A literature review of the origins of depression in older persons

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Introduction

The incidence of depression among 662 older persons in Macau community was found to be 12.37 percent (Ning, Esteves, Lin, & Qu, 2001). A further large-scale study identified that the incidence of depression among 2039 community-dwelling older persons was 10.4 percent (Macau Social Welfare Bureau, 2006). Yet, another study found that the incidence of depression was 53.1 percent for 367 older persons in day centres care (Li, Li, Liu, Qiu, & Zeng, 2003). These depression rates of Macau’s older persons, particularly the latter, appear high, when compared to that of 10 percent to 15 percent of the population over 65 in UK (Ebersole & Hess, 2001), 15 percent to 20 percent of older persons in USA (Schmittker, 2005), 26 percent of 162 Chinese elderly migrants living in community in Auckland (Abbott, Wong, Giles, Young, & Au, 2003), and 19.1 percent among 1087 representative community older persons in Hong Kong (Chou & Chi, 2005). Depression has been described as the commonest and the most reversible mental health problem in old age (Chen & Jiang, 2000; Ebersole & Hess, 2001; Lueckennotte, 2000). Unfortunately, in primary health care it is frequently under-detected and usually untreated (Wong et al., 2006).

In the light of the high prevalence of depression among older persons, often under-recognised and under-treated, attention must turn to better understanding the phenomenon of depression in older age. In order to establish the present state of relevant knowledge, published research based on western literature is now reviewed. This review of literature seeks to provide an overview on the origins of depression in older persons.

The Origins of Depression in Older Persons

The origins of depression in older persons get involves in various kinds of complex reasons. There are different explanations for various theories. A number of factors have been found to be associated with depression, including biologic, physiologic, psychologic, and social perspectives (Walker, 2008). While theories on depression related to the general population are applicable to older persons, the elderly are vulnerable for a range of reasons. Depression is a disorder that affects thoughts, emotions and the physical body, encompassing all aspects of the human experience. Just as there are a number of theoretical schools in mental health, so there are a number of different ways to construct the disorder as outlined below. It is important to highlight at the outset that the ‘cognitive school’ has been prominent in recent years. Some of the problems experienced during depression include decreased lingual complexity, paucity of thought, reduced motivation, memory and concentration issues as well as a selective bias toward negative autobiographical events. Depression is often considered to be characterized by an ‘inaccurate’ cognitive style among other elements (Kuyken & Brewin, 1999). It is thought that many depressed older people have negative cognitive styles, negative ways of thinking and retrieving knowledge and memories, and all these negative cognitive styles are associated with a more chronic course of depression. Self-blame and self-criticism are cognitions common to many depressives. This is also true of intrusive negative memories. Most depressed older people experience highly specific intrusive memories concerning illness, death in the family, episodes of personal illness and assaults, relationship problems and rows (Kuyken & Brewin, 1999). It is believed that the onset of depression can trigger certain internal information-holding structures.
called schemas. These schemas represent specific information in the brain and it has been considered that the onset of depression could trigger a ‘self-as-worthless’ schema and this may then maintain the depression while the episode worsens (Kuyken & Brewin, 1999).

In recent years, late life depression was often found to be associated with biological changes (Fava, 2003). As with all mental illnesses, biological explanations and implications have been eagerly sought from the scientific world, and this includes both health professionals hoping to use their knowledge to better understand the biochemical basis of the illness, and patient groups seeking to move the responsibility for the illness to biological complications beyond the patient’s control. There has been much debate over recent years with regard to compartmentalizing aspects that are mental and those that are biological. Depression is, first and foremost, a biopsychosocial disorder and, as such, all three elements are crucial in its genesis, natural history and treatment.

Biologic Origins of Depression in Older Persons

Mental illnesses have strong biological elements because fundamental concepts of the experience of depression are represented using the biological apparatus inside the brain. Much of this apparatus and the way it works are still largely undiscovered in the early twenty-first century but what we do know is that the different constituents of the brain and the body are intimately linked with. Depression is represented not only by apathy, despair, hopelessness and sadness but also by those physical problems of sleep difficulties, weight fluctuations, psychomotor retardation and somatic complaints.

A number of factors, including stress, genetic predisposition, social networks and life experience, interact to determine vulnerability to mood. In particular, the physiology of stress has received attention with regard to depression. Carpenter, Tyrka and McDougle (2004) concludes that the number of synaptic connections between neurons decreases while ageing. There was considerable evidence for changes in brain structure with ageing. Brain volume decreased with ageing but cerebral spinal fluid volume increased (Kendler, Kuhn, & Prescott, 2004). Davidson et al. (1980) found significant elevated platelet monoamine oxidase (MAO) activity, which might further reduce central nervous system’s norepinephrine activity, in the older persons with depression. The limbic brain is a command post that receives information from different parts of the body. It responds by regulating the body’s physiological balance and maintaining homeostasis (internal biological stability). It essentially processes information in order to ensure our survival. When something stressful occurs, processes in the brain activate what is known as the hypothalamic pituitary axis (HPA). Age is positively associated with basal plasma cortisol concentration (Rinne, Kloet, & Wouters, 2002). The hypothalamus, a constituent of this HPA, will act via the pituitary gland with the result that abnormally high levels of a stress hormone called cortisol is circulated around the body. This abnormal secretion can be beneficial in coping with immediate stressors but prolonged secretion can lead to problems with the immune system and depression. This endocrine arousal can be driven by feelings of chronic uncertainty and helplessness and the usually precise hypothalamic regulation of cortisol is impaired in many people with depression. Indeed, high levels of cortisol are related to more severe depressions (Brown, Varghese, & McEwan, 2004).

Exposure of the HPA to stress leads to decreased glucocorticoid receptor density in the hippocampus and the prefrontal cortex, an important area of the brain involved in planning and complex cognitive behaviours. This is possibly due to the chronic over secretion of cortisol, which is important because decreased hippocampal volume has been found in depression (Penza, Heim, & Nemeroff, 2003). Regarding these lower hippocampal volumes in patients with depression, studies suggest that this volume reduction may happen early in the course of depression or even precede the onset of the disorder.
An age-related decrease in the activity and density of noradrenergic neurons in the central nervous system may play a key role in the increased basal level of cortisol of older persons and thus, in turn, account for the association between age and plasma cortisol responding to yohimbine and alpha-2 antagonist (Penninx et al., 1998). Furthermore, Miller, Spencer, McEwen, and Stein (1993) announced that the thyroid-stimulating hormone (TSH) response to thyroid-releasing hormone (TRH) had been found to decrease in older men with increasing age. Hypothyroidism alone could cause all the symptoms of depression (Mondimore, 2006). Patients could experience slowed thinking, a decreased energy level, and memory problems in addition to depressed mood which, sometimes, is of a suicidal proportion. Therefore some impairment in the thyroid axis, analogous to that described as the HPA axis, may present.

The role of certain genes has also been explored in the recent medical literature, and a functional difference in a gene known as the 5 HTT gene was found to moderate the influence of stressful life events on depression. People with one variant of this gene appeared with more depressive symptoms, diagnosable depression and suicidal ideation in comparison to those with another variant. This has been taken as evidence for a gene/environment interaction where people with the unhealthier gene variant will be more likely to develop depression in the presence of stressful or difficult life events (Walker, 2008).

**Phyisologic Origins of Depression in Older Persons**

One source of stress of particular importance among the elderly is medical illness and its associated functional limitations. Medical illness is closely associated with depression, contributing to both the emergence and persistence of depressive symptoms (Kocsis, 1998; Lyness, King, Cox, Yoediono, & Caine, 1999). Medical illness and consequent physical disabilities frequently rob individuals of the ability to pursue goals and engage in preferred activities (Rovner & Casten, 2002; Vali & Walkup, 1998). Among elders with physical disability and/or visual impairment, the loss of usual activities such as watching TV, reading, driving, walking, exercise, engaging in hobbies, and physical activities or routines are commonly reported (Rovner & Casten, 2002). Such changes constitute a major loss, leading to demoralization, low self-esteem, and diminished self-efficacy (Bandura, 1982; Rovner & Casten, 2002). Further, these changes often take place in close proximity with other major life events (such as retirement, interpersonal loss, and reduced income) that may also diminish individual autonomy and compound vulnerability to depressive syndromes. The association between poor health and depression appears to be stronger for men and for those aged 75 and over than for women and younger old people (aged 65-74 years). Poor health, loss of mobility and depression were linked with loneliness and social isolation (Cattan, 2002). Subjective measures of ill-health like pain, or self-rating of overall healthiness and well-being, were more strongly related to depression than were more objective measures of illness or disability like the number of chronic diseases or the degree of functional limitation (Beekman, Kriegsman, & Deeg, 1995). Nearly a third of older people with four or more medical problems are depressed, compared with 1 in 20 of those without a significant illness (Kennedy, Kelman, & Thomas, 1990), and the frequency of depression occurring among patients with poor physical health attending their general practitioner is twice that of healthy older people (Evans & Katona, 1993). Perceived health status and osteoarthritis were significant predictors of depression among Taiwanese institutionalised older persons (Tsai, Chung, Wong, & Huang, 2005). Eating problems and sleep problems were found to be significant predictors of depression in older adult (Cuijpers, Beekman, Smit, & Deeg, 2006).

Various theories have been advanced to describe the interactions between physiological and psychosocial factors in patients suffering from both
medical illnesses and depressive symptoms. The interaction between depression and medical illness appears to be bidirectional. Depression increases the risk for medical illness, and illness pathology in turn increases the risk for depression (MacMahon & Lip, 2002). Medical illness, as Lyness and colleagues (1996) have noted, is “the most consistently identified factor associated with the presence of late life depression and is the most powerful predictor of poor depressive outcome” (Lyness et al., 1996, p. 198). Conversely, depression is a major risk for onset or progression of a range of medical illnesses. When medical illness is complicated with depression, the risk of morbidity and mortality are increased (Koenig & Kuchibhatla, 1999). Furthermore, there is a complex interplay between medical and psychiatric factors. Medical illnesses can increase depression both directly, through neurohumoral effects, and indirectly, through impaired role functioning and resultant demoralization. Depression, similarly, can aggravate medical illnesses through both direct and indirect routes. The risk of depression as measured one week after myocardial infarction, for example, was increased by about 24 percent in one study. Another study, examining patients hospitalized for congestive heart failure, identified severe depression in 85 percent of participants (Zuccala, Cocchi, & Carbonin, 1995). Acceptance of ill health as a normative aspect of ageing and illness, resulting in adoption of a “sick role,” can contribute further to a condition of “excessive disability.” The outcome can be a positive feedback loop or “reciprocal spiraling” (Bruce, 2001), a mechanism in which depression and medical illness mutually exacerbate with each other, ultimately producing greater dysfunction than that would be accounted for by either component of illness alone (Lenze et al., 2001). Many older adults dismiss depressive symptoms, which they were more likely to attribute to their known medical illnesses. Others may underreport depressive symptoms as a result of a negative attitude towards psychiatric illness.

Psychologic Origins of Depression in Older Persons

In common with many other mental disorders, theories of the causality of mood disorders can be placed within psychological, social and biological perspectives. The psychological perspective traces the cause of mental disorders to past events, often remote to the sufferer, that impinge on current emotions and cognitions, whereas the social perspective tends to focus on the impact of interpersonal and social events external to the sufferer. These two perspectives employ the mind–body dualism of Descartes and lean heavily on psychological constructs to explain the origin of depression. The psychiatric literature is replete with discussions of the psychologic aetiology and psychodynamics of depression in age (Beck, 1976).

The psychodynamic perspectives have traditionally focused on depression as the result of aggression or anger turned inward towards the self. This anger has been directed at a loved one who has thwarted the person’s need for love and support. Because the person has internalised the love object in his attempt to prevent a traumatic loss, he becomes the target of his own anger (Whybrow, 1997). Ayalon and Young (2003) noted that depression in older adults might result from frustration and their sense of loss of control over the environment and a need to respond positively to accommodate environmental stimuli, especially what appeared to be helpful gestures from the environment. Monopoli, Vaccaro, Christmann, and Bajdett (2000) also suggested that loss of self-esteem was the central psychological problem of depression in older persons. When the older person looked back on his or her life course, which was viewed as not as worthwhile as it should be, self-esteem decreased, thus increasing despair. This despair would then take in the form of depressive symptoms. However, this theory fails to provide an account of current forces outside the individual, and recent developments in the psychoanalytic tradition have allowed a more active interchange between the mind and the environment.
Adult losses, of which separations are the most frequent and potent, are postulated to revive a childhood loss and hence lead to psychopathology (Monopol, Vaccaro, Christmann, & Badgett, 2000).

