's.

In this section the author will attempt to answer the questions: **Can aromatherapy be used as a non- drug therapy for certain mood disorders or ailments? And how safe is aromatherapy?**

Aromatherapy is concerned with the psychological physiological and pharmacological effects of essential oils introduced by means of inhalation, olfaction and dermal application.

Aromatherapy has been in existence for as long as medical science was discovered. But it is just gaining popularity as an alternative form of non-drug therapy for the management and cure of certain illnesses or symptoms resulting from illnesses or side effects such as pain etc.

Encouragingly no adverse effects have been reported in the published chemical trails of aromatherapy in mental health,(Cook and Ernst 2000,Perry and Perry 2006),cited by Van Der Watt and Janca.

Essential oil contains chemicals and most require dilution before use. Safety issues are related to inappropriate use, excessive use, accidental ingestion and skin rash in the allergy prone Van Der Watt and Janca(2008).

One of the assumptions of biomedical paradigm, views therapy as consisting of psychochemical interventions on the body machine Blattner (1981:7).

Wilkinson et al (2007) found that aromatherapy is the most widely practiced complimentary therapy within cancer settings in the United Kingdom and was cited by Van Der Watt and Janca(2008).

Dewing stated that Banerjee (2009) highlighted that increasing concerns about the use of anti-psychotic drugs in dementia care, he stressed that anti-psychotic drugs appears to be used too readily and at their likely level of use ,the potential benefits are probably outweighed by their overall risk.

Van Der Watt and Janca, said 'taking psychotic drugs interfere with the survey into how effective aromatherapy is'.

Some practitioners see aromatherapy as a holistic type of intervention which treats soul, spirit and body, while a small number of other groups focus on fragrance compounds and essential oils as medicinal agents Van Der Watt and Janca(2008).

Aromatherapy is the therapeutic use of essential oils form plants. Essential oils can be absorbed into the body via the skin or the olfactory system (Dye 1997,Lavabre 1990,Tisserand 1996) cited by Rho et al .

Chamomile and Lavender odour was irritating and allergic to parts of the subjects used in a clinical trail conducted by Bagetta et al and Chang-Ming and Chuh-Wei .

According to Chang-Ming and Chuh-Wei ,the other factor that may affect aromatherapy performance is the odour preferences of different individual's, as subjects likes and dislikes can lead to different results.

This model of brain activity also predicts a manipulation of the levels of brain chemicals, can also alter the interaction of the components neurones in the brain that change a behaviour and mood can be produced Donaghy et al (2008;34).

In support of using complimentary medicines to reduce chronic drug therapies Van Der Watt and Janca cited a study carried out by Perry and Perry (2006) where they found that lavender or Melissa oil for agitation in dementia compared favourably with the use of commonly prescribed anti-psychotic drugs.

Jenny and wilkinson et al stated that in France medical aromatherapy is also practiced and involves the internal use of essential oils and they were citing Franchomme et al (2001).

They further used survey carried out by lampic et al 1994 to make a point that aromatherapy is primarily used to help cope with anxiety and fear and to support symptom control, rather than as an alternative to conventional treatment.

The author believes that as a cautionary measure ,aromatherapy can be used to replace certain drug therapies but not all and it will work better if used as a supplementary ,combination alternative, because of the lack of evidence on the half-life effects and drug interaction with essential oils in the body organs and blood stream.

4. Overview of World Health Organization and Traditional Alternative Medicine.

According to the World health organization: In some Asian and African countries 80% of the population depend on traditional medicine.

In many developed countries 70% to 80% of the population has used some form of alternative or complimentary medicine eg (acupuncture).

Traditional medicine can treat infections and chronic conditions: new anti-malarial drugs were developed from discovery and isolation of artemisinin from *Artemisia Annua*. A plant used in China for almost 2000 years.

More than 100 countries have regulation for herbal medicine.

Challenges: Traditional medicine has been in use in some communities for thousands of years. As traditional medicine practices are adopted by new populations there are challenges:

(1) **International Diversity:** Traditional medicine practice have been adopted in different cultures and regions without the parallel advance of international standards and methods for evaluation.

