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Religious coping among women with obstetric fistula in Tanzania

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Abstract

Religion is an important aspect of Tanzanian culture, and is often used to cope with adversity and distress. This study aimed to examine religious coping among women with obstetric fistulae. Fifty-four women receiving fistula repair at a Tanzanian hospital completed a structured survey. RCOPE assessed positive and negative religious coping strategies. Analyses included associations between negative religious coping and key variables (demographics, religiosity, depression, social support and stigma). Forty-five women also completed individual in-depth interviews where religion was discussed. Although participants utilised positive religious coping strategies more frequently than negative strategies ($p<.001$), 76% reported at least one form of negative religious coping. In univariate analysis, negative religious coping was associated with stigma, depression and low social support. In multivariate analysis, only depression remained significant, explaining 42% of the variance in coping. Qualitative data confirmed reliance upon religion to deal with fistula-related distress, and suggested that negative forms of religious coping may be an expression of depressive symptoms. Results suggest that negative religious coping could reflect cognitive distortions and negative emotionality, characteristic of depression. Religious leaders should be engaged to recognise signs of depression and provide appropriate pastoral/spiritual counseling and general psychosocial support for this population.

Keywords

obstetric fistula; Tanzania; religion; gender; maternal health

Introduction

Religious coping refers to religion-based strategies that individuals use to respond to stressful or otherwise challenging situations, experiences, or emotions. These coping strategies are classified into five key areas: finding meaning in adverse circumstances; seeking control over one's experiences; finding comfort; fostering intimacy and closeness

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with others; and making transformations in one's life (Pargament, Koenig, & Perez, 2000). Research in the United States has demonstrated that reliance on religion and spirituality is an effective strategy for individuals to deal with illness or disability, including cancer (Tarakeshwar et al., 2006; Vallurupalli et al., 2012), gynaecological disorders (Boscaglia, Clarke, Jobling, & Quinn, 2005), and HIV infection (Ironson et al., 2002; Ironson, Stuetzle, & Fletcher, 2006), and that religiosity is associated with improvements in aspects of individuals' overall quality of life and physical health (Powell, Shahabi, & Thoresen, 2003; Seeman, Dubin, & Seeman, 2003). At the same time, the application of religious coping strategies may also include the use of negative coping strategies, such as reappraising stressors as punishments from God and questioning whether one has been abandoned by God (Pargament, Smith, Koenig, & Perez, 1998). Meta-analysis confirms that these negative forms of religious coping are associated with negative psychological adjustment to stress, including increased anxiety and depression (Ano & Vasconcelles, 2005).

In Tanzania, religion is an important aspect of culture and life, and studies suggest that Tanzanians rely on religion to cope with adverse medical events (Steglitz, Ng, Mosha, & Kershaw, 2012; Watt, Maman, Jacobson, Laiser, & John, 2009; Zou et al., 2009). The small body of research on religious coping in Tanzania focuses almost exclusively on coping with HIV infection and focuses primarily on positive religious coping strategies. However, there is some suggestion that individuals living with a stigmatised medical condition like HIV in this setting may also adopt negative coping strategies in response to their condition. In particular, a stigmatised medical condition may evoke religious or spiritual struggles, such as feelings of punishment or abandonment by God, which may lead to a sense of disconnectedness from both the larger community and from one's own identity and eventual destiny (Roura et al., 2010; Watt et al., 2009). Although the religious coping literature in Tanzania has focused on HIV infection, there is a need for further study of negative religious coping styles as they relate to other stigmatised medical conditions in Tanzania, particularly medical conditions where there may be less community knowledge and awareness than HIV.

Obstetric fistula is one such medical condition that has a profound effect on a woman's social, psychological, and physical functioning, and may therefore evoke negative religious coping responses. Women develop obