Religion and depression: Mutual effects in elderly

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INTRODUCTION

Purpose of this paper is to discuss the reasons of late life depression and possible ways to handle it. In the centre of interest are religious and spiritual coping.

Epidemiology and definition of depression and late life depression

According to the WHO depressions will be the second common disease worldwide in 2020 (Murray and Lopez 1997). Depression among elderly is very common especially in highly industrialized countries: 2 million senior citizens in the US, ages 65 and older, suffer from severe clinical depression while 5 million others suffer from mild cases of psychological and emotional disorders (National Institute of Mental Health 2003). Some of the reasons can be – beside less exercise, overweight, somatic diseases: Most people assume that it is natural for aging people to feel depressed, thus, taking for granted the real causes of depression. Physicians themselves may ignore the fact that an elderly is depressed as they tend to focus on the patient's physiological concerns. Besides, senior citizens themselves do not talk about their emotions, or do not have someone to talk to. (Cattell 2000)
Even when depression in older people seems to have less symptoms, the risk for becoming suicidal in over 75 years old people is 30,5% (in comparison to 3,4% in people below 25 years of age (Weyerer and Bickel 2007). The prevalence rates of depression in nursing homes are between 40 and 50%, 15 to 20% of these inhabitants are severely ill (Ernst and Angst 1995).
Males aged 75 and over have the highest rates of suicide in nearly all industrialised countries, and among many of these nations suicide rates rise with age. Risk factors for elderly suicide are older age, male gender, living alone, bereavement (especially in men), psychiatric illness, depression, alcohol misuse, previous suicide attempt, vulnerable personality traits, physical illness, and pain (Cattell 2000).

Today the bio-psycho-social model of the development of depression[1] is preferred. According to Clark and Beck one can differentiate between biological and developmental components and coping skills of an individual vulnerability and the components of a so called environmental toxicity, which include loss related, existential related and context related stress (Clark, Beck et al. 1999). Depression has a strong genetic background, what means, that even without any exogenous risk factors, a depressive episode can develop. Nevertheless are permanent distress or suddenly appearing crises often trigger for the outbreak of a new depressive episode.
Mental diseases have to some extent a physiological function (Hamilton 1981). Bearing the evolutionary benefit of depression in mind, the function of depression can be described as follows: Being „passive, paralysed" after negative life events prevent depressed people from repeating unfavourable pattern of behaviour (Price, Stevens 1998). Depressive mood signalizes the social community need for help: Reactive depression and mourning are a reaction to a loss. Depressive behaviour of the individual gives the group the possibility to take care for him /her, what indicates the importance of the loss and the individual for the group. The affected person will be protected and relieved and get the chance to regenerate. The depression gives the individual a time-out in the daily competition, grief reactions give time to cope with the loss, and protect against loss once again (Kaiser 2007). But is has to be noticed that a severe and long lasting depression is mal-adaptive.

The occurrence of late life depression poses questions about the ideas people have concerning becoming and being "old": In which societies is old age a *„disease"*?; are old people deficit beings or wise old individuals?. Depending on the concepts of old age, one is confronted with problems like: should the existence of old age be neglected, denied? - is the "therapy" of old age to be together with the real very-old ones (to feel younger)? - does an old being benefit from being together with the extended family? - does physical repair like (plastic) surgery or special medication (like neural enhancer) or physical exercise help, to postpone aging? Or should one start to move on the spiritual path, with confrontation and / or acceptance of the last part of life cycle? Or should one apply a mixture of all of these remedies?

THE CONCEPT OF RESILIENCE AND HARDINESS

[1] Definition according diagnostic and statistic manual IV (DSM IV): Major Depressive Episode (www.mental-health-today.com/dep/dsm.htm)
Five (or more) of the following symptoms have been present during the same 2-week period nearly every day. At least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure:

(1) depressed mood most of the day
(2) markedly diminished interest or pleasure in all, or almost all, activities most of the day
(3) significant weight loss or weight gain (e.g., more than 5% of body p.m.)
(4) insomnia or hypersomnia
(5) psychomotor agitation or retardation
(6) fatigue or loss of energy
(7) feelings of worthlessness or excessive or inappropriate guilt
(8) diminished ability to think or concentrate, or indecisiveness
(9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