(2) **National policy and regulations:** Not many countries have national policies for traditional medicine. And regulating traditional medicine products, practices and practitioner's is difficult due to variations in definition and categorization of traditional medicine therapies

(3) **Safety, Effectiveness and Quality:** Scientific evidence from test done to evaluate the safety and effectiveness of traditional medicine products and practices is limited. Requirements and methods for survey and evaluation are complex. The safety, effectiveness and quality of finished herbal products depends on quality of their source materials(which include hundreds of natural constituents)

(4) **Knowledge and sustainability:** Herbal materials for products are collected from wild plants populations and cultivated medicinal plants. The expanding herbal products market could drive over-harvesting of plant and threaten bio-diversity.

(5) **Patient safety and use:** Traditional medicine and practices can cause harmful, adverse reactions, if the product or therapy is of poor quality or is taken inappropriately in conjunction with other medicines. The WHO and it's member state's co-operate to promote the use of traditional medicine for health care.

The co-collaboration is to :(a) Support and integrate traditional medicine into national health systems in combination with natural policies and regulations of products.

(b) Ensure the use of safe, effective and quality products and practices, based on available evidence.

© Acknowledge traditional medicine as part of primary healthcare, to increase access to care and preserve knowledge and resources.

(d) Ensure patient safety, by upgrading the skills and knowledge of traditional medicine providers.

5. Discussion and Conclusion.

The reason for choosing this area of study is the seemingly un-ending maladaptive behaviour's exhibited by elderly clients in dementia homes and the need for the author to find alternative means of dealing with these problems of maladjustments.

The goal of aromatherapy in this thesis is to stop the negative thinking and behavioural rituals and evoke pleasant memories, through smell or relief from sickness and symptoms.

This relief in turn, leads to a better perception of self, life's situation and leads to a more positive response to one's environment.

The first study question was (1) What effect does aromatherapy have in reducing mood disorders such as: anxiety, stress, depression in elderly clients suffering from dementia and thereby increasing quality of life?

According to Abraham Maslow's motivation and learning needs theory which is one of the most popular holistic oriented motivation theories and according to Maslow: needs formed the foundation of humanistic psychology.

Maslow's theory of human behaviour is based on these unmet needs which serves as a primary influence on behaviour, as needs arise, tension either pleasant or unpleasant develops, which motivates behaviours.

Understanding human behaviour forms a psychological framework to understanding how to communicate with others.

Being able to anticipate one's response to situations, environment etc can form a good basis to recognizing the triggers of maladaptive behaviours in mental health.

Hypothetically speaking the author feels, most people tend to express their innermost feelings be it physical or emotional are expressed by an outward action, so it is not uncommon to experience dementia patients expressing an unmet need by being aggressive, anxious, depressive, wandering etc.

Most human actions are a form of communication, and the reduction in the ability of dementia patients to communicate properly often results in misdiagnosis of a problem, and some find themselves with lots of unmet needs and wants.

The use of aromatherapy as an intervention to behavioural patterns can help individuals re-establish or develop a new habit. The author feels that this can be one of the most effective ways of communicating with dementia patients, who due to the ailment have difficulties retaining new information's.

Communication serves as an important vehicle for expressing emotions, sharing memories, interacting socially, developing a supportive and responsiveness to the physical and human environment and maintaining body awareness for activities for daily living.

Patient's self-esteem and dignity are promoted by creating a communication environment that fosters adult exchange at the patient's functional level. Lubinski (1997:243).

Recreating memories of the past can be a very effective means of communication according to the authors own point of view

From the author's personal experience as a worker in dementia home in an institutional setting. Patients suffering from cognitive impairments have fewer opportunities to demonstrate any skills, the motivation to participate in activities decline's and individual's realize at some level that they are no longer in control of their own behaviour or any part of the environment.

Use of aromatherapy is to arouse stored up memories and using this familiar stored up memories to get a positive response from the patients, creating an interaction between the mind and body.

The author, do believe that aromatherapy can be used to replace certain drug therapies but not all and it will work better if used as a supplementary ,combination or alternative, because of the lack of evidence on the half-life effects and drug interaction with essential oils in the body organs and blood stream. So addressing the second and third

questions of the study which was (2) can aromatherapy be used as a non-drug therapy for certain mood disorders or ailments? (3) How safe is aromatherapy.

The author is torn in-between a yes and a maybe, and hence it is not yet conclusive on this matter.

Van Der Watt and Janca, said taking psychotic drugs interfere with the study into how effective aromatherapy is.