Cognitive theories focus on the way people process information and became popular in the second half of the twentieth century. Prominent cognitive theories include those of Aaron Beck, a mental health professional who created the concept of the negative cognitive triad. Beck et al. (1979) proposed that the cognitive triad consisted of three major patterns that induced the patient to regard himself/herself, his/her future, and his/her experiences in an idiosyncratic manner. The first component centered on the patient’s negative view of himself/herself. He/she viewed himself/herself as defective, inadequate, diseased, or deprived. He/she often attributed his/her unpleasant experiences to psychological, moral, or physical defect in himself/herself. He/she tended to underestimate or criticize himself/herself because of their defects. Finally, he/she believed he/she lacked the attributes that he/she considered necessary to attain happiness and contentment. The second component of the triad consisted of the patient’s tendency to interpret his/her ongoing experiences in a negative way. He/she viewed his/her world as making exorbitant demands on him/her and/or presenting insuperable obstacles to reach his/her life goals. He/she misinterpreted or overinterpreted his/her interactions as representing defect or deprivation. The patient negatively construed situations even when more plausible, positive interpretations were apparent. The third component of the triad consisted of a negative view of the future. The depressed patient anticipated that his/her current difficulties or suffering would continue indefinitely. He/she foresaw unrelenting hardship, frustration, and deprivation. When he/she considered undertaking a specific task in the immediate future, he/she predicted that he/she would fail. Depressed people were said to have a negative view towards the world, a negative view of themselves and a negative view of the future, and these people would commit ‘cognitive errors or distortions’ based on these three sets of beliefs. These errors were thought to maintain an outlook on life that perpetuated depression. Once the older person developed the negative triad about the self, the world, and the future, and developed schema that structured cognitive functioning into an enduring component, which in turn became formalized, then usual life events led to depressive symptoms. This was because interpretations of those events were typically negative and idiosyncratic to the older person. In addition, autonomous depressive symptoms could lead to negative interpretations of the environment and similar idiosyncratic contexts. Beck (1976) postulated that negative mental structures, called schemas, existed in a latent form and could act as predisposing factors to depression. Helplessness and hopelessness were seen as core experiences of depressed people (Beck, Rush, Shaw, & Emery, 1979).

The other signs and symptoms of the depressive syndrome might be viewed as consequences of the activation of the negative cognitive patterns. Motivational symptoms (for example, paralysis of the will, escape and avoidance of wishes) could be understood as consequences of negative cognitions. “Paralysis of the will” might result from the patient’s pessimism and hopelessness. If he/she expected a negative outcome, he/she would not commit himself/herself to a goal or undertaking. Suicidal wishes could be explained as an extreme expression of the desire to escape from what appear to be insoluble problems or an unbearable situation. The depressed person might see himself as a worthless burden and consequently believe that everyone, including himself, would be better off if he were dead. Not only did cognitive aspects contribute to depression, the cognitive aspect of depression might also explain the physical symptoms of depression. Apathy and low energy might be the consequences of the patient’s belief that he was doomed to failure in all his experiences (Beck, Steer, & Garbin, 1988).

Behavioural models of depression focus on the characteristics of people’s immediate environment such as events of an interpersonal or situational
nature. The theory of learned helplessness is one such theory. Based largely on animal experiments, the theory of learned helplessness states that a lack of assertiveness, passivity and resignation to fate are learned from the past where the person was unable to discover a behaviour that terminated aversive events. Thus helplessness is traced back to the personal biography of the patients. Evolutionary theory is one strand of a more biological, reductionist approach to mental health and has also been used as a framework to explain depression (and, indeed, almost every other facet of human culture). Evolutionary theory states that depression is actually an evolutionary adaptation whose function is to inhibit aggressive behaviour to rivals and superiors when one does not have the resources to effectively challenge them. It acts as a kind of self-check mechanism to stop individuals competing and fighting for resources that they cannot realistically have access to and thus set up a dominance hierarchy without resorting to violence. Evidence from studies of primates has been used to support this view and humans are thought to share this yielding mechanism when competing for food or mates. It is self protective as it signals that the individual does not represent a threat. That said, while there may or may not be some merit in this explanation, there are grave doubts about the success of evolutionary psychologists who try to explain to severely depressed patients that their current state serves as an adaptation. Just because a given illness is widespread within a species does not necessarily mean that it has an evolutionary origin (Whybrow, 1997).