The terminus "resilience" derives from Latin *resilire for jumping back, rebound, and can be translated with „resistance, hardiness*", meaning the ability to react to the demands of changing conditions in a flexible way and master stressful, frustrating, and other difficult situations in life. The term resilience embraces the positive pole of individual differences in people's response to stress and adversity (Rutter 1987). Most of early research on resilience focused on children determined to be "at risk" and generally refer to the children who had lower rates of psychopathology later in life. Factors associated with resilience included having an easy temperament, self-mastery, planning skills, and a warm, close relationship with an adult (Rutter 1985; Rutter 1987). Resilience can although be defined in the context of the group, for example of the family: A disease can be interpreted as betray of the own body and the belief in somatic invulnerability (Kleinman 1988.). Therefore a story around the disease can inspire, can help to cope with. The conviction, that a disease is an enemy, one (or a family) has to fight against, has definitely a different consequence than the opinion, that the disease of one of the members of the community is a God's punishment. Convictions concerning function of crises are the cognitive correlate of the behaviour expressed in the coping with the crises. It makes a huge difference whether old age is regarded as a deficit condition or a period of spiritual growth and personal wisdom. And it is important, that changes are accepted as a part of normality. All these assumptions and convictions are to some extend determined by the socio-cultural background (Rolland 1998; Walsh 1999), what poses a specific problem in dealing with "becoming old life crises" in migrants. The idea of remaining the master of ones own destiny, not being helpless, not being dependent on others has an influence on the coping and defines (beside other factors) the resilience of an individual (Thompson, Kyle 2000). To be in charge as contrary from being helpless needs positive self-esteem and an internal locus of control, or a belief in self-efficacy (Luthar 1991; Rutter 1987; Werner, Smith 1982). The internal locus of control (Luthar 1991) describes the belief that forces shaping one's life are largely within one's control. The opposite is "learned helplessness": people who believe themselves to be powerless become more passive and restricted in their coping abilities) (Abramson, Seligman, Teasdale, 1978).
Resilience emphasizes the concerned ability not only of the individual but of the social group; this in contrast to the so called "hardiness", here is the focus more on individual components. Kobasa introduced the concept of "hardiness", which has been defined as a stable personality resource that consists of three psychological attitudes and cognitions: commitment, challenge, and control. "Commitment" refers to an ability to turn events into something meaningful and important; "control" refers to the belief that, with effort, individuals can influence the course of events around them, and "challenge" refers to a belief that fulfilment in life results from the growth and wisdom gained from difficult or challenging experiences ((Kobasa 1979, Kobasa, Maddi, Kahn, 1982; Lazarus and Folkman 1984; Maddi, Khoshaba 1994).

Although some variables seem to indicate environmental factors, such as social support and family cohesion, it is individuals´ contribution to these factors that confers their status as characteristics of resilience. For example, a resilient person may have the ability to seek and extract support from others, and enhance his or her social support; similarly, the person contributes to the cohesion in his or her family. Especially in elderly ties to family and other social support systems are mandatory (Bowling 1991; Lund, Modvig, Due, Holstein, 2000; Glass, de Leon, Marottoli, Berkman, 1999). A group behaviour that may confer protection is called "community resilience".

RELIGIOSITY VERSUS SPIRITUALITY

In religiosity the belief is centred on a well defined religious system, whereas the term spirituality more frequently is used in a trans-Christian context: Search for the „sacred". Often questionnaire in sociology and psychology cover items of religion, religiosity, spirituality, and belief are unfitted to cover the entity of „Spirituality" (Kaiser 2007). In the *„Systems of Belief Inventory"* (Albani, Bailer, Blaser, Geyer, Brahler, Grulke, 2002) subscale, *„religious conviction and practices",* 4 of 10 items are related to a personified God. Termini like „prayer", „God"and „belief"are use. Frequently used inventories are not capable to detect personal concepts of transcendence in the different religions (Kaiser 2001; Möller, Reimann 2003), because religiosity differs from a broader, a trans-confessional defined spirituality.

Types of religion

Religious scholars generally differentiate three types of religiosity; the definitions can to some extent applied on spirituality as well:
Extrinsic religiosity: *„Persons with this orientation may find religion useful in a variety of ways – to provide security and solace, sociability and distraction, status and self-justification..."* (Allport, Ross 1967: 434).
Intrinsic religiosity: *„Persons with this orientation find their master motive in religion. Other needs, strong as they my be, are regarded as of less ultimate significance, and they are, so far as possible, brought into harmony with the religious belief and prescriptions..."* (Allport, Ross 1967: 434).
Quest-Orientation: „*Quest*-Religiosity", „religion as a quest", is marked by complexity, doubt and search as well as scepticism, and reserve concerning handed down, orthodox religious answers (Batson, Ventis 1982: 230ff).

Dimension of religiosity

According to Kesces and Wolf five dimensions of Christian religiosity can be separated. Three of them - *Christian belief, experience, practice-,* are the core of empirical detectable forms of Christian religiosity. *Religious knowledge* - the so called cognitive dimension – is independent from the other dimensions and is, according studies with several thousand people, not important for religiosity. The *"acceptance of Christian rituals"* including important rites de passage takes a place in between (Kesces Wolf 1995).

Function of religion and religiosity

Looking at the functionalistic aspect of religion, religion can have 5 main functions, represented by the five dimensions of RCOPE (Pargament, Koenig and Perez 2000):

- Finding meaning in the face of the unexplainable and often horrific circumstances

- Gaining control through religious means
- Gaining comfort from achieving closeness to God
- Seeking intimacy with others and closeness with God
- Experiencing life transformation

Summarizing the findings of multiple studies on the impact of religion on health in general, a positive effect of religion / belief on health depends on 4 interdependent factors (Bergin 1983; Levin 1994; Koenig, Cohen, George, 1997; Kaiser 2009):

- The way crises and disease are explained in a specific religious community (punishment, bad luck etc.)
- The kind of religiosity: Extrinsic ↔ intrinsic ↔ quest- religiosity and its sustainability in crises: does the belief work, when deadly needed?
- The integration of the individual belief in the belief system of the socio-cultural environment (Problem: migrants)
- The type of established and applied coping strategies in communities

Regarding the effects of religiosity and / or spirituality on mental well-being / mental health; it can be emphasized, that:

- Certainty in belief in the sense of a stabilizing conviction seems to be more important for mental health than the belief per se
- Cognitive uncertainty and doubts lead to cognitive dissonance. This has - on the long run - a negative impact on (mental) health via psycho-neuro-immunological mechanisms
- Religious / spiritual doubting or indifferent people draw no benefit from religion as a coping strategy and sustainable salutogenetic resource
- Religiosity / spirituality in mentally ill people can be a danger, but as well a therapeutic option

COPING AND RELIGIOUS COPING

Coping can be defined as: *„the thoughts and behaviors used to manage the internal and external demands of situations that are appraised as stressful"*(Folkman and Moskowitz 2004:745).
There are some influential factors for a Coping strategy or mechanisms, which are responsible that coping is successful:

- Former experience, that the strategy did work,
- Plausibility (the way the strategy is working, makes sense for the individual)
- The belief in its function by the social community (shared belief)
- People or institution who / which are considered as authorities do belief in its function and do promote its use.

Therefore: Starting to believe when crisis already occurs seems to be too late to work properly: *Prophylaxis* is better than *therapy*

A good example how elder people can cope with changing conditions is the Okinawa Centenarian Study (www.okicent.org/study.html). Here, the communities reveal a bundle of factors:

- genetic
- continuing working (even after retirement)
- exercise
- social support mutual help, gossip
- healthy food
- (buddhist-shintoist belief) spiritual: individual as well as collective
- Ikigai

"Ikigai" is the Japanese equivalent of the French raison d' être. In English, these translate respectively as: 'something important one lives for', and 'a reason for being'.This term is culturally defined in the society of Japan as a comprehensive concept describing subjective well-being. It is considered to be related to life-satisfaction, self-esteem, morale, happiness as well as evaluation towards meaning of one's life. According to a study (Shirai, Iso, Fukuda, Toyoda, Taaktorige, Tatara, 2006), scores for life-changes through work were associated with a higher prevalence of having "Ikigai" for both male and female. For male, "Ikigai" tended to be associated with physical condition and socioeconomic factors such as the size of their residence or annual income, while for female, family relations such as having spouse and psychological factors such as satisfaction with one's life history were significant factors. In spite of the design limitations of this study, it is possible to conclude that the recognition of life change through obtaining work may enhance "Ikigai" among people who wish to engage in productive activities in their later stages of life for both male and female.
Health promotion and support for quality of life for the elderly is therefore an important task in such a society. In this connection, the idea that psychosocial conditions are related to the enhancement of health and reducing the risk of mortality in later stage of life is attracting growing attention. Most commonly, social relations, subjective well-being, participating productive activities, and meaningful engagement towards one's life have been studied as psychosocial factors associated with health and mortality of older populations. (House, Landis, Umberson, 1998; Rowe, Kahn 1998; Maier, Smith 1999). Psychological productivity – the usefulness to be as an older member in the community, with all his/her life experience, perhaps wisdom – is an other important but often overlooked factor.

Paradoxon of refugees and paradoxon of Elderly: Researchers asked for the explanation for the observation that refugees do develop symptoms of mental diseases more seldom than expected? (Posttraumatic stress disorders PTSD 4-20%) (Silove 1999). A different kind of paradoxon but with the perhaps similar causality is the fact, that despite increasing loss in (physical) health and performance the life satisfaction does not decrease with increasing age
(Kaiser 2007)

Table 1.

Riskfactors: Refugees / People, aged >65 in industrialized countries

Item	in refugee-camps	aged > 65 years
Work /profession	difficult	difficult
Family	often separated and splitted	low number of children
Financial situation	Dependency on donors	pension, perhaps dependency
Individual development	objectively restricted	subjectively and perhaps objectively restricted
Health care	insufficient	expensive
Life perspective in general	Restricted	restricted

Protective Factors in Refugee Camps "*…that family solidity, religious belief, participation in self-help groups and fulfilling work are the main factors to give individuals and groups the ability of framing their status and problems in terms that transcend the immediate situation and give it meaning."* (Jablensky, Marsella, Ekblad, Jansson, Levi, Bornemann, 1994). To stay mental healthy in an environment like a refugee camp protective factors including functioning family- or community structures, strong religious belief systems and work are important. In miserable conditions to be found in refugee camps, religion can have a strong positive impact on coping strategies in hopeless situations. Religion (as well as other belief systems or forms of identification) can help to transcend the immediate situation and give it meaning. Research on this subject postulates that the effects of religion and religiosity are salutary, depending on at least three interdependent factors: The way disease and strokes of fate are explained in the specific belief system; the kind of religiosity of the believer (intrinsic versus extrinsic versus quest etc.) and the integration of the individual belief in the belief system of the human environment. (Kaiser, Benner 2004). This depends on the degree of intrinsic religiosity, in other words, to what extent this belief has been internalised to enable the individual or the group to develop sufficient mental stability. Therefore, the *Harvard Program in Refugee Trauma* (Mollica, Cui, McInnes, Massagli, 2002) demands that support programs should promote following factors: work / occupation; indigene religious rites; culture-adapted altruistic behaviour in the social community.
In a refugee camp as well as in a prison the ability of correct time framing seems to be an additive factor.

For that the following coping and protective factors in elderly over 65 can be named (Kaiser 2009):

- Social integration (family, neighbors, community)
- Fullfilling work, useful occupation
- Participation in self-help groups
- Ability of correct time framing
- Giving life significance (meaning) and transcendence
- Psychological productivity

Religiosity and spirituality combine human reactions, emotions and feelings, thinking, and behaviour. These mental entities are based on inborn human behavioural equipment (neuronal capability). This equipment is the prerequisite for learning. The theories on learning do agree that the impact of experience can not be over-estimated. Only learning subject by heart, in theory, only by hearing stories in church or by reading the bible the alertness will improve, to recognize faster specific information. The occupation with religion, with belief increase the probability of having an extraordinary experience like being born again, feeling of experiencing God or an Absolute Being does help, because Humans do see what they do expect (e.g. visual hallucination of the Christian cross in persons suffering with an epileptic fit). The more "moving" an experience is (or at least is recognized), the more "deep" this experience will be rooted in the neural network. And - not only in religious experience - the higher the probability that it will influence feeling, thinking and decision making in times of crisis. Spirituality or religiosity normally needs its time to become well grounded, that it can function as a resource in the period of need. Therefore it makes sense to start early with the mental occupation with spirituality.

Religious coping

Religious coping is defined as the extent to which persons use religious beliefs and practices to help them to cope.
Religious coping can divided in positive, negative (mal-adaptive) and mixed forms. „Positive" forms of religious coping are spiritual support and cooperation, support by the institutional religious community (church), benevolent religious reframing and religious (ethical) motivated altruism. „Mal-adaptive" forms of religious coping are dissatisfaction with God or the religious community and detrimental religious reframing. Religious coping with mixed effects are religious rituals as reaction to stressful events and crises and religious coping concerning the control of the situation like the c*oncept of self-determination, concept of delegation*, and the c*oncept of collaboration* (Pargament, Brant 1998)
A meta-analysis considering 40 studies on religious coping in dealing with life-crises revealed that *religious coping* is successful in 53% whereas *religious orientation* showed to be successful in 38%. The data demonstrated that *religious coping* correlates not only more often than *religious orientation* in a positive way (with dealing with life crises) but more often in a negative way too (Pargament 1997).

Depending on the idea of the belief on sense of life, of the end of worldly life, on eternal death or on life after, on sin and on justice, spiritual coping can give sense, can give hope (life after death or reincarnation), can make humble and make realising what is important in life. Can perhaps help to forgive others and to forgive oneself to find peace and to accept the own (previous) life up to now or the hope that non-conform behaviour is forgiven by a greater being than the believer.

Research on religiosity and aging has focused more on church attendance than on the religious role and the strength of beliefs and the extent of private devotions. Already published in 1987 in a study the degree to which nine variables account for variation in both organized religious activities and private religious behaviour have been examined. These include three social activity and interaction variables, three religion variables, and three personal variables (health, age, and income). Strength of religious conviction / belief proved to be the strongest predictor of both types of religious participation. Multiple-regression analysis did not support the hypothesis that private religious activity is compensatory; that is, it does not make up for increased social or personal deprivation. Poor health, low income, reduced activity, and living alone did not predict higher levels of non-organized religious behaviour. However, strong kin/friend networks did predict high levels of private devotion. This research suggests that frequent interaction in a social network contributes to the spiritual well-being of elderly persons; that is, it affirms the wholeness of their lives. (Young and Dowling 1987).

Studying the correlation between religious practice and depression among geriatric home care patients in the US, the research did reveal that the prevalence of DSM-IV Major Depressive Disorder and the severity of depressive symptoms were significantly lower among homecare patients who attend religious services. Because a large proportion of persons stop attending religious services after initiating homecare, it is suggested by the authors that visitation by clergy may improve depressive symptoms for these patients (Milstein, Bruce, Gargon, Brown, Raue, McAvay, 2003).

In an US- American study age differences in perceived coping resources and satisfaction with life across 3 older-adult age groups (45-64, 65-74, and 75 years and older) were examined. Group comparisons were made on 12 individual coping scales, and an overall coping resource effectiveness score was computed. No significant differences were found for 11 of the coping resources or for overall coping resource effectiveness. Similar consistencies in life satisfaction were found across the 3 age groups. The findings indicate that for healthy adults, the oldest old cope at least as effectively as their younger counterparts, despite their likelihood of encountering increased levels of stress; and psychologically, old age may be viewed as a time of resilience and fortitude (Hamarat, Thompson, Aysan, Steele, Matheny, Simons, 2002). The observation that religiosity seems to be stable over the life span was reproduced in several studies. On the other hand religiosity may or may not be related to such factors as physical and mental health, life satisfaction, and coping, depending on the kind of religiosity. In a study on centenarians a significant relationship between religiosity and physical health but no significant relationship between religiosity and mental health and life satisfaction was found. Religiosity and coping are strongly related, and there is the suggestion that religious coping mechanisms might be more important in the oldest-old (Courtenay, Poon, Martin, Clayton, Johnson, 1992). . It is obvious, that religiosity has to be well defined to explain these data.

