UNIVERSITY OF CINCINNATI

Date: July 22, 2004

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hereby submit this work as part of the requirements for the degree of:
Master of Science

in:

Medical Genetics

It is entitled:

Spiritual Assessment in Genetic Counseling

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Spiritual Assessment in Genetic Counseling

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July 22, 2004

Thesis submitted for Masters of Science in Medical Genetics
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Abstract

One hundred and twenty seven full members of the National Society of Genetic Counselors participated in this study which investigated current spiritual assessment practices of genetic counselors and introduced a spiritual assessment tool. While 60% of genetic counselors reported they had performed a spiritual assessment in the past year, fewer than 8.7% of these counselors assessed spirituality in more than half of their sessions. Counselors with a high perceived relevance of spiritual assessment performed an assessment more frequently than those with a low perceived relevance. Barriers to spiritual assessment included lack of time, insufficient skills, and uncertainty regarding the role of spiritual assessment within genetic counseling. Almost two-thirds of counselors expressed that having a spiritual assessment tool would increase their ability to elicit relevant information. These data demonstrate a need for increased training regarding the methods and relevance of spiritual assessment in genetic counseling. Recommendations for implementing this training are explored.

Acknowledgements:

We would like to thank the Bioethics Network of Ohio (BENO) for their generous grant which supported this research. We would also like to thank Gowri Anandarajah and Ellen Hight for granting permission to use the HOPE tool in our study.

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Introduction

Spirituality is variously defined, but generally includes a focus on a sense of meaning and purpose derived from a relationship with God or a higher spirit, self and others (Greenwald & Harder, 2003; Hodge, 2001; Koenig, 2002; McVay, 2002; Treloar, 1999). Anandarajah and Hight (2001) identified three aspects of spirituality: cognitive/philosophical, experiential/emotional, and behavior. The first, cognitive/philosophical, involves the beliefs and values by which an individual lives as well as a search for meaning, purpose, and truth in life. The second, experiential/emotional, regards the feelings of hope, love, connectedness, inner peace, comfort, and support sustained by relationships and connections with self, community, environment, nature, and the transcendent. The third aspect, behavior, consists of the external manifestations of individual spiritual beliefs and inner spiritual state.

Research in the past 20 years increased our understanding of the connections between spirituality, religion, and health (Mills, 2002). Spirituality has positive effects on mental, physical, and emotional health including coping ability, self-esteem, and social support systems (Anadarajah & Hight, 2001; Hodge, 2001; Koenig, 2002; Thoresen & Harris, 2002; Treloar, 1999). In addition, religious and spiritual beliefs can profoundly influence medical decision making. In one study of outpatients, 45% of participants indicated that religious beliefs would influence their medical decision-making if they became gravely ill (Ehman et al., 1999). A study of high-risk breast cancer probands found that a patient's self-perceived spirituality influenced her decision-making regarding BRCA testing (Schwartz et al, 2000). A prominent author in the area of spirituality and healthcare, Harold Koenig, stated: "neglecting the spiritual dimension is just like ignoring a patient's social environment or psychological state, and results in failure to treat the whole person" (Koenig, 2002, p.6). In recognition of this concept, Pat Staten, associate

director of standards interpretation, states “the Joint Commission on Accreditation of Healthcare Organizations expects you to conduct a spiritual assessment of every patient in every health care setting” (Spiritual Assessment Required, 2003).

Recent polls demonstrate significant public interest in having spiritual topics addressed by health care providers. Approximately 87% of Americans identify religion as being at least fairly important in their lives with 58% identifying it as very important (Gallup, 2002). Studies involving patients who were seriously ill found that high proportions of participants felt that a physician should consider (77%) or discuss (53%) a patient’s spiritual needs (Kaldjian, et al, 1998; King & Bushwick, 1994). Additionally, 66% of adult outpatients at the Hospital of the University of Pennsylvania indicate that a physician’s inquiry about spiritual or religious beliefs would strengthen the patient’s trust in the physician (Ehman et al, 1999).

Koenig (2002) identifies three goals of spiritual assessment in healthcare. First, the provider should learn about a patient’s religious beliefs, especially those which pertain to medical care. Second, an understanding of the ways a patient uses religious or spiritual beliefs in coping with illness or stress should be gained. Third, any spiritual needs of the patient should be identified (p. 20-21). By performing a spiritual assessment, the health care provider communicates respect for the patient’s spirituality and obtains information about the patient’s support system. Spiritual assessment within a health care setting may enhance the patient’s coping, influence patient compliance with medical management by recognizing beliefs which may interfere with treatment, and identify individuals who may benefit from a referral for pastoral counseling. (Koenig, 2002)

Various spiritual assessment tools are reported in the literature (Anandarajah & Hight, 2001; Hall & Edwards, 2002; Hatch et al, 1998; Hodge, 2001; Maugans, 1996; Puchalski &

Romer, 2000; Vandenbrink, 2001). Physicians Gowri Anandarajah and Ellen Hight developed the HOPE tool for spiritual assessment to aid medical students, residents, and practicing physicians in learning to incorporate spiritual assessment into their clinical practice (Anandarajah & Hight, 2001). The tool involves a series of questions assessing four general spiritual topics: sources of hope, meaning, comfort, strength, peace, love, and connection (H), the role of organized religion (O), personal spirituality/practices (P), and effects on medical care and end-of-life issues (E). This tool is patient centered; it utilizes an interactive, conversational style, introduces the topic of spirituality gradually, provides an opportunity for clients to decline further exploration, and respects the beliefs of most religious traditions (Anandarajah & Hight, 2001, Koenig, 2002). Not every question within the HOPE tool is meant to be included within a spiritual assessment; health care providers can select which questions are appropriate for use with a particular client.

The primary aim of this study was to quantify and characterize current spiritual assessment practices, including identification of barriers to spiritual assessment within genetic counseling. In addition, the study examined the feasibility and appropriateness of using the HOPE spiritual assessment tool in genetic counseling by assessing counselors' perceived relevance and comfort with questions from each of the four spiritual topics addressed (H,O,P,E).

Methods

Sample and Procedure

A convenience sample of full members of the National Society of Genetic Counselors (NSGC) was included in this cross-sectional study. The email addresses of a random sample were obtained via the NSGC directory. An initial request for participation was sent by e-mail to 765 full members, describing the study and providing a link to complete the online survey. The

initial request informed participants that the survey was anonymous and that consent was assumed by completing the survey. A reminder email was sent to each participant two and a half weeks after the initial contact. Approval for this study was obtained from both the Cincinnati Children's Hospital Medical Center and the University of Cincinnati institutional review boards.

Measures

The survey instrument was a self-administered online questionnaire with four sections. The instrument consisted of 32 questions, including Likert scales, yes/no questions, multiple response lists, and open-ended questions. The questionnaire was developed by a multidisciplinary team including professionals in genetics, mental health counseling, clergy, and chaplaincy to ensure content validity. The questionnaire was piloted with one genetic nurse specialist.

The first section of the questionnaire assessed the attitudes and practices of each participant regarding spiritual assessment. Respondents were asked to indicate the frequency with which they assess spirituality as well as to indicate their relative comfort with and perceived importance of spiritual assessment using a five-point Likert scale (with 1=not at all, 2=slightly/mildly, 3=moderately, 4=very, and 5=extremely). Counselors were asked to choose from a list of potential reasons for assessing (or not assessing) spirituality in a session. Participants could provide additional reasons through an open-ended response.

The second section of the questionnaire presented examples of questions taken from the HOPE spiritual assessment tool (Anandarajah & Hight, 2001). The questions from each of the four topics (as described above) were placed in random order. For each question, participants were asked to indicate first whether the question would be relevant in some genetic counseling sessions (i.e., yes or no) and second, the extent to which they would feel comfortable asking the

question within a genetic counseling session (i.e., 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, or 5=strongly agree).

The third section of the questionnaire included follow-up questions to determine the effect of the introduction of a spiritual assessment tool on counselors' attitudes toward spiritual assessment. Participants were asked to indicate whether having a spiritual assessment tool would increase their comfort and ability in assessing client spirituality (i.e., 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree) and whether they intended to incorporate the HOPE tool into future sessions (i.e., 1=definitely won't, 2=probably won't, 3=might, 4=probably will, 5=definitely will). An open-ended question was provided for comments. The fourth section requested demographic information from participants including years of practice, gender, self-perceived spirituality, and religious affiliation.

Data Analysis

Data was deposited directly into an online database upon submission and then downloaded to a Microsoft Excel ® document when data collection was complete. Statistical analysis was performed using SPSS 12.0 for Windows ®. Descriptive statistics including frequency, mean, and mode were calculated for each question in sections 1, 3, and 4. Chi-square analysis was performed to compare the responses of genetic counselors who had performed a spiritual assessment in the past year to those who had not. Responses were also analyzed by years of practice, self-perceived spirituality, and religious affiliation. A *p* value of < .05 was used as the cutoff for statistical significance.

The responses in section 2 were totaled by topic addressed (i.e., H,O,P,E) to provide a summative score for each topic area. There were four questions each for topics H, P, and E; five questions were included for topic O. Responses to two of the questions within O were

statistically similar; one of these questions was excluded from the analysis so that the summative score could be compared to those for the other topics. This exclusion did not significantly change the summative score for topic O. The summative scores were then compared using the Friedman test, which calculates the mean rank of each topic. This test was chosen as it was felt that participants' perceived relevance/comfort ranking for one topic would be related to their perceived relevance/comfort ranking for the others. The summative scores were compared to determine each respondent's ranking of topics (least relevant/comfortable to most relevant/comfortable); these rankings were averaged to determine the overall ranking of each topic. Again, a p value of $<.05$ was used as the cutoff for statistical significance. The topics were then compared pair-wise using the Friedman test to examine differences between rankings. A total of 6 pair-wise comparisons were performed (H:O, H:P, H:E, O:P, O:E, P:E); a Bonferroni adjustment was used to determine the p value of $<.008$ ($0.05/6$) used as the cutoff for statistical significance.

Results

One hundred and two emails were returned as undeliverable, leaving a sample of 663. A total of 128 subjects participated in the study; one ineligible respondent was excluded. Six respondents completed only the first section of the survey; they were excluded from the analysis of subsequent sections. After adjusting for the undelivered messages, the response rate was 19%. It is likely that many messages were automatically filtered to bulk mail folders or deleted; thus the actual response rate may be higher than the reported rate.

Demographic Characteristics

The demographic characteristics of the sample population are summarized in Table I. The mean years of service was 8.93 years. There was no significant difference in the years of

service or gender distribution between this study population and that surveyed by the Professional Status Survey (PSS) (Parrott et al., 2002). Summary data regarding self-perceived spirituality and religious affiliation are provided in Table II. Most respondents (81.7%) classified themselves as mildly, moderately, or strongly spiritual. There was a range of religious groups represented. For analysis, smaller groups were combined. Almost one-fourth of respondents reported no religious affiliation, comprising the largest single group.

Current Spiritual Assessment Practices

Of the 127 genetic counselors who responded to the survey, 76 (60%) indicated they had performed a spiritual assessment in the past year. The reported frequency of sessions in which counselors performed spiritual assessment within the past year varied from 1-100% of sessions. Among those counselors who indicated they had performed spiritual assessment in the past year, the mean reported frequency was 20% of cases seen. Of those counselors who performed spiritual assessment, only 8.7% did so in more than half of their sessions. Counselors who performed spiritual assessment within the past year exhibited significantly higher perceived relevance and comfort with spiritual assessment ($p=.001$) compared to those who did not perform spiritual assessment. The primary reasons chosen for performing spiritual assessment were “the client brought up the topic of spirituality” (76.4%), “the session involved termination” (41.7%), and “the session involved end-of-life issues” (29.9%). Increased perceived relevance of spiritual assessment was associated with increased frequency of spiritual assessment ($p=.035$). Increasing comfort with performing spiritual assessment was not as strongly associated with increased frequency of performing spiritual assessment ($p=.095$).

A low perceived relevance (i.e., not at all or slightly important) of spiritual assessment to genetic counseling was indicated by 20.2% of respondents and low comfort (i.e., not at all or

mildly comfortable) with spiritual assessment was indicated by 37.3%. Genetic counselors with a low perceived relevance were significantly more likely to also exhibit low comfort with the topic ($p<.001$). The identified barriers to spiritual assessment are listed in Table III. The predominant reason counselors identified for not assessing spirituality was lack of time in a genetic counseling session (45.7%). Another commonly cited barrier was perceived client discomfort (27.6%).

Neither years of practice, self-perceived spirituality, nor religious affiliation influenced counselors' spiritual assessment practices. There were too few males in the sample population to perform analysis by gender.

Feasibility and Appropriateness of HOPE tool

Comparison of the cumulative scores for perceived relevance and comfort showed significant variation among the four topics addressed by the HOPE tool (Figures 1 and 2). The Friedman test provided a ranking of the four topics from most to least relevant and most to least comfortable; these rankings were statistically significant ($p<.001$). H questions were found to be most relevant, followed by E, then O, and finally P; the ranking order for comfort was identical to that for relevance. H questions were ranked highest; 93.4% of respondents found at least three of the four questions relevant to genetic counseling and 53.7% indicated they would feel comfortable (score of 4 or 5) asking all of the questions. E questions were rated second in relevance and comfort; 86.0% found at least three of the four questions relevant and 27.3% indicated comfort with all questions. O questions were third; 49.6% of respondents found at least three questions relevant and 24.8% indicated comfort with all questions. P questions were ranked lowest in relevance and comfort; 31.4% of respondents found at least three of the four questions relevant and only 5.0% indicated comfort with all questions.

After reading through the examples given from the HOPE spiritual assessment tool, 22.4% of respondents stated that they probably or definitely will begin incorporating spiritual assessment into their sessions using questions from the HOPE tool. An additional 46.7% of respondents might incorporate spiritual assessment into their sessions using these questions. Counselors who had performed a spiritual assessment in the past year were ten times more likely to indicate they probably or definitely will incorporate the HOPE tool into their practice ($p < .001$). In addition, 65% of respondents felt that having a spiritual assessment tool would increase their ability to elicit relevant information from a client and 59.2% felt that having a spiritual assessment tool would increase their comfort in assessing client spirituality.

Discussion

Although some spiritual assessment is occurring within genetic counseling sessions, it is limited in nature. Even among counselors who perform spiritual assessment, only 8.7% do so for more than half of their sessions. There were too few respondents in this group to characterize those who perform frequent spiritual assessment. Assessment seems to occur in very specific situations: when the client brings up spiritual topics, when termination is discussed, or when end-of-life issues are involved. We surmise that in these situations counselors may be more comfortable assessing spirituality. If the client initiates the discussion, this resolves one of the major barriers to spiritual assessment (perceived client discomfort). Counselors may be more knowledgeable about the potential impact of religious beliefs when a client is faced with termination or end-of-life concerns and thus feel the topic is important to address in these situations. A recent publication by Rebecca Rae Anderson outlines the beliefs of major religious groups pertaining to prenatal genetic counseling. Issues addressed include termination, pregnancy loss, and/or neonatal illness/death (Anderson, 2002). Access to this resource

has provided genetic counselors with a framework to understand the affect that a client's spirituality may have on his or her reaction when faced with termination or end-of-life concerns. Similar guidebooks outlining the affects of religious or spiritual beliefs in other genetic counseling specialty areas are needed.

Perceived relevance of and comfort with spiritual assessment were found to be directly related in this study. Genetic counselors seem to be more comfortable addressing spirituality if they can appreciate a direct application to the session. About one-third of counselors surveyed indicated minimal perceived relevance and comfort with spiritual assessment; these counselors were significantly less likely to have performed a spiritual assessment within the past year compared to those with a moderate to high perceived relevance and comfort. Perceived relevance was more significantly associated with the frequency of spiritual assessment than comfort, indicating that a genetic counselor's understanding of the importance of spiritual assessment may be a key factor in her decision to incorporate this assessment into practice. Discomfort with spiritual assessment may also stem from a fear that just as psychosocial counseling follows psychosocial assessment, spiritual assessment will create a need for spiritual counseling.