Social Origins of Depression in Older Persons

Depression and social support may be linked (Hartsell, 2005). Proximal stressors in the social environment that may contribute to the onset and continuance of depression in older adults have been divided into life events, chronic stress, and daily hassles (Gallo, Rabins, & Anthony, 1999). Life events are those identifiable, discrete changes in life patterns that disrupt the elder’s usual behaviour and threaten or challenge his or her well being. Such life events as bereavement, moving house, social alienation, employment difficulties, the breakdown of a relationship and suffering a long-term or debilitating illness have been considered to be causes of depression (Priest, Vize, Roberts, Roberts, & Tylee, 1996; Spence, Najman, Bor, O'Callaghan, & Williams, 2002). Indeed, the strongest relationship between life events and the onset of depression has been shown to be between threatening and undesirable events and depression onset (Putnam, 2000). Longer duration of depression appears to be associated with marital difficulties or widowhood, with a shorter duration of illness associated with lifetime trauma (Brown, Schulberg, & Prigerson, 2000). Chronic stress includes those long-term conditions that challenge or threaten the elder’s well-being, such as ongoing financial deprivation and interpersonal difficulties (Krause, 1987). Daily hassles are the ordinary but stressful events and transactions between the person and the physical or social environment (Lin & Parikh, 1999). Examples of daily hassles include household responsibility, home maintenance, and unpleasant interactions with neighbours.

Social networks provide tangible health assistance as well as reinforcing healthy modes of behaviour. It has been shown to be significantly associated with depression in particular (Putnam, 2000). Social support had a direct effect on depression symptoms. Social engagement was independently associated with depressive symptoms (Giblin, Clare, Livingston, & Howard, 2004). Higher rates of depression have been found in people who report feelings of isolation over the previous twelve months as a result of the difficulties related to life, cost and availability of transport, paid work, issues related to care for children and being unable to socialize with friends and family (Payne, 2006). The size of a person’s social network is important, with larger social networks being associated with better mental health (Stansfeld, Fuhrer, Shipley, & Marmot, 1999). The size of a person’s primary group (the social support network) is significantly
smaller in psychiatric outpatients than community controls (Brugha et al., 2004). Over the years some of the leading theorists on suicide, like Baumeister (1990), have reiterated the importance of poor social integration as a precipitating factor in both depression and suicide. Social support is profoundly important with regard to coping with everyday challenges and strong interpersonal ties protecting people from becoming distressed. Social interaction is not the same as social support and strong, supportive relationships are often needed to reduce feelings of helplessness and low self regard, to reduce the impact of what can often seem like crushing life events. The feeling of not being isolated, of experiencing a rich support network, can be of great help for many people as they move through difficult times (House, Landis, & Umberson, 1988).

There is a considerable and growing body of literature showing that poverty and economic deprivation are associated with an increased prevalence of mental disorders, including depression (Boardman, Hodgson, Lewis, & Allen, 1997; Roy-Byrne, Ruso, Cowley, & Katon, 2003), with depressed groups suffering from greater economic deprivation than healthy controls (Lin & Parikh, 1999). Depression has been shown to be associated with low material standards of living within all occupational strata, and Weich and Lewis (1998) claimed that a poor material standard of living accounted for nearly 25 percent of prevalent cases of common mental disorder. It has been shown that poverty not only predicts current risk of depression but also predicts depression in the future. Data from the New Haven Epidemiologic Catchment Area study showed that poverty at first contact predicted a doubling of the risk of a further depressive episode (Brown & Moran, 1997). Financial strain seemed to be the critical mediator behind the greater depression associated with unemployment (Price, Choi, & Vinokur, 2002). Moreover, the experience of being in debt to one or more companies in the last year made someone significantly more likely to suffer poor mental health. It has been suggested that the profound fear of eviction and impending homelessness associated with falling into mortgage arrears has led to nearly 80 percent of such people suffering from mental disorder (Payne, 2006).

Poverty and the development and maintenance of social networks were related. A lack of income could seriously impinge upon the possibilities for social network development and integration (Wilton, 2003) and such a lack of social integration that results from being unable to finance sociality would lead to greater isolation and feelings of alienation. If an older person cannot afford to visiting malls, shops, pay for their own phonecards or mobile phones and cannot afford the clothing by which to subjectively make oneself respectable, then such community and family ties can easily drift. Feeling like a third class citizen, since one is unable to exist at the same consuming level as members of your social circle, can lead to a distancing from those around, and such considerations are more common than many people may realise. Both social capital and social support influence mental health status, and there is considerable evidence to suggest that having less social support with which to cope with the increased stresses and strains created by urban living is fundamental to mental health disorders including depression. Reduced housing quality and greater social isolation are profound problems that increase the risk for developing depression and decrease the likelihood of recovering from depression and these factors are rather endemic in urban environments.

Other studies indicated that children from poorer families have poorer academic achievement, nutritional status and social development than more advantaged children. They tended to have more mental health problems generally, with higher rates of depression specifically, than children of wealthy families. Those children with an early history of persistent poverty had higher levels of depression over the five years that they were examined, regardless of their subsequent experience of poverty (McLeod & Shanahan, 1996). Simply addressed, it appeared that early economic disadvantage had long term effects on mental health. This long term effect
Conclusion

Origins of depression in older persons included biological, physical, psychological, and social perspectives. Biological origins included changes in brain structure and function, and cortisol level with ageing. Physical origins included functional limitations, loss of mobility, and medical illness. Psychological origins included changes in cognitive, behavioural, and psychodynamic aspects. Social origins included limited social network, negative life events, poverty, and poor family relationships.

As with all psychological theories, each of the above conceptualisations had elements that intuitively rang true when discussing some given aspect of depression but no theory alone was able to provide a completely convincing account of the full psychological, social and biological elements of the disorder, it is important to provide a starting point for the further study to understand the different origins, a social and cultural construct, and consequences of depression in older persons.

References


4.3 組織能力

是次活動給予護生實踐經驗，護生必須把所學的知識都應用起來。整個活動由策劃、實行以至處理不可預期的情境等，皆由護生主導及負責，因此，要求護生具備良好的組織能力。在反思當中，有護生表達著參與工作而被視到自己協作及組織能力不足的問題，激起了護生再學習的動力，是一個正面影響；對組織而言，成員的組織能力強弱是工作或任務完成的關鍵，因此，關愛之光應對成員在組織能力上之學習需求，可提供開放態度，給予讚揚及鼓勵，促使再學習之正向行為，並提供更多實踐機會，讓成員把所學的應用於其中。

5. 總結

活動不但為護士學生提供了一個健康促進的服務機會，亦創造了一個多樣化的課外學習體驗，豐富了護生的學習生活；而當中所經歷的挑戰及領會的收穫，透過參與的護生在反思中的表達，說明活動對護生的發展及學識、價值及才能等方面的成長起著積極，當中的社會問題亦能夠真實地被體會，而更重要的是喚起參與護生對組織—關愛之光的歸屬、對護理意義的認同、對專業使命的責任及熱情；對社會公民責任義不容辭的承當，都是護生學識、思考和探索—環境—健康—護理的重要元素。活動的設計需考慮到定義清晰目標對團隊的必要性，讓參與護生有指引或有系統地對層層深入的活動後反思；而為了照顧參與護生在服務及學習時所牽涉的情緒變化，有需要讓參與護生及組織學習有效的情緒管理技巧及溝通技巧，以促進雙方的服務及學習需求。

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The effects of visiting on student nurses

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Preface  To deliver our care, our love and our concern to the AIDS Orphans, non-aids orphans, and AIDS patients, 21 members of the students’ union at KWNC joined a visit programme named “A Visit to Children in Yunnan”, and went to Yunnan province to visit those orphans and patients during the Spring Festival 2008. The following are analyses of 13 students’ reflective reports to explore the effect of the programme on nursing students.