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And Likelihood of Addressing Religious and Spiritual Issues with Patients

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Characteristics of religious and spiritual beliefs of Danish Physicians – and likelihood of addressing religious and spiritual issues with patients

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Abstract

This study investigated the associations between physicians' religious and spiritual (R/S) characteristics and frequency of addressing patients' R/S issues, as well as gender differences in these variables. Information was obtained through a questionnaire mailed to 1,485 Danish physicians (response rate: 63%). We found significant associations between physicians' personal R/S beliefs and the frequency of addressing R/S issues. Moreover, we identified significant gender

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differences in most R/S characteristics. However, no differences in frequency of addressing R/S issues were identified across gender. These results raise questions regarding the influence of gender on associations between physicians' R/S characteristics and frequency of addressing R/S issues.

Key words: Religion, spirituality, physician, gender, secular society

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Introduction

Over recent decades, the medical literature investigating the influences of religious beliefs and practices on patient health has increased to the point where some scholars have characterized the increase as an "explosion" (Hall, Meador & Koenig, 2008; Mills, 2002). The research studies show that positive religious and spiritual (R/S) resources, beliefs, and practices are linked to positive health outcomes in cancer, heart disease, and psychiatric disease, whereas adverse results are seen with R/S beliefs acting as negative resources or leading to spiritual struggle (Koenig, King & Carson, 2012). Even in Denmark, once named "the least religious nation in the world" (Zuckerman, 2008), the same seems to apply in populations practicing religious belief such as Seventh Day Adventists and Baptists (Thygesen et al, 2012). Likewise, research has indicated a relationship between positive religious resources and positive coping outcomes, again with adverse effects regarding negative religious resources (Paloutzian & Park, 2005). Therefore, the above-mentioned results indicate that discussing and engaging patients' R/S beliefs and practices in health care settings might be constructive in terms of patients' adjustment and coping (Büssing et al., 2009; Jenkins & Pargament, 1995).

Despite a body of research showing the possible contribution of R/S resources to patient adjustment and coping, the majority of physicians remain reticent to be attentive to and discuss their patients' R/S resources and practices (Curlin, Chin, Sellergren, Roach & Lantos, 2006; Assing Hvidt et al., in press; Kappel Kørup et al, 2016). While some of the barriers to discussing R/S practices and existential issues can be explained by reference to general personal discomfort and lack of education on the matter (Assing Hvidt et al., in press; Balboni et al., 2014; Carr, 2010; Curlin et al., 2006; McCauley et al., 2005; Sloth et al., 2011), some of the barriers are also related to physicians' own R/S characteristics. Curlin et al. (2006) explored how physicians' R/S beliefs influence their willingness to initiate discussions about R/S issues with their patients. Curlin et al. (2006) found that the physician's own R/S characteristics played an important role in explaining self-reported attitude and behaviour, over and above that which can be explained by other factors such as differences in religious affiliation, self-reported barriers to discussing R/S, specialty, and other covariates.

Research in the field of physician beliefs and values is growing, and several international research projects have been conducted. In Germany, Lee, Zahn & Baumann (2014) found that German psychiatrists' own R/S positively influenced their willingness to address, and their attitude towards, R/S issues in the clinical encounter. Studying Muslim physicians' attitudes and behaviors towards R/S issues, Al-Yousefi (2012) found that, among other things, their attitude towards the relationship between religion and health and intrinsic religiosity predicted physicians' behaviors regarding addressing R/S in clinical practice. In a large cross-cultural study, Ramakrishnan and colleagues (2014) investigated, among other things, the difference between Indonesian and Indian physicians' attitudes towards, or perspectives on, the role of R/S in medicine. Though they found that Indian and Indonesian physicians' comfort in meeting patients' spiritual needs was better explained by clinical experiences in meeting patients' R/S needs, physicians' own R/S characteristics also affected the frequency of addressing R/S issues in the clinical encounter.

Although physicians' values and R/S beliefs have been shown, as seen above, to affect the communication about R/S issues with the patient in different cultural contexts, research investigating these associations is sparse in a predominantly secular setting such as Denmark. Therefore, we found it important to explore the R/S characteristics of physicians in Denmark, as well as whether these R/S characteristics (R/S or not) of Danish physicians did influence the frequency of addressing R/S issues with patients. No generalized survey has been conducted among Danish physicians on R/S matters until the present study. Empirical knowledge about how R/S characteristics of Danish physicians influence the clinical encounter might be of help in raising physicians' awareness that their own R/S characteristics affect how they relate to, and communicate with, patients.

Apart from investigating physicians' R/S characteristics, this study will explore whether there are any gender differences concerning R/S characteristics and the frequency of addressing R/S issues with patients. Research into the relation between gender and R/S characteristics has been conducted for other populations than physicians. In a recent study of 3,686 Danish twins, Hvidtjørn, Hjelmborg, Skytthe, Christensen and Hvidt (2014) investigated the association between gender and religiosity. Among other discoveries, they found that women more often than men reported being religious. This parallels what has been found in other studies conducted in both Denmark (e.g. Ausker, 2008; Gundelach, 2008) and UK (Loewenthal, MacLeod & Cinnirella, 2002) (for a review and discussion on the topic, see Trzebiatowska & Bruce, 2012). Whether these differences also apply to a sample of Danish physicians will be investigated in this study.

Aim

The aim of this study is to provide a description of the R/S characteristics of Danish physicians and to explore how these are related to self-reported frequency of addressing R/S issues with patients. Moreover, this study aims to examine possible gender differences in R/S characteristics and the impact of R/S characteristics on the frequency of addressing R/S issues with patients.

Methods

Instrument

We developed a 45-item questionnaire. It consisted of twelve items on demographics. Furthermore, we included eleven items from the European Value Study (EVS). The EVS is a cross-national survey study on "basic human values" carried out in 47 European countries every nine years. Information about the EVS, its methods and results can be found at www.europeanvaluesstudy.eu. In addition, we included two items from the questionnaire Religion III, developed by the International Social Survey Programme (ISSP). For information about the ISSP see: www.issp.org. We also included seventeen questions from Curlin et al.'s (2006) study of American physicians' religious charateristics. These questions were forward-backward translated according to standard guidelines for questionnaire validation, in order to ensure the quality of translation (Beaton, Bombardier, Guillemin & Ferraz, 2000). Finally, we added two unique items to address particular interests in a Danish context, as well as an item on whether the participants were willing to do a qualitative interview afterwards. The questionnaire went through several revisions based on a pilot study among 150 Danish physicians, and qualitative validation with 10 Danish physicians. These revisions were concerned with the precise formulation of individual questions in the questionnaire.

Sample

The questionnaire was mailed to 1485 physicians in the Southern Denmark Region (one of Denmark's five regions with 1.2 million inhabitants). General practitioners (GPs), private practicing specialists, hospital physicians, and physicians otherwise employed (pharmaceutical companies etc.) were included. In this study, all GPs and private practicing specialists from the Southern Denmark Region were included. A sample of physicians employed at hospitals were randomly chosen from the physicians database of The National Board of Health (NBH). The respondents had the option of returning a questionnaire by surface mail, or filling out the questionnaire on the Internet, through the program SurveyXact, developed and maintained by Rambøll, a Danish consulting firm. Two reminders were sent to non-respondents following the initial wave of questionnaires. In Denmark, most hospitals are public, thus most hospital physicians are publicly employed, whereas GPs own their own practices. The NBH physician database supplied home addresses of hospital-employed physicians and supplied the work addresses of general practitioners. GPs were offered financial compensation for the time spent filling out the questionnaire (256DKK, approximately equivalent to 35USD), as is common practice in surveys among GPs in Denmark.

Analysis

Paper version responses of the questionnaire were added manually to the data collected online in SurveyXact, then extracted from that program and imported into the statistical program Stata, version 13 in which the statistical analyses were conducted.

Missing data were excluded from the analysis. We then utilized Pearson's Chi square (x^2) to investigate the relation between R/S characteristics of physicians and frequency of addressing R/S issues in the clinical encounter. For the purpose of this study, physicians' R/S characteristics will be limited to include: being a person of faith or not/atheist, frequency of prayer, and frequency of

church attendance. Furthermore, possible gender differences were investigated in relation to R/S characteristics.

Survey Response

29 Questionnaires were returned due to errors in addresses, or various inabilities to respond. A total of 911 questionnaires were received, yielding an overall response rate of 63%. Of the responding physicians, 42% were female and 58% male. Mean age was fifty-five years. 56% of respondents were hospital employees, 21% were GPs, 11% were private practicing specialists, and 12% were employed otherwise such as in pharmaceutical companies.

Results

Religious orientation and affiliation

Table 1 – Religious and spiritual beliefs and affiliations in relation to gender

	Men (%)	**Women (%)**	**Total (%)**
Do you consider yourself a person of faith?			
A person of faith	236 (52)	197 (61)	433 (56)
Not a person of faith	136 (30)	89 (28)	225 (29)
Convinced atheist	83 (18)	35 (11)	118 (15)
Total	455	321	776
p-value (χ^2) *	< 0.001*		
Do you consider yourself a religious person?			
Very religious	11 (2)	6 (2)	17 (2)
A little *or* moderately religious	268 (53)	233 (62)	501 (57)
Not religious at all	227 (45)	135 (36)	362 (41)
Total	506	374	880
p-value (χ^2)	= 0.021		
Religious affiliation			

Member of Danish State Lutheran Church	356 (69)	292 (76)	648 (72)
Member of another religious organization	40 (7)	30 (8)	70 (8)
Not a member of any religious organization	123 (24)	62 (16)	185 (20)
Total	519	384	903
p-value (χ^2)	=0.019		

**Throughout this paper, we are working with a 95% level of significance.*

86% of respondents answered the question of whether they considered themselves a person of faith. Of these respondents, 56% reported being a person of faith, 29% reported not being a person of faith, and 15% reported being convinced atheists. The distribution of answers was significantly different in men and women. Women were more likely to report being a person of faith (61% vs. 52%), men were more likely to report *not* being a person of faith (30% vs. 28%), and men were more likely to report being a convinced atheist (18% vs 11%).

98% of respondents answered the question about the degree of their personal religiosity. Of these, 2% reported being very religious, 57% reported being a little or moderately religious, and 41% reported not being religious at all. Of the respondents reporting being very religious the distribution was equal in both genders (2%). For the other categories, there was significant difference between men and women in the distribution of answers. Women were more likely to report being a little or moderately religious than men (62% of women vs 53% of men), and men were more likely to report not being religious at all, than were women (45% of men vs 36% of women).

72% of respondents reported being members of The Danish State Lutheran Church, 8% reported other affiliation (Roman Catholic, Orthodox, Jewish, Hindu), and 20% reported having no affiliation at all. Again, gender differences were significant, with men less likely to be members of the State Church (69% vs. 76%), and more likely to report no membership (24% vs. 16%), than were female physicians.

Church attendance and prayer

Table 2 – frequency of church attendance and prayer in relation to gender

	Men (%)	**Women (%)**	**Total (%)**
How often do you attend church?			
Once per week or more	16 (3)	8 (2)	24 (3)
About once per month	34 (7)	29 (8)	63 (7)
At special holidays	220 (43)	174 (46)	394 (44)
About once per year	91 (18)	63 (17)	154 (17)
Less than once per year *or* never	152 (29)	104 (27)	256 (29)
Total	455	321	776
p-value (χ^2)	= 0.713		
How often do you pray?			
Daily	50 (10)	32 (9)	82 (9)
Once per week or more	34 (7)	49 (13)	83 (9)
About once per month	13 (3)	14 (4)	27 (3)
About once per year	38 (7)	44 (12)	82 (9)
Less than once per year *or* never	372 (73)	229 (62)	601 (70)
Total	507	449	956

p-value (χ^2)	<0.01	

99% of respondents answered the question regarding frequency of church attendance. 3% reported attending church once per week or more, 7% reported attending about once per month, 44% reported

attending at special holidays, 17% reported attending about once per year, and 29% reported attending church less than once per year or never. There were no significant gender differences in frequency of church attendance.

97% of respondents answered the question regarding frequency of prayer outside of church. Of these, 9% reported praying daily, 9% reported praying once per week or more, 3% praying about once per month, 9% reported praying about once per year or more, and 70% reported praying less than once per year or never. The distribution of answers was significantly different in men and women. Generally, women reported a higher frequency of prayer than men. There was a very slight difference in daily or monthly prayer, and a clearer difference in weekly (7% vs. 13%) and yearly (7% vs. 12%) prayer, as well as praying in less than yearly or never (73% vs. 62%).

Addressing R/S issues in clinical practices

Table 3 - Frequency of addressing R/S issues in clinical practice in relation to gender

	Men (%) **Women (%)**	**Total (%)**

How often do you address R/S issues?			
Once per week or more	32 (7)	14 (4)	46 (6)
Monthly	100 (21)	76 (22)	176 (21)
About once per year	134 (28)	96 (26)	230 (28)
Less than once per year *or* never	217 (44)	163 (48)	380 (45)
Total	483	349	832
p-value (χ^2)	= 0.43		

93% of respondents answered the question of addressing R/S issues with patients. 45% reported addressing R/S issues less than once per year or never, 28% reported addressing these issues

about once per year, 21% reported addressing them monthly, and 6% reported addressing R/S issues once per week or more. There were no significant gender differences. Out of the group of respondents addressing R/S issues yearly or never, 84% found this to be appropriate. When asked if they would change the subject if a patient brought up R/S issues, 20% would do so sometimes, and 12% would do so often or always. These findings are not listed in the tables.

Faith, prayer and church attendance, and frequency of addressing R/S issues

Table 4 – Associations between faith, prayer, and church attendance, and frequency of addressing R/S issues

	Frequency of addressing R/S issues	

	Yearly or less/never (%)	**Monthly or more often (%)**	**Total (%)**
Faith or non-faith			
A person of faith	276 (70)	120 (30)	396 (100)
Not a person of faith or convinced atheist	253 (78)	70 (22)	323 (100)
Total	529	190	719
p-value (χ^2)	< 0.01		
Frequency of prayer			
Monthly or more often	106 (63)	63 (37)	154 (17)
Yearly or less/never	488 (76)	153 (24)	256 (29)
Total	594	216	810
p-value (χ^2)	< 0.01		
Church attendance			
Monthly or more often	50 (63)	30 (37)	80 (100)
Yearly or less/never	555 (75)	188 (25)	743 (100)
Total	605	218	823
p-value (χ^2)	= 0.018		

Respondents who reported being a person of faith were significantly more likely to address R/S issues monthly or more, than respondents who reported being atheists or not a person of faith (30% vs 22%).

Respondents who reported praying monthly or more often were significantly more likely to report addressing R/S issues monthly or more, than were respondents who reported praying yearly or never (37% vs 24%).

Respondents who reported attending church monthly or more often were significantly more likely to report addressing R/S issues monthly or more, than were respondents who reported attending church less than monthly (37% vs 25%).

Discussion

The present study explored R/S characteristics of Danish physicians, and examined how these were related to self-reported frequency of addressing R/S issues with patients. Moreover, this study explored possible gender differences in R/S characteristics.

More than two thirds of respondents (72%) reported affiliation with the Danish State Church, yet 44% reported either not being a person of faith or a convinced atheist. Only 10% reported attending church monthly or more frequently. This seems to indicate a rather strong cultural attachment to the state church, alongside a very low personal commitment to religious practices. This mirrors what has been described in several sociological studies of the religious characteristics of the general Danish population (Andersen PB & Luchau P. 2004, Andersen PB et al 2013, Gundelach, P. 2011).

Moreover, this study identified statistical significant associations between R/S characteristics (faith, frequency of prayer and of church attendance) and frequency of addressing R/S issues. This is in accordance with what has been found elsewhere in the literature (e.g. Curlin et al., 2006; Al-Yousefi 2012; Lee et al., 2014; Ramakrishnan et al., 2014). Therefore, it seems that, although traditional and institutionalized religion do not seem to play a significant role in most Danes' lives (Andersen & Luchau, 2004; Andersen et al., 2013; Gundelach, 2011), some of the same

dynamics – regarding physicians' R/S characteristics and their propensity to be attentive to and discuss R/S matters – seem to prevail as those found in the above-mentioned studies.

Of those who reported addressing R/S issues with patients yearly or never (73%), the vast majority (84%) found this amount of time to be appropriate. In addition, if the patients were to bring up R/S issues, about one third of respondents would change the subject sometimes, often, or always. This seems to indicate a certain uneasiness or inability among physicians to communicate with patients about R/S issues which has also been documented in a recent study among Danish general practitioners (Assing Hvidt et al., in press). There are probably several reasons for this. In Denmark, religion is widely held to be a private and personal matter (Rosen, I. 2009). Moreover, there is a widespread tendency in secular Europe to identify science and religion as separate domains that cannot – and should not – partake of the same social spheres (Taylor, C. 2007). It has also been put forth that socialization into a dominating biomedical culture with its claim to rationality, objectivity and personal detachment explains why physicians feel that they cannot legitimately provide a type of care that involves an attention on R/S issues (Assing Hvidt et al., in press). Future studies should investigate how the different explanations and mechanisms apply in different medical contexts and how a medical culture might be advanced that foster a more explicit patient centred attention on the patient's R/S needs.

In accordance with other research projects in the field, this study found significant gender differences in R/S characteristics (e.g. Hvidtjørn et al., 2014), but even though female physicians reported being more religious than males, the present study did not show gender differences in terms of frequency of addressing R/S issues. This contrasts what could be expected based on Curlin et al.'s (2006) findings: higher R/S predict higher frequency of addressing R/S issues, controlled for the effects of gender – among other variables. Therefore, the lack of gender differences in frequency – in spite of significant differences in R/S characteristics – does raise some questions concerning the mediating or moderating effects of gender on the relationship between R/S

characteristics and frequency of addressing R/S issues. Future studies should investigate whether gender prompt mediating or moderating effects on the relation between R/S characteristics and frequency of addressing R/S issues in a Danish context.

Limitations

Our study has both strengths and limitations. Due to funding and logistical considerations, it was only possible to conduct our investigation in The Southern Denmark Region, comprising about a fifth of the total Danish population. Nevertheless, by including a randomized sample of hospital physicians and all GPs from the Southern Denmark Region (except from the 150 GPs who were participating in the pilot study), our study is quite representative for physicians in this region. Generalizing to physician populations from other regions of Denmark should be approached with caution, however. Even though we employed a large sample (N=911) – thereby improving generalizability –, it is possible that the R/S beliefs and practices of physicians in this particular region of Denmark differ somewhat from the physicians in other regions. However, it is unknown if this possible difference would be statistically significant. Furthermore, with 37% non-respondents, there is a likelihood of bias, but unfortunately, a non-response follow-up was not possible due to confidentiality issues. Finally, employing a large sample does not come without costs. A number of associations and differences identified in the present study were statistically significant, but with quite modest numerical differences. There is a possibility that the results, though statistically significant, might be an expression of high statistical power due to a relatively large sample.

Conclusion

To recapitulate, this study indicates that there is a significant association between the personal religious affiliations and practices of physicians, and the frequency with which they report addressing R/S issues with patients; that is, physicians who regard themselves as religious, attend

church, and pray often have a higher frequency of addressing R/S issues with patients than their atheistic counterparts. This parallels what studies in USA and Germany have reported (Ellis & Campbell, 2005). The study also found that, while women reported higher levels of R/S, they were not significantly more likely to initiate discussions on patients' R/S issues than men.

While it may not be surprising that the more religious physicians are, the more likely they will be to address religious issues with patients, these findings do raise a number of questions in relation to the Danish institutional medical setting. If Danish medical practice is to be considered and practiced as patient centred in all areas, as it is stated in a strategy approved for the Regions of Denmark (Danske Regioner, 2015), it is important to further study and discuss the extent to which subjective beliefs and values of physicians – whether these be religious or non-religious – influence patient care and clinical decision making. These considerations seem even more imperative as this study suggests that, when it comes to R/S issues, clinical practice in Denmark is prone to be more physician than patient centred.

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