Participants indicated that the barrier most likely to prevent spiritual assessment during a genetic counseling session was a lack of time. Realistically, there is little that can be done to reduce this barrier. However, education and training might reduce the difficulties created by the other barriers to spiritual assessment that were cited by participants. Roughly one-third of counselors cited insufficient skills in spiritual assessment (e.g., not knowing how to assess spirituality or what to do with the information gained). Another substantial group (31.5%) demonstrated lack of awareness regarding the role of spiritual assessment. Counselors in this

group stated that spirituality was not relevant to genetic counseling, that the client's spirituality was not important, or spiritual assessment was not necessary in genetic counseling.

Additionally, over one-fourth of participants anticipated that a client would be uncomfortable discussing spirituality although this belief contradicts studies showing that patients are interested in discussing their spirituality with health care providers (Ehmam et al, 1999; Kaldjian, et al, 1998; King & Bushwick, 1994). As genetic counselors, we routinely explore other sensitive topics with clients including drug and alcohol use during pregnancy, psychiatric illness, financial difficulties, and previous elective and/or spontaneous abortions. It is important to remember that "probing a client does not obligate her to share more than she is comfortable with" (Biesecker, 2002).

It is interesting to note that in this study, years of practice, self-perceived spirituality, and religious affiliation were not related to counselors' spiritual assessment practices. An earlier survey of genetic counselors corroborates the lack of relationship between personal spirituality/religion and clinical practices, noting that 66% of respondents felt their religious beliefs have minimal to no effect on their genetic counseling practice (Wyatt et al., 1996). Yet, other studies of health care professionals dispute the lack of relationship between personal spirituality/religion and clinical practices. One survey of genetic counselors found that respondents who were non-spiritual or non-religious had a lower level of comfort with the topics of spirituality and religion (Salamone, 2002). Similarly, studies from the nursing literature found that increasing personal spirituality was positively correlated with nurses' perceived ability and comfort in providing spiritual care (Taylor et al., 1999). It may be that the non-directive ethos of genetic counseling has minimized the influence of counselors' personal spirituality on their spiritual assessment practices. As genetic counselors are trained to separate their own beliefs

from their practice in an attempt to avoid influencing client decision-making, genetic counselors' personal spirituality may be less apt to affect their spiritual assessment practices compared to other health care professionals.

Genetic counselors find certain spiritual topics more comfortable to discuss and relevant to genetic counseling. Overwhelmingly, counselors indicated highest comfort and relevance of questions relating to sources of hope, meaning, and connection. This category likely includes topics that are already part of many counselors' psychosocial assessment. We also note that these questions address spirituality in a less direct manner. Questions dealing with effects on medical care/end-of-life issues were ranked second in perceived relevance and comfort. The application of religious beliefs to these topics is available to counselors within genetic counseling resources with a psychosocial or multi-cultural counseling focus (Anderson, 2002; Fisher, 1996; Weil, 2000). The role of organized religion received a lower rating in both perceived relevance and comfort than the previously listed topics. In many settings, counselors may consider inquiry into a client's religious affiliation to be an intrusion into client privacy. Genetic counselors may address the role of organized religion due to the prevalence of certain genetic disorders within some religious groups, the Ashkenazi Jewish population for example. Alternatively, genetic counselors may inquire about ethnic background while taking a family history to avoid asking directly about religious affiliation. Questions related to the clients' personal spirituality and practices were consistently rated low in perceived relevance and comfort. This category of question addresses spirituality most directly. Because of this, counselors may anticipate greater client discomfort with these topics and may be unsure of what they would do with the information, thus increasing the barriers to the assessment of this topic.

A survey of genetic counselors found that while 68% agree or strongly agree that spirituality/religion should be addressed with clients, over 70% of counselors rarely or never inquire about spirituality (Salamone, 2002). Introduction of a spiritual assessment tool alone may not be enough to substantially increase the frequency of spiritual assessment within genetic counseling. In our study, less than one-fourth of respondents indicated a high-likelihood of incorporating the HOPE tool into their practice with greatest interest expressed by counselors who had performed a spiritual assessment. Even when presented with a model for spiritual assessment, genetic counselors who had not performed a spiritual assessment in the past year seemed reluctant to incorporate assessment into future sessions. Thus, lack of resources regarding how to assess spirituality does not appear to be the primary barrier for counselors who have never performed spiritual assessment.

These data also demonstrate a need for a spiritual assessment tool within genetic counseling. The majority of counselors surveyed felt that having a tool would increase their comfort inquiring about spirituality as well as their ability to elicit relevant information, yet there was low interest in incorporating the HOPE tool. It may be that more training in the utilization of the tool is needed; it was not our intention to model the proposed use of the tool within this survey. Based upon the comments we received, many participants interpreted the tool to be used as a complete list rather than selecting the questions which apply to a particular client. Additionally, because of the need to randomize the questions addressing each topic, the HOPE tool's gradual method of introducing spirituality was lost. The development of a tool unique to genetic counseling may be necessary. Because of the individual nature of spirituality, it will be difficult to develop a tool that addresses the relevant aspects of spirituality for each client.

Flexibility must also be present on the part of the counselor to recognize individual expressions of spirituality and to learn from the client what is important to him or her.

A primary limitation of this study was the low response rate. Because the invitation email came from a personal email account, many invitations may have been filtered by recipients' accounts directly into a bulk mail or trash folder. Additionally, because the email addresses were taken from the directory, a proportion of addresses were likely outdated. Although the low response rate was likely influenced by the mode of questionnaire delivery, it is also very possible that the survey topic encouraged or discouraged the participation of some potential respondents. Our survey did not sufficiently characterize the demographic details of respondents versus non-respondents to determine the extent to which the study population appeared to be similar to genetic counselors as a whole. Thus, while this study provides an overview of the current attitudes and practices regarding spiritual assessment in genetic counseling, one can generalize these results to the entire population of genetic counselors only with caution. Further studies are needed to determine whether the results of this study provide an accurate representation of the perspective of genetic counselors as a whole.

Given that the American population has expressed considerable interest in having their spirituality addressed by health care providers, the frequency of spiritual assessment within genetic counseling must increase to meet this need. These data show that perceived relevance and comfort are significantly associated and positively related to frequency of spiritual assessment. This suggests that increasing either counselor's perceived relevance or comfort will increase the frequency of spiritual assessment within genetic counseling. Integration of spiritual assessment into the continuing education programs and clinical training for genetic counselors is needed. If counselors are trained regarding the reasons to inquire about client

spirituality, they will likely feel more comfortable making such inquiries in clinic. Comfort may be further enhanced through demonstration of and training in techniques for spiritual assessment.

Boyle (2004) recommends that “clinical genetics professionals should develop a rudimentary understanding of issues associated with religious coping, including a capacity to assess patients’ needs for pastoral counseling and determine how and to whom such patients should be referred” (Boyle, 2004, p.8). Incorporation of instruction in spiritual care into genetic counseling training programs represents an important means of improving the care provided to clients. Effective instruction must address both theoretical and practical aspects of spiritual care (Brush & Daly, 2000). Based on the models proposed for nursing education (Brush & Daly, 2000; Greenstreet, 1999; Lemmer, 2002; McEwen, 2004) and the American Counseling Association’s spiritual competencies (Fukayama & Sevig, 2002), teaching spiritual care in genetic counseling could include discussion of the meaning of spirituality and the role of genetic counselors in addressing spiritual concerns, a review of the beliefs of major world religions, instruction on aspects of religious coping, and presentation of spiritual assessment tools. The opportunity to practice spiritual assessment skills with peers and supervisors through participation in role-plays and clinical experience is critical to successful training (Brush & Daly, 2000). Examination of one’s own spiritual beliefs, perspectives, and potential biases is another important component (Anandarajah & Hight, 2001, Fukayama & Sevig, 2002). Where available, pastoral counselors could serve as guest lecturers to provide instruction about spiritual assessment. Partnering with chaplains or a chaplaincy training program would provide students with an opportunity to observe spiritual care-giving first-hand and create a network for future referrals. Similar interventions could be implemented at regional and/or annual meetings for professionals already in the field.