From the evidences mentioned in this thesis it is apparent that aromatherapy does offer some promising result in the management of maladaptive behaviours such as :stress depression ,agitation ,anxiety and can be used as a complimentary mode of medication as compared to psychotropic drugs.

Even the World health organization has created a strategy that recognizes the benefits of traditional medicine of which inclusively is aromatherapy. The WHO is as a part of healthcare trying to increase access to care and preserve knowledge as well as resources involved in the provision of herbal medicines. And as said by Blattner below:

Holistic living can assist you in upgrading your health performance and wellbeing; it is healing for whole person, body, soul and spirit.

Aromatherapy is a treatment with major and relevant, but un-explored potential in the field of chemical psychiatry Van Der Watt and Janca.

The world health organization warns on the safety of complimentary alternative medicine and strives to develop policies that safeguards the customer, but most of these policies are not same all over the world and this might pose as a health risk. And hence this is a challenge in the future development of traditional medicines like aromatherapy.

The author feels that, use of aromatherapy in institutional settings can create a role play by involving group activity that focuses on aroma identification, enjoyment and storytelling that re-voles around that aroma and what memories it arouses in the elderly client.

The author believes that, aromatherapy can be used as a means of dealing with problems associated with problematic behaviours exhibited as a form of communication by creating a role play setting, hence giving some control to the dementia client's to choose

their own aroma's, stimulating their senses, memories, giving an opportunity for them to give their opinions and respecting their choices, this might help to re-in force some locus of control for the individual suffering from dementia.

Although humanistic medicine deals with illness, it focuses on the presence of health in the person who is ill, all illness has a meaning for the individual and part of the role of the helper is to help the person discover the message and the positive value of the illness Blattner (1981:7).

In agreement with the above statement, the author is of the opinion that aromatherapy is not just a relaxation therapy, but a way of creating and adapting, new roles and new outlook to life for the elderly.

Change is beginning to become the integral component of healthcare improvement, to implement change effectively, it is necessary to look at caring from a different perspective and the use of aromatherapy in caring for elderly clients not only contributes to their quality of life, but provides an alternative dimension to care.

Validity of Study.

Theoretical validity is used to measure the reliability and validity of the study. The reliability of the survey cannot be overestimated as the error of theoretical validity must be put into consideration.(Kirk and Miller:1986:28).

As a measure of validity of the study most of the author's who's articles and books were used were professionals in the field of health care ranging from nurses to doctors in the academic field, with years of experience as written in their bibliographies.

The documents were criticized as directed by Bell(1987:55) and the genuity of the documents were determined based on their existing publishers like those nursing journals or the data bases from which they were located as most article were gotten from Arcada data base and no article found through Google or Google scholar was used because of the difficulties associated with proving their authenticity, Articles and

information's gotten directly from the World Health Organizations were trusted because of the status of the organization.

According to Bell(1987:9) 'Reliability like validity is meaningful, only by referring to some theory 'Most of the studies and books used in this survey were selected because of the style of the method used.

Of particular importance were studies that were conducted using surveys, ethnographic styles, experimental styles which contained controlled or uncontrolled groups.

Studies used were from 1980 till 2010 and one obvious factor in those studies was that aromatherapy was tested and it yielded same positive results on mood related behaviours like anxiety, depression, agitation and stress, though a few studies reported allergic reactions on the subjects.

Most of the studies did refute themselves by concluding that aromatherapy is effective in managing certain mood disorders, even though all the results were not obtained under the same circumstance's the results were still relatively same.

Therefore the validity of the use of aromatherapy can be said to be valid to a degree, because according to Kirk and miller (1986:30) Maslow's behavioural theory was tested in my study, which involved use of aromatherapy to manage mood related behaviours that have other underlying causes other than what is visible in the client.

The intension of this study, though was not to prove Maslow's theory but to use Maslow's theory to prove that behaviour is related to certain needs that are unmet and that aromatherapy for elderly people could be an alternative way of meeting these needs.

Reliability and General Applicability.

The reliability of the text was measured by looking at the different literatures that are talking about same things.eg aromatherapy been used effectively to treat anxiety, the different times that the aromatherapy is used to treat anxiety effectively, written by different author's determines the reliability of the survey to the author.