In a Europe-wide survey, associations were studied between church-attendance, religious denomination and depression at the syndrome level for (6 EURODEP study centres, five countries, n = 8.398): the depression rates were lower among regular church-attenders, most prominently among Roman Catholics. In an attached study, ecological associations were computed by multi-level analysis between national estimates of religious climate, derived from the European Value Survey and depressive symptoms (12 EURODEP study centres in 11 countries, n = 17.739): fewer depressive symptoms were found among the female elderly in countries, generally Roman Catholic, with high rates of regular church-attendance. Higher levels of depressive symptoms were found among the male elderly in Protestant countries. The authors conclude that religious practice is associated with less depression in elderly Europeans, both on the individual and the national level. Religious practice, especially when it is embedded within a traditional value-orientation, may facilitate coping with adversity in later life. (Braam, Van den Feden, Prince, Beekman, Kivela, 2001). But religiosity / spirituality correlate not automatically with church attendance frequency.

How can (spiritual) coping be used in the treatment or as a prophylaxis of depression in elderly? Different ways of distinguishing different kinds of religiosity have been suggested. Wittmiss et al. 2009 differentiate between religious motivation – which is defined as a person-immanent construct (i.e. personality trait) and therefore independent from the severity of a depressive episode-, religious coping, and religious practice like rituals etc. They could confirm the data of Meta-analyses which did reveal that a positive religiosity is correlated with lower depression rate (Smith, McCullough, Poll, 2003) and a longer life span (McCullough, Hoyt, Larson, Koenig, Thoresen, 2000), whereas negative religious coping correlates with higher prevalence of depression (Bosworth, Park, McQuoid, Hays, Steffens, 2003). It seems that the higher the religious motivation is, the lower is the severity of depression – objectively (tested by MADRS) and in the view of the patients (self evaluated by GDS) (Wittmiss, Toepper, Driessen, Thomas, 2009).

CONCLUSIONS

Reflecting the genetic roots of depressive disorders on the one site, and the exogenous triggers for the outbreak of new depressive episodes on the other, the victims are not solely helpless.

The important result of all the studies on the relation between religion and depression in elder can be resumed as follows: Religiosity or Spirituality influences human thinking, behaviour and acting to the extent how deep it is grounded in the personality of the very individual. The power of grounding, of the embedding of religiosity / spirituality depends on the socio-cultural background and the social environment as well as on individual factors. Former religious experience (bad or good) has a higher impact than sole religious practice. Religious knowledge definitely does not help to improve the effectiveness of religious coping. Deducing from theories on learning and current neuroscience, the sustainability of saved information correlates with the extent of neural activity and the neural networking involved in the task, perception or thought.

A long-lasting positive experience with religion (like: prayers did frequently help me in past) or a so called God-experience enhance the power of ones individual belief. In this case, religious coping as an expression of ones religiosity / spirituality can be nourished by the certainty, that life crises have (an maybe cover) deeper meaning and probably will have an positive outcome. This certainty can not be learned in a lecture room but only in life. Sustainability derives from the empirical individual as well as collective knowledge that the belief "works". To "start" with believing at older age is like starting learning Chinese at the same age as a method to keep the brain functioning: it will be possible to learn the basics, but it will be probably too late to be able to make a conversation on Chinese philosophy, the "newly learnt belief" will be probably not helpful in the crises in the last decades of life.
Therefore depending on the idea of the belief, spiritual coping – beside social integration, useful occupation etc. - can help aged people to reduce anxiety when to face pending age, sickness, loneliness and death.
Depending on the sustainability (intrinsic quality) and the certainty of belief:

- Getting older can be accepted
- Accepting getting older not deficit-orientated but internal growing orientated is a stronghold against depression in elderly
- Spiritual coping works better as a prophylaxis against depression but as a treatment

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