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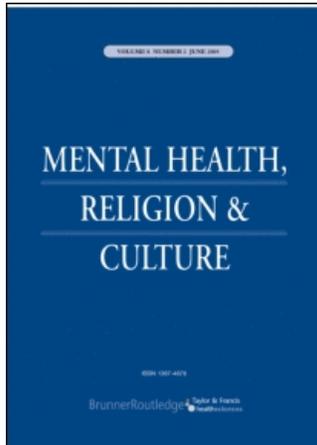
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Existential and religious issues when admitted to hospital in a secular society: Patterns of change

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Situated in a secular culture, this study examined the relationship between four dimensions of health and a number of existential, religious, and spiritual/religious practice variables in questionnaires sampled from 480 Danish hospital patients. Illness dimensions were: self-rated health, severity of illness, illness duration, and recent changes in illness. The results indicated the youngest age group (<36 years) to be the most active on all existence/religious/practice variables. Small overall correlations were found between the illness dimensions and existential/religious/practice variables, but results had underlying complex patterns. The dimension of *severity of illness* showed the most consistent results in the expected direction: the worse the illness, the more existential/religious/practice activity, but very different patterns were found for men and women. Men generally had low levels of existential/religious/practice issues, when illness was not severe, but levels heightened when illness turned worse. The opposite was the case for women who had overall higher levels, when illness was not severe, but unexpectedly lost interest and activity when the illness grew worse, especially regarding the religious faith variables. When illness turned to the better, women (re)gained religious faith. The illness duration of 1–3 months showed to be the most sensitive period for the existential/religious/practice variables involved. The patients' experience of change in existential/religious/practice issues and the actual measured change pattern did not always follow each other. The findings might contribute to clinical reflection and planning in health care settings in secular societies like in Scandinavia.

Introduction

For a long time, it has been an underlying psychological assumption that in times of real crisis, humans will call for their Gods—"there were no atheists in the foxholes" or "in a sea storm, voyagers will pray to any God," as the sayings go. Religious coping has been an almost compelling topic of investigation for the psychology of religion, and the main body of studies in the area has until recently been successfully conducted in the USA, where religiosity, measured in surveys, is high and public, and can be regarded as a common trait in the culture. In this American-based research, religious coping is usually found to be a resource, but it can also function less often as a burden when religious struggle is the case. In any case, a religious or spiritual framework has been culturally present and accessible for the persons involved (Ano & Vasconcelles, 2005; Fitchett et al., 2004;

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Koenig, Pargament, & Nielsen, 1998; Pargament, 1997; Pargament, Smith, Koenig, & Perez, 1998; Pargament et al., 1998).

Religion and health seem easily connected in the US culture: One-third of Americans are found to pray for health concerns (McCaffrey, Eisenberg, Legedza, Davis, & Phillips, 2004), clear associations between seriousness of illness and religious consolation have been found (Ferraro & Kelley-Moore, 2000), and marked links of religious history and meaning-making coping during the duration of illness have been shown (Jacobsen, Luckhaupt, DeLaney, & Tsevat, 2006). When thoughts of death have been artificially heightened under experimental conditions, an unequivocal tendency to adhere to the anxiety-reducing concepts of the in-laid, culturally habited religion has been repeatedly demonstrated (“*Terror Management Theory*”) (Greenberg et al., 1990; Solomon, Greenberg, & Pyszczynski, 2004).

All these research findings might turn out very different in the late modern, but far more secular societies like in Scandinavia. Very little is known of religious coping in these societies, where common cultural concepts of an anxiety-reducing religiosity/spirituality cannot be taken generally for granted and seen as a common cognitive grid for the individuals, especially not the younger ones, who usually have had a non-religious upbringing. In these secular societies, religious matters are labelled as “*privatized*” by sociologists of religion (Andersen & Riis, 2002; Gustavsson & Petterson, 2000; la Cour, 2005). The term “*privatized*” means that the existential, religious, and spiritual thoughts and practices of the individuals have been disconnected from their collective and traditional forms in late modernity. The secular or non-religious society can be characterized by a culture not supporting any religious belief, leaving any religious belief or thought an open choice for the individual.

When people in secular, non-religious cultures are stressed on existential issues such as serious illness, what will then happen? Will religious coping appear just as in religious cultures, or will new and unexpected patterns appear, for instance patterns of less existential thinking and more disbelief? Regarding the vast (American) body of research in religious coping and illness, the first will be our informed hypothesis: the more threat and burden there is from illness, the more religious thoughts and coping there will be.