While psychosocial assessment is well-established as a genetic counseling competency (I:4, II:2, Fine et al, 1996; Weil, 1996), little attention is given to spiritual assessment. Although spiritual assessment is not directly named in the competencies, there is a focus on conducting counseling in a culturally responsive manner (I:7, Fine et al, 1996). As “spirituality and religious beliefs are embedded in culture” (Fukuyama & Sevig, 2002, p. 274), spiritual assessment is an important component of culturally sensitive care. The scope of psychosocial assessment needs to be expanded to include spiritual assessment. The standard assessment of coping and support systems provides a natural lead-in to inquiry regarding spiritual resources. Jon Weil notes “genetic counselors should be prepared to address issues of religion and spirituality with counselees. In many instances, the genetic counselor must open the discussion...” (Weil, 1996, p. 51-52). Spiritual assessment within genetic counseling is a means of opening that discussion, allowing clients to share the ways in which their beliefs will influence their perception of genetic information.

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Appendix 1: Tables and Figures

Table I
Demographic Characteristics of Sample Population

	Total Sample: N=120 ^a	
	n	%
Years of Practice		
1-5 years	55	45.8
6-10 years	28	23.3
11-15 years	19	15.8
16-20 years	8	6.7
21 or more years	10	8.3
Sex		
Male (1)	3	2.5
Female (2)	117	97.5

^a7 participants declined to provide demographic information

Table II
Spirituality and Religious Affiliation of Genetic Counselors

	Total Sample: N=120 ^a	
	n	%
Self-perceived Spirituality		
Not at all	11	9.2
Mildly spiritual	29	24.2
Moderately spiritual	37	30.8
Strongly spiritual	32	26.7
Very strongly spiritual	11	9.2
Religious Affiliation		
Jewish	14	11.7
Christian	12	10.0
Roman Catholic	22	18.3
Protestant ^b	25	20.8
Other ^c	9	7.5
None	29	24.2
Did not specify	9	7.5

^a7 participants declined to provide demographic information

^bBaptist, Episcopalian, Methodist, Presbyterian, Lutheran, Church of Christ

^cUnitarian Universalist, Greek Orthodox, Hindu, Vedantin, Quaker, Buddhist

Table III
Barriers to Spiritual Assessment in Genetic Counseling

	Total Sample: N=127 ^a	
	n	%
<i>Survey Supplied Barriers (Closed-ended)</i>		
There is not enough time in the session	58	45.7
I think the client would be uncomfortable discussing spirituality	35	27.6
I do not know how to assess spirituality	22	17.3
I would not know what to do with the information	19	15.0
I do not think that the client's spirituality is important	14	11.0
I am uncomfortable discussing spirituality	9	7.1
I am not a religious/spiritual person	8	6.3
My own religious beliefs might conflict with those of the client	6	4.7
My spirituality might conflict with my client's	6	4.7
Spiritual assessment is the job of chaplains and clergy members	2	1.6
<i>Respondent Supplied Barriers (Open-ended)</i>		
Client did not bring up spirituality	19	14.9
Spirituality was not relevant to the session	16	12.6
I do not think assessment is necessary in basic GC sessions	10	7.9
Spirituality did not seem to be important to the client	8	6.3
The client resisted discussing the topic	2	1.6
Spiritual assessment is not my role	1	0.8
The physician I work with is uncomfortable with the topic	1	0.8
Spirituality is not assessed in follow-up sessions	1	0.8

^aRespondents were allowed to select more than one barrier

Figure 1 – Perceived relevance of genetic counselors in spiritual assessment

Figure 2 - Perceived comfort of genetic counselors in assessing spirituality