According to Bell (1987:51) Reliability is the extent to which a test or procedure produces similar results under constant conditions on all occasions. The checking for reliability will come at the stage of question wording.

The authors study reliability is based purely on common sense reasoning, putting into consideration's the facts of my theoretical framework and my findings and linking these to the study goal's.

There are many threats to reliability and validity of an investigation, these are known as biases' and error's in the conceptualization of the study idea. Bowling (1997b:135).

There are many bias and errors as listed by Bowling (1997b:135),but the most important and relevant to my study is assumption (conceptual bias)she defined it as error arising from the faulty logic of the investigator, which leads to faulty conceptualization of the study problems, faulty interpretations and conclusions.

The author feels that a relationship was proven through the help of this study between behaviour, communication and needs and this is in agreement to the statement below.

The relationship between behaviour and communication is undoubtedly obvious and reliability Therefore reliability can be said to be diachronic Kirk and Millar (1986:42).

Some commonly used Essential oils and their Therapeutic Properties.

Lavender: One of the most commonly use essential oil is lavender it is unique in appearance and grows all over the world.it is a perennial bushy shrub, with clean fresh floral top notes and subtle green herbaceous undertones. Many of the properties of lavender is it's ability to balance and normalize body functions and emotions. It is also popular for it's scent and relaxation properties an often is used in non-orthodox ways to combat insomnia.

Therapeuticpropertiesincludes: Analgesic,anti-depressant,antiseptic,ati-vital,degongestant,sadetive ant tonic.

Uses: used for muscular aches and pains, as a bath oil, for relieve of headaches, healing of burns

German Chamomile: Also known as Matric aria Chamomile is an annual herb with delicate feathery leaves and simple like daisies, with white and yellow flowers on single stems. Essential oil from it is ink like and blue in colour. Commonly used in treatment of inflammation and treatment of anxiety that often accompanies painful and inflamed symptoms. It is also soothing and calming and is especially suitable for irritation and depression, and the Roman chamomile can be used in treatment of pain.

Therapeutic Properties: Analgesic,anti-allergenic,anti-inflammetary,antiseptic,anti-spasmodic,anti-viral,duiretic,sadetive.

Uses: Used for relieving stress related conditions, muscular tension, insomnia, promotes relaxation and sleep

Geranium (*pelargonium graveolens*) is an aromatic, perennial, hairy plant with serrated leaves and flowers, varying in colour from light pink to deep rose, magenta or red mostly grown in Asia's, South Africa, Egypt and Morocco.

Therapeutic properties: Anti-depressant, antiseptic astringent,dedorant,duiretic,tonic.

Uses: it is used as an adrenal cortex stimulant, and helps to regulate hormones and moods alike.it is also used to detoxify the lymphatic system and helps to eliminate cellulites.it smells a lot like rose and hence is used for perfume, and skin care manufacturing.it is used in treatment of anxiety associated with nervous debility.

Ylang Ylang (*Cananga odorata*) is a tall ever green with branches that bend low.it produces quantities of large yellow and white flowers. It has an intensely sweet, almony, floral smell, with slightly exotic balsamic undertones.

Therapeutic Properties: Anti-depressant, antiseptic, aphrodisiac, hypotensive and sedative.

Uses: used in reduction of blood pressure, especially those accompanied by palpitations. Treatment of anxiety, shock, for slowing down f rapid breathing. Also used in treatment of depression especially when there is a lot of nervous tension

Rose absolute (*Rosa damascena*)it is a pink flower grown in countries like France, Bulgaria, China etc.it is viscous, varies in colour from brown-red to greeny orange and has deep sweet floral top notes.

Therapeutic properties: sedative anti-depressant, anti-spasmodic, hepatic, uterine

Uses: Helps to comfort the heart especially in times of bereavement, allays anxiety. Treatment of menopausal problems in females, treatment of depression. Used in treatment of mature dry skin,inflammed and sensitive,

Rosemary (*Rosemarinus Officinalis*) is an aromatic perennial shrubby bush with silver green leaves and distinctive, prolific sky blue flowers.

Therapeutic properties: Analgesic, antiseptic, anti-spasmodic, astringent, carminative, diuretic, stimulant etc

Uses: Calms the nerves, strengthens the mind and increases creativity. Used for relaxing tight over worked muscles, relieving fluid retention and detoxifying lymphatic system. When use in a burner rosemary can be used to prevent airborne infections.