The purpose of this study is to investigate patterns between four different aspects of illness in a hospital setting in Denmark: (a) self-rated health, (b) seriousness of illness, (c) duration of illness, and (d) changes in the course of illness, all in relation to three dimensions of meaning-making variables: existential concerns, religious beliefs, and religious/spiritual practices.

Religiosity in Denmark, where this study was conducted, is of the late modern, secular kind. Little existential concern and very low levels of religious belief and practice are found when Denmark is measured in standard sociological ways and compared with other nations (the following data are extracted from Inglehart et al., 2000). Regarding existential issues, it was found in 1997 that only 29% of the Danes claimed to “*think often of the meaning of life,*” while this was the case for 34% in the UK and 48% in the USA. The Danes also scored very low regarding any specific religious belief (for example, 11% believed in the devil, compared with 28% in the UK and 73% in the USA), and regarding religious/spiritual practices (for example, 17% of the Danes pray more than once a week, while this is the case for 28% in the UK and 73% in the USA).

On the other hand, it would be wrong to declare Denmark an atheistic nation; only 5% name themselves as “*convinced atheists,*” while 17% call themselves “*non-believing individuals,*” indicating that the majority have not actively turned away or positioned themselves hostile to religion. Religious and existential matters might better be

described as “un-moored”: existential and religious topics have been private and in-laid in the culture for quite some time; only 43% of the total population (including the elderly) claimed in 1997 to have had a religious upbringing (compared with 61% in the UK and 82% in the USA).

Method

Sample

Questionnaires were distributed to the patients of 31 units on Rigshospitalet, the main hospital in Copenhagen during the period 1 October 2005 to 1 March 2006. To include all stages of illness, units treating different patient groups were chosen. The total sample comprises inpatients (79%) as well as outpatients (15%) and parents to hospitalized children (6%); in the last case, the parents were asked about the illness conditions of the child. Of the 31 units involved, most patients came from cardiology (17%), hepatology (7%), and oncology (7%). The questionnaires were handed out and retrieved by the staff; the questionnaire itself was self-administered. Participation was voluntary and anonymous. Excluded by staff were patients who did not have reasonable Danish language, patients with cognitive disturbances, and patients who could be expected to react negatively to the questionnaire (i.e., burdening already very burdened patients). A total of 480 questionnaires were completed; the response rate was 52%, which is acceptable in this type of open, respondent-administered surveys (Bryman, 2004).

The sample comprised 51% men and 49% women; the mean age was 53.1 years (range 16–89, SD 15.3), as expected somewhat higher than in the common population (mean 1997:39.9 years) (Statistics Denmark, 2007). The sample also had more persons in the elderly age groups (≤ 35 years: 14%; 36–55: 30%; ≥ 56 : 43%) exactly as the age distribution for the whole hospital (Rigshospitalet, 2006).

Seventy-eight per cent were members of the Danish Folk Church, reflecting the special Danish arrangement, where membership is given by child baptism, unless active steps against it are taken. Two per cent ($N = 11$) belonged to a non-Christian religion including 1% Muslims ($N = 6$). In the sample, 69% defined themselves as “a religious person,” 21% as “not a religious person,” and 7% as a “convinced atheist.” The sample had 38% living in the city of Copenhagen. This distribution of denominations is slightly below the general Danish population, but slightly higher than in the Copenhagen urban segment, as expected.

Measures

The questionnaire comprised eight questions of basic demographics, four questions of experienced health conditions and 29 questions on topics of existential issues, religiosity, and spiritual/religious practices. Some questions were worded identically as in the Danish version of the World Values Surveys (Inglehart, 2000), making tentative comparisons with other studies possible, national as well as international.

The four questions on the patient’s experience of *illness* were: (A) Self-reported health (“All in all, how would you describe your health these days?” Answer categories: Very good, good, fair, poor, very poor); (B) Experienced *severity* of illness (“How do you understand your illness?”—Being less serious, serious, very serious); (C) *Duration* of period with illness (“For how long have you been ill?”—Less than 1 month, 1–3 months, beyond 3 months, beyond 1 year); (D) Experienced essential *change* in illness (“Has your

health condition, due to your own understanding, changed essentially within the last month?”—Changed for the better, unchanged, changed for the worse).

Five questions addressed *existential topics* and the experienced *changes* in these in relation to the current illness: (1) “How often do you think about the meaning and purpose in life?” (Often, sometimes, rarely, never); (2) “In relation to your illness/hospital admission, do you think more of the meaning and purpose of life? (Thinking more, the same, thinking less); (3) “Do you wish to have done things differently in your life?” (Yes, no); (4) Worded and structured as above (item 2), changes in relation to being ill (More, the same, less); (5) “In relation to your illness, do you think you have found new values in life?” (Yes/no).

Ten questions concerned elements of *religiosity*: (6) “Independently of whether you go to church or not, would you say you are” (A religious person/not a religious person/a convinced atheist/don’t know); (7) Changes in relation to being ill (As above); (8) “How important is God in your life?” (Scale 1–10); (9) Changes in relation to illness; (10) “Do you believe in life after death?” (Yes/no); (11) Changes in relation to illness; (12) “Do you believe in reincarnation?” (Yes/no); (13) Changes in relation to illness; (14) “Do you find that you get comfort and strength from religion?” (Yes/no); (15) Changes in relation to illness.

Finally, five questions were regarding *religious/spiritual practices*: (16) “Do you ever pray or meditate?” (Yes/no); (17) Change in relation to illness (More, the same, less); (18) Do you sometimes talk with God or a higher being? (Yes/no); (19) “Has your need for attending church changed in connection to your illness?” (More/the same/less); (20) Have you had/needed an existential/religious conversation in relation to your illness? (Yes/no). This last was actually asked as two questions but used in combination in this study.

Data analysis

The data were handled and analysed by means of SPSS v. 15, using standard procedures of frequencies, Factor analysis, chi-square test, Spearman correlation, and ANOVA.

Results

The three groups of inpatients, outpatients, and parents to ill children were compared on all involved variables. Few significant differences showed up, and they all disappeared when data were controlled for age (parents were younger than the two other groups).

The distribution of the experienced illness dimensions is shown in Table 1. None of these dimensions showed gender differences, and when the data were split into three age groups, only the duration of illness showed significant age differences, and more patients over 55 years had a duration of illness beyond one year.

In contrast, most of the variables of existential thinking, religiosity, and religious/spiritual practice showed gender differences with women as the more active on nearly all cases. The exceptions were that gender differences were not significant on questions 11 and 13 (changes in belief in afterlife) and question number 3, the only question where men had a higher count (the wish to have done things differently in life, borderline significant). As a tendency, age differences were found in all variables. The youngest age group (<36 years) was the most active in any variable, and age differences on the items 2, 7, 10, 12, 17, and 20 were significantly different, three of these concerning change in attitudes in relation to illness (2, 7, 17). Belief in an afterlife was generally very high in this youngest age group: 67% believed in an afterlife in contrast to 35% in the oldest age

Table 1. Dimensions of experienced illness: percentages.

<i>Self-rated health (N = 459)</i>	
Very good	11
Good	26
Fair	38
Poor	18
Very poor	7
<i>Experienced severity of illness (N = 461)</i>	
Less severe	18
Severe	54
Very severe	28
<i>Duration of period with illness (N = 454)</i>	
<1 month	14
1–3 months	13
>3 months	19
>1 year	53
<i>Experienced essential illness change within the last month (N = 423)</i>	
Health better	26
Health unchanged	42
Health worse	32

group (> 55 years). The younger group was also very high in religious/spiritual practice; 80% of the women and 57% of the men claimed to pray or meditate in this group. For a further analysis of these variables and comparisons with Danish national samples, see Ausker, la Cour, Busch, Nabe-Nielsen, and Mørk Pedersen (2008) and Mørk & Ausker (2007).

A factor analysis was performed, including all the existential, religious, and religion/spirituality variables, but excluding the “change in relation to illness” variables. A component matrix with three factors (Eigenvalue >1) was revealed: one grouping the “high believers,” explaining 41% of the variation and with high associations between nearly all variables. Items 8 and 14 (God’s role and finding comfort in religion) had the highest correlations; the lowest correlations were found in items 3 and 12 (thoughts of doing things different in life and belief in reincarnation). The second factor grouped “believers in reincarnation” (item 12), explaining 10% of the variance, and negative correlations in this group were found on the need for church attendance (19), prayer (16), and finding strength and comfort in religion (14). The third factor grouped the “ruminators,” explaining 10% of variance and with the highest correlation on the wish to have done things differently in life. This was moderately correlated with item 1 and 20 (thinking of meaning of life and having/needing to have an existential/religious conversation in relation to illness), and it was negatively correlated with most variables on religiousness, especially item 6 (faith).

The complex structure of the issues involved in this study calls for understandings and descriptions of patterns in the data rather than a narrower focus on significant results.