Clary sage (*Solvia sclaria*) is a tall biennial or perennial herb with long hairy purple green leaves and prolific, small blue violet or white flowers. Grown in some parts of Europe and America. It has sweet musky herbaceous top notes and also nutty almost floral undertone.

Therapeutic properties: Anti-convulsive, anti-depressant, antispasmodic, digestive, hypotensor, sedative and tonic.

Uses: It can produce an almost drug like narcotic high, it is an anti-depressant, reduces stress, anxiety, chronic general dissatisfaction, melancholia. Can be used with massage to the chest and back to help relieve asthma. Can be used to reduce excessive sweating when used in footbath or with bath.

Melissa (*Melissa officinalis*) also called lemon balm and is a sweet scented perennial bushy herb with green serrated leaves and small white or pink flowers

Therapeutic properties: anti-depressant, anti-spasmodic, anti-viral, bactericidal, sedative, tonic.

Uses: used in treatment of shock, depression, grief, anxiety. Enhances life, gladdens spirit and chases away dark thoughts.

Garlic (*Allium sativum*) it is a strongly scented perennial herb with long flat green leaves small white flowers and a bulb of compacted cloves. It has an unmistakable powerful odour.

Therapeutic properties: Antibiotics, antiseptic, anti-toxic, anti-viral, expectorant, diuretic, fungicidal, stomachic, tonic.

Uses: lowers cholesterol levels, fights infections, may protect against heart diseases, treatment of many urinary infections and respiratory infections.

Citrus (Citrus Bergamia) The bergamot tree was originally grown only in Italy. It produces small citrus fruits that ripen from green to yellow, but the fruit is inedible because it is sour. It is the finest fruit essential oil and is expressed from the peel of the nearly ripe fruit.

Therapeutic properties: Analgesic, antiseptic, antidepressant, carminative, deodorant, sedative, tonic, stomachic

Uses: treatment of depression, urinary tract infections, cystitis. It is a powerful disinfectant for the urinary system. Sufferers of cystitis get anxiety and tension as a symptom and a local wash with bergamot calms the nerves and relieves symptoms. It is used in the relief of depression, sadness and grief.

Gill Farrer Halls (2005:2-115).

GLOSSARY OF THERAPEUTIC TERM'S.

Anti-allergenic-relieves and reduces the symptoms of allergies

Analgesic-relieves or diminishes pain

Anti-bacterial-prevents the growth of or destroys bacteria

Anti-depressant-uplifts and counteracts depression

Anti-rheumatic-relieves or reduces symptoms of rheumatism

Anti-spasmodic-Relieves spasm, and cramps of smooth muscles

Anti-Toxic-counteracts poisoning

Anti-viral-inhibits the growth of viruses

Astringent-contracts and tightens tissues

Bacterial-prevents the growth of or destroys bacteria.

Carminative-settles the digestion, eases gripes and relieves flatulence

Cephalic-stimulates and clears the mind

Decongestant-relieves and reduces congestion especially mucus

Deodorant counteracts body odours.

Depurative -purifies and cleanses the blood

Detoxifying-helps to eliminate toxins from the body

Digestive-aids the digestion of food

Diuretic-increases the production of excretion and urine

Fungicidal-resist or destroys fungal infections

Haemostatic-helps to stop bleeding

Hepatic-liver tonic stimulates and aids liver functions

Immune stimulant-stimulates the function of the immune system

Laxative-aids in bowel evacuation

Sedative -calms and reduces nervousness, distress and agitation

Stomach-tonic of the stomach, aids digestion

Volatile-evaporates quickly and easily from liquid

Vulnerary-promotes the healing of wounds and prevents tissue degeneration.

References.

Www.allnaturalprevention.com 23.8.2011.

Www.aromas.com/articles/history12.8.2011.

Bowling,Ann.1991a,*Measuring Health:A review of Quality of Life Measurement Scales*.Open University Press.Buckingham.Second Edition,159pages.

Bowling,Ann.1997b,*Research Methods in Health,investigating health and health services*.Open University Press Buckingham,Philadelphia. 431Pages.

Bell ,Judith.1987,*Doing your Research Project*.Open University Press Milton Keynes .Philadelphia.142pages.

Blattner,Barbara.1981,*Holistic Nursing*.Prentice -Hall inc. Englewood Cliffs ,N.J.07632.501pages.

Bond,John & Lynne, Corner.2004,*Quality of Life and Older People*.Open University Press McGraw-Hill Education Berkshire England .131pages.

Cox,Burns I,& Plant.H.2000,*Liesure or Therapeutics?Snoezelen and the Care of Older Persons with Dementia* N:International Journal of Nursing. Practice vol 6:Ebsco Academic Search Elite,Accessed 10.7.2011.

Dewing ,Jan.2010,*Respondig to Agitation in Peope with Dementia*.Volume 22,Number 6.

Donaghy,Maria,Maggie,Nicol,Davidson,Kate.2008,*Cognitive-Behaviour Interventions in: Pysiotherapy and Occupational Therapy*.Butterworth Heinemann Elsevier. 175pages.

Downie, R.S & Telfer, Elizabeth.1980,*Caring and Curing*.Mathuen Limited ,London and New York .168pages.

Www.en.wikipedia.org/wiki/stimulation 28.82011

Farrer-Halls,Gill.2005,*Aromatherapy Bible*,A definitive guide to using essential oils.A Godsfield Book.400pages.

Kang-Ming Chang & Chuh-Wei Shen.2011.*Aromatherapy Benefits Autonomic Nervous System Regulation for Elementary School Faculty in Taiwan*.Hindawi Publishing Corporation,Volume 2011.

Kirk Jerome & Miller,Marc .L.1986,*Reliability and Validity in Qualitative Research*. Sage Publication Inc. 85pages.

Lejonqvist,Gun-Britt.2009,*Scientific Theory , Research Methods and Research Ethics* 2.Arcada university of Applied Sciences,Blackboard Learning Systems.Accessed 10.7.2011.

Lubinski,Rosemary.1995, *Dementia and Communication*.Singular Publication Group San Diego,London. 299Pages.

Maddock,Wendy s& Jenny, Wilkinson.2004,*Aromatherapy Practice in Nursing:Literature Review N:Journal of Advanced Nursing*.Blacwell Publication Ltd.48(1)93-103.Accessed:Ebsco Academic Search Elite 2.8.2011.

Www.mediterms.com.23.8.2011.

www.medical-dictionary:the free dictionary.com/anxiety 23.8.2011.

Noro,Anja.1997,*Long Term Institutional Care among Finnish Elderly Population*. Gummerus Kirjapaino Oy. 365Pages.

Oliver,James.2008,*Contented Dementia*,CPI Mackays,Chatham,MES 8TD,United Kigdom. 286Pages.

Rapley,Mark.2003,*Quality of Life Research,A Critical Introduction*.Sage Publication,London.Thousand Oaks. New Delhi. 285pages.

Rho et al. 2006,*Effects of Aromatherapy Massage on Anxiety and Self Esteem in Korean Eldery Women N: A pilot Study*.Intern Journal of Neuroscience.116:1447-1455 Ebsco Academic Search Elite.Accessed 10.6.2011.

Www.stanford.edu/d 23.8.2011.

[Www.stat.fi/till/kyyst/2009](http://www.stat.fi/till/kyyst/2009) 23.8.2011

[Www.thefreedictionary.com/odour](http://www.thefreedictionary.com/odour) 23.8.2011.

Van Der Watt, Gillian & Janca, Aleksandar. 2008, *Aromatherapy in Nursing and Mental Healthcare*. Contemporary Nurse (2008) 30:69-75. Ebsco Academic Search Elite, Accessed 20.8.2011.

VanDerWeert Julia, C.M., Alexandra. VanDulman. M. Van, Peter, M.M. Jozien Spreuwenberg, Bensen .M. 2004, *Nursing Assistants Behaviour During Morning Care, Effects of Implementation of Snoezelen, Integrated in 24 -hour Dementia Care* N: Journal of Advanced Nursing. Blackwell Publication Ltd.

World Health Organization. 2002-2005, *Traditional Medicine Strategy*. World Health Organization Geneva. 10.8.2011.

[Www.who.int/mediacentre/factsheets](http://www.who.int/mediacentre/factsheets) 23.9.2011.

www.who.int/mental_health/management/depression/definition 23.8.2011.

List of Tables

Table 1, presentation of Materials.