In Table 2, the correlations (Spearman’s rho) between the dimensions of illness and the variables on existential issues, religiosity and religious/spiritual practices are shown. (The direction of the correlations in the tables is reversed for more intuitive reading purposes.) The four *dimensions of illness* were all correlated significantly with each other but not very high (0.11–0.14). Item 1 (“How often do you think about the meaning and purpose of life?”) correlated as the only one significantly with all other variables of

Table 2. Correlations between dimensions of illness and existential issues, religiosity, and religious/spiritual practices (Spearman's rho).

	Self-rated health	Severity of illness	Duration of illness	Change of illness
<i>Existential issues</i>				
1. Thinking of meaning and purpose	0.14**	0.18**	0.02	0.06
2. Changes in 1 ^a	0.14**	0.23**	0.07	0.02
3. Wish to have done things differently	0.23**	0.13**	0.03	0.08
4. Changes in 3 ^a	0.00	0.05	-0.09	0.05
5. New life values	0.00	0.12**	0.06	-0.10*
<i>Religiosity</i>				
6. Faith	0.00	0.01	0.03	-0.01
7. Changes in 6 ^a	0.12	0.12*	-0.03	0.03
8. God's role	-0.01	0.00	0.00	0.00
9. Changes in 8 ^a	-0.04	0.10*	-0.01	0.01
10. Life after death	-0.05	0.00	0.02	0.06
11. Changes in 10 ^a	-0.01	0.07	-0.06	0.08
12. Reincarnation	-0.01	-0.02	-0.01	0.10*
13. Changes in 12 ^a	-0.02	0.07	-0.03	0.03
14. Strength and comfort	-0.08	-0.01	-0.07	0.01
15. Changes in 14 ^a	-0.03	0.03	-0.10*	-0.11*
<i>Religious/spiritual practice</i>				
16. Pray or meditate	0.07	0.03	-0.02	-0.04
17. Changes in 16 ^a	0.15**	0.17**	-0.01	0.04
18. Talk with God	0.02	-0.01	-0.02	-0.07
19. Need for church attendance	0.15**	0.10*	-0.01	0.09
20. Had/needed existential talk	0.16**	0.21**	0.10*	0.07

^aChanges in relation to current illness (more, the same, less).

*Correlation is significant at the 0.05 level (two-tailed); **correlation is significant at the 0.01 level (two-tailed).

existential/religious/spiritual content, except items 11 and 13, dealing with experienced illness-related changes in belief in afterlife and reincarnation.

As can be seen in Table 2, correlations for the full sample are not high in any case, and only two patterns seem obvious: the illness dimensions *Self-rated health* and *Experienced severity* correlates with more existential thinking and with religious/spiritual practices.

The dimensions of *duration of illness* and recent *change in course of illness* do not really interact with any existential/religious/practice variable, but most striking seem the three discordant (non-expected) significant correlations (on items 5 and 15), indicating a loss of existential thinking and religiosity with illness duration and when illness turns worse.

A further analysis of the distributions of these two illness dimensions showed two characteristics: (1) the distribution of questions 1–20 on both illness dimensions showed many formed U-formed curves, which challenge the common sense assumption of an ordinal ranking structure of these dimensions of illness (i.e., from less to more; perceiving less duration of illness not as burdensome as longer duration; and changes to the worse as more thought-provoking than changes to the better); and (2) contradictory correlation directions for men and women were found when the sample was divided into gender.

Regarding these issues, Table 3 summarizes additional calculations of three kinds:

- (1) Significance levels are analyzed through Chi²-test, not assuming an ordinal structure of the illness dimensions.

Table 3. Gender and relationships between illness dimensions and existential/religious/spiritual variables: χ^2 significance and direction of Spearman's rho.

	Self-rated health		Severity of illness		Duration of illness		Change of illness	
	Male	Female	Male	Female	Male	Female	Male	Female
<i>Existential issues</i>								
1. Thinking of meaning and purpose			+	+				
2. Changes in 1 ^a			+	+				
3. Wish to have done things differently	+	+	+	+				
4. Changes in 3 ^a	(-)	(+)	+	+				
5. New life values	(-)	(+)						
<i>Religiosity</i>								
6. Faith	(+)	(-)	(+)	(-)				
7. Changes in 6 ^a	+	+	(+)	(-)				
8. God's role ^b	(-)	(+)	(+)	(-)				
9. Changes in 8 ^a	(+)	(-)	(+)	(-)				
10. Life after death	(+)	(-)	(+)	(-)				
11. Changes in 10 ^a	(+)	(-)	+	(-)				
12. Reincarnation	(+)	(-)	(+)	(-)				
13. Changes in 12 ^a	(+)	(-)	+	(-)				
14. Strength and comfort	(+)	(-)	(+)	(-)				
15. Changes in 14 ^a	(+)	(-)	(+)	(-)				
<i>Religious/spiritual practice</i>								
16. Pray or meditate			(+)	(-)				
17. Changes in 16 ^a	+	(+)	+	(+)				
18. Talk with God	(+)	(-)	(+)	(-)				
19. Need for church attendance								
20. Had/needed existential talk			+	+				

Notes: +: Concordant correlation (the more ill the more thoughts/practice), -: discordant correlation (the more ill the less thoughts/practice). The non-significant direction of Spearman's rho is shown in parentheses. U-FORM: significant if dimension of illness is calculated as bivariate.

^aChanges in relation to current illness.

^bAnalysed with ANOVA.

*Correlation is significant at the 0.05 level (two-tailed); **correlation is significant at the 0.01 level (two-tailed).

- (2) The directions of Spearman correlations (concordant or discordant with the hypothesis of the more illness, the more thoughts) are given in parentheses for the cases where the direction of correlation was *contradictory* between genders.
- (3) U-forms of the distributions are indicated if they showed significance, and U-forms were calculated for significance by compressing the illness dimensions into bi-variate variables (duration of illness: 1–3 months' duration vs. shorter and longer; changes of illness direction: change vs. no change) and run against the existential/religious/practice variables.

As can be seen in Table 3, *Self-rated health* and *Severity of illness* have striking patterns of discordant correlations for the women, significant on items 14 and 15, indicating that strength and comfort from religion diminishes with the severity of the illness conditions. The pattern of discordance for the women is dominating in the religious and spiritual/religious practice domains but not in the existential domain, where the main pattern is of concordance between severity and amount of existential thoughts.

Looking separately at the distributions of the *severity of illness* variable, a group of women rating themselves as very severely ill ($N=63$) are strongly turning away from all existence/religious/practice topics. This group comprises more inpatients than the less ill (as expected), but compared with the same group of severely ill men, who turn more religious and have more practice (N also 63), it is noteworthy that there are no differences regarding patient-status, age, work/retirement, or length of education. The gender differences in these subgroups are very clear. One such significant gender-difference example: in the group of less severe ill men, 21% believe in life after death, and in the group of very severe ill men, the number has doubled to 42%. For the women, in the group of less severe ill women, 63% believe in life after death, and this number has dropped to 48% in the group of very severe ill women.

Regarding the *Duration of illness*, the U-curve had its peak of existential/religious/spiritual issues at the illness duration of one to three months—counting both the significant results and the tendency in the patterns of the distribution curves of this illness dimension. The men sometimes peaked slightly later, three months to one year. When divided into gender, the variable counts showed nearly the same levels when the duration of illness was less than one month and when the duration of illness was more than one year, indicating the start and end-point of an illness period almost equal regarding existential/religious/spiritual intensity.

The dimension of *Changes of course of illness within the last month* also showed characteristic gender differences, in this case concerning the kind of change that had taken place. The distributions revealed the main pattern of men being more active on the existential/religious/spiritual issues when the illness turns to the worse, while the opposite was the case for women: the women turned existential/religious/spiritual active when the change in illness was for the better.

The patient's *experience of changes* in relation to illness on the existential/religious/spiritual variables, as asked for in the questionnaire in items 2, 4, 7, 9, 11, 13, 15, and 17, were analyzed separately by constructing a "change-score." Items 2 and 4 were added to an "experienced existential change" score; items 7, 9, 11, 13, and 15 were added to a "experienced religiosity change" score; items 16 and 17 were added to a "Experienced spiritual practice change" score. Finally, all scores were added to a "Total score" of experienced change (range 8–24). The correlations of the change scores and the dimensions of illness are listed in Table 4. While the self-rated health shows significant changes in the practice variables, again, the dimension of severity of illness seems most

Table 4. Changes in self-reported existential/religious/practice variables: Spearman's rho correlations.

	Self-rated health			Severity of illness			Duration of illness			Change of illness		
	Full sample	Male	Female	Full sample	Male	Female	Full sample	Male	Female	Full sample	Male	Female
Existential issues	0.03	-0.06	0.08	0.13*	0.10	0.17	-0.05	-0.07	-0.06	0.02	-0.01	0.06
Religiosity	0.08	0.13	-0.01	0.17**	0.18**	0.15*	-0.06	0.00	-0.15	0.01	0.01	0.00
Practice	0.18**	0.30**	0.06	0.19**	0.22**	0.15*	-0.01	0.09	-0.11	0.06	0.18*	-0.04
Total	0.11	0.11	0.01	0.27**	0.27**	0.23*	-0.08	0.00	-0.22*	0.05	0.03	0.09

*Correlation is significant at the 0.05 level (two-tailed); **correlation is significant at the 0.01 level (two-tailed).

clear following the hypothesis: the more severe illness, the more experience of change, especially for the men. The duration of illness is dominated by non-significant, discordant correlations and the discordant, significant total score correlation for women. U-curves are present for the duration of illness dimension, but not significant in the bivariate analysis, conducted as above. There is no clear pattern in the distribution of the Change of illness-dimension except the one significant finding of men turning more religious/spiritual active when the course of illness has taken a turn for the worse within the last month.

Discussion

The youngest group of patients (<36 years) were shown to be the most active in regard to every aspect of existential, religious, and spiritual/religious practice issues. At first glance, this finding is not what should be expected in a secular society where religious upbringing is in accordance with the experiences of the Danish hospital priests (Mørk & Ausker, 2007) and with the patterns found in Danish sociology in religion, where the sociological layers of religious growth after years of decline are found among the young ones in the cities (Andersen & Riis, 2002). This finding might be exclusive for a long-term secular society and might not be found in more religious societies. Given the framework of serious illness (and heightened awareness of death) the finding might be taken as an argument for a thesis of a natural limitation of secularization, at least regarding existential issues and belief in life after death, as argued, among others, by Batson and Stocks (2004) and Koole and Van den Berg (2004).

The component matrix of the factor analysis of the questionnaire in use did not reflect the intellectual division of the structure of content in existential, religious, and practice issues. The component matrix instead showed three different types of belief systems; the most dominant (explaining 41% of variance) was the coherent structure of questions differentiating between the “high-believers” and “low-believers” in the data. The intellectual structure of existential, religious, and practice issues instead proved meaningful in relation to the illness dimensions, where clear differences between the categories were found and where the existential and practice categories were the most predictable, and the religious category the most complex.

The illness dimension of *self-rated health* showed concordant correlations between bad health and the areas of existential issues and religious/spiritual practice, while the area of religiosity had an overall tendency to be slightly discordant correlated with bad health. Gender differences were remarkable in this area, with patterns of men showing and reporting more religiosity with worse health, women showing and reporting less religiosity with worse health. Especially the women’s own experiences of change in obtaining comfort and strength from religion dramatically declined with worse health. The patterns of gender differences in the area of religiosity were consistent in most calculations and will be discussed below.

The dimension of *severity of illness* seemed to be the most predictive dimension of illness, revealing the clearest pattern in the expected direction: the worse the illness, the more existential and spiritual/religious practice activity there was, and this was especially the case for men. Again, gender differences with results pointing in opposite directions were a clear pattern, not only on religious matters but also expanding to the practice dimensions of praying and meditating. Women tended to lose faith with severity; men gained faith with severity of illness.

The dimension of *duration of illness* unexpectedly showed no linear correlations to any category of variables, but a typical U-form of the distribution turned up in most distributions (significant in some), indicating a main period of existential/religious/practice intensity of one to three months after the onset of the (serious) illness. Men tended to have such an intensive period a little later than women. After this period of intensity, the thoughts, beliefs, and practices seem to “normalize” to the level of the start of the illness period.

The last dimension of *change in the course of illness* might show the least expected results, although in concordance with the tendencies in the rest of the data. When illness changed for the better, men tended to lose interest in the existential, religious, and practice areas, while women gained (or probably regained) their interest. When the illness changed for the worse, men gained interest, while women lost it, especially concerning the question of obtaining strength and comfort from religion.

The repeatedly marked gender differences are not previously reported in any study, to my knowledge. In empirical studies, we usually find women to be more religiously active than men, and when religion is found to play a protective role, women are found to profit most from that (Krause, Ellison, & Wulff, 1998). In specific studies of health, religion, and coping, we find clear gender differences showing women gaining more health and psychological benefits from religiosity. This also includes previous Danish findings on mortality and church attendance in an elderly sample born in 1914 (Helm, Hays, Flint, Koenig, & Blazer, 2000; Koenig et al., 1999; la Cour, Avlund, & Schultz-Larsen, 2006; McCullough, Hoyt, Larson, Koenig, & Thoresen, 2000; Pargament, 1997).

A possible perspective on these apparently contradictory findings may be that religious coping as a meaning-making strategy might be very closely connected to culture and gender, while the existential and practice activity as meaning-making strategies may seem slightly more universal and robust against cultural differences. An interesting question for future research would be to try to connect gender- or culture-specific religiosity (such as different pictures of God) to specific feelings of support or disappointment in religion during a period of illness or other personal crisis.

Clinical perspectives

For clinical practice in either psychological or pastoral counselling, four aspects of this study may be of relevance:

- (1) When looking at Tables 2–4, differences between the actual findings and the patient’s own experience of change in relation to illness are quite often not the same. The men are, for example, significantly more prone to wish to have done things differently in life with worse self-rated health, but in their own experience, they do not report this to be the case. On other occasions, the patient’s experiences of change seem to overgrow the tendency of the item (examples: women reporting great changes in thinking of meaning and purpose with severe illness, but not showing them (item 2); and men reporting, but not showing great changes regarding faith and prayers: item 7 and 17). In clinical settings, people might be in need of sharing their reflections of existential and religious matters, while in their expressed attitudes, they deny or express disbelief of such issues. This sometimes confusing situation has previously been reported as a clinical experience (Mørk & Ausker, 2007).
- (2) The finding of the younger group as very active in the existential, religious, and practice domains might call for clinical attention to this group in particular. In a secular setting, this group will often have been raised in a non-religious way and may therefore have

special needs regarding development of words and concepts dealing with their changed life conditions, especially if illness is experienced as a life threat. If patients are non-religious, previous clinical studies with non-religious patients have stressed the necessity of time to mutual exchanges of thoughts and natural development of suitable language (McGrath, 2005; McGrath & Clarke, 2003).

- (3) The finding of major gender differences might represent special clinical challenges regarding the women. If a main concern for severely ill women in a secular society is the feeling of insufficiency of the previous worldview or even denial of previous meaning-making dimensions of life, it might call for a goal-oriented clinical approach towards the group. Goals could include special attention to negative religious concerns and religious struggle. If comparable, negative religious coping and religious struggle have previously been set as warning flags for clinical attention due to associations with declined well-being and worse health (Fitchett et al., 2004; Pargament, Koenig, Tarakeshwar, & Hahn, 2001; Pargament, Smith, et al., 1998; Pargament, Zinnbauer, et al., 1998).
- (4) In this study, the time period from one to three months after the onset of illness is found to be probably the most intensive for existential and religious reflections. This could be of clinical relevance when planning psycho-social or pastoral support strategies in hospital settings. Common recommendations for interventions are not usually found or mentioned as a research result in this area, probably due to the individually oriented perspective of pastoral care and existential psychotherapy (Lantz, 2004).

Limitations

This study represents quantitative investigations of existential, religious, and practice variables in relation to illness in a secular, non-religious culture, a field not yet supported by other studies. Because of this, due to the limited size of the study and due to the methodological limitations, all findings must be reflected with caution.

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References

- Andersen, P.B., & Riis, O. (2002). Religionen bliver privat (Religion turns private). In P. Gundelach (Ed.), *Danskernes værdier [Values of the Danes]* (pp. 76–98). Copenhagen: Hans Reitzels Forlag.
- Ano, G.G., & Vasconcelles, E.B. (2005). Religious coping and psychological adjustment to stress: a meta-analysis. *Journal of Clinical Psychology, 61*, 461–480.
- Ausker, N., la Cour, P., Busch, C., Nabe-Nielsen, H., & Mørk Pedersen, L. (2008). Danske hospitalspatienter intensiverer eksistentielle tanker og religiøst liv (in Danish). (Existential thoughts and religious life of Danish hospital patients). *Ugeskrift for Læger* [in press].

- Batson, C.D., & Stocks, E.L. (2004). Religion: Its core psychological functions. In J. Greenberg, S.L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 141–155). New York: Guilford.
- Bryman, B. (2004). *Social research methods*. Oxford: Oxford University Press.
- Ferraro, K.F., & Kelley-Moore, J.A. (2000). Religious consolation among men and women: do health problems spur seeking? *Journal for the Scientific Study of Religion*, *39*, 220–234.
- Fitchett, G., Murphy, P.E., Kim, J., Gibbons, J.L., Cameron, J.R., & Davis, J.A. (2004). Religious struggle: prevalence, correlates and mental health risks in diabetic, congestive heart failure, and oncology patients. *The International Journal of Psychiatry in Medicine*, *34*, 179–196.
- Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., & Kirkland, S. et al. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology*, *58*, 308–318.
- Gustavsson, G., & Petterson, T.E. (2000). *Folkkyrkor och religiös pluralism—den nordiska religiösa modellen* (in Swedish) [*The folk church and religious pluralism—the Nordic religious model*]. Stockholm: Verbum.
- Helm, H.M., Hays, J.C., Flint, E.P., Koenig, H.G., & Blazer, D.G. (2000). Does private religious activity prolong survival? A six-year follow-up study of 3,851 older adults. *Journal of Gerontology*, *55A*, 400–405.
- Inglehart, R. World Values Surveys and European Values Surveys, 1981–1984, 1990–1993, and 1995–1997. [ICPSR version. Ann Arbor]. 2000. Institute for Social Research, 2000. Ann Arbor, Inter-University Consortium for Political and Social Research. www.worldvaluessurvey.com.
- Jacobsen, C.J., Luckhaupt, S.E., DeLaney, S., & Tsevat, J. (2006). Religio-biography, coping, and meaning-making among persons with HIV/AIDS. *Journal for the Scientific Study of Religion*, *45*, 39–56.
- Koenig, H.G., Hays, J.C., Larson, D.B., George, L.K., Cohen, H.J., & McCullough, M.E. et al. (1999). Does religious attendance prolong survival? A six-year follow-up study of 3,968 older adults. *Journals of Gerontology Series A: Biological and Medical Science*, *54*, M370–M376.
- Koenig, H.G., Pargament, K., & Nielsen, J. (1998). Religious coping and health status in medically ill hospitalized older adults. *Journal of Nervous and Mental Disease*, *186*, 529–535.
- Koole, S.L., & Van den Berg, A.E. (2004). Paradise lost and reclaimed: an existential motives analysis of human–nature relations. In J. Greenberg, S.L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 86–103). New York: Guilford.
- Krause, N., Ellison, C.G., & Wulff, K.M. (1998). Church-based emotional support, negative interaction, and psychological well-being: findings from a national sample of Presbyterians. *Journal for the Scientific Study of Religion*, *37*, 725–741.
- la Cour, P. (2005). Danskernes Gud i krise (in Danish) [God of the Danes during crisis]. In M. Højsgaard Thomsen, & H. Raun Iversen (Eds.), *Gudstro i Danmark* (pp. 59–82). København: Anis.
- la Cour, P., Avlund, K., & Schultz-Larsen, K. (2006). Religion and survival in a secular region. A twenty year follow-up of 734 Danish adults born in 1914. *Social Science and Medicine*, *62*, 157–164.
- Lantz, J. (2004). Research and evaluation issues in existential psychotherapy. *Journal of Contemporary Psychotherapy*, *34*, 331–340.
- McCaffrey, A.M., Eisenberg, D.M., Legedza, A.T., Davis, R.B., & Phillips, R.S. (2004). Prayer for health concerns: results of a national survey on prevalence and patterns of use. *Archives of Internal Medicine*, *164*, 858–862.
- McCullough, M.E., Hoyt, W.T., Larson, D.B., Koenig, H.G., & Thoresen, C. (2000). Religious involvement and mortality: a meta-analytic review. *Health Psychology*, *19*, 211–222.
- McGrath, P. (2005). Developing a language for nonreligious spirituality in relation to serious illness through research: preliminary findings. *Health Communications*, *18*, 217–235.
- McGrath, P., & Clarke, H. (2003). Creating the space for spiritual talk: insights from survivors of haematological malignancies. *Australian Health Review*, *26*, 116–132.

- Mørk, L., & Ausker, N. (2007). Trosfaktoren—hvad siger patienterne? (in Danish) (The faith factor—what do the patients say?). *Tidskrift for sjalesorg*, 27(2), 126–139.
- Pargament, K.I. (1997). *The psychology of religion and coping*. New York, London: The Guilford Press.
- Pargament, K.I., Koenig, H.G., Tarakeshwar, N., & Hahn, J. (2001). Religious struggle as a predictor of mortality among medically ill elderly patients. A 2-year longitudinal study. *Archives of Internal Medicine*, 161, 1881–1885.
- Pargament, K.I., Smith, B.W., Koenig, H.G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37, 710–724.
- Pargament, K., Zinnbauer, B.J., Scott, A.B., Butter, E.M., Zerowin, J., & Stanik, P. (1998). Red flags and religious coping: Identifying some religious warning signs among people in crisis. *Journal of Clinical Psychology*, 54, 77–89.
- Patient-administrative system, Rigshospitalet. 2 April 2006. Data File.
- Solomon, S., Greenberg, J., & Pyszczynski, T. (2004). The cultural animal: twenty years of terror management theory and research. In J. Greenberg, S.L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 13–24). New York: The Guilford Press.
- Statistics Denmark (2007). Mean age for the Danish population. Available online at: <http://www.dst.dk/Vejviser/Portal/Befolkning/FAQ.aspx> (accessed 22 August 2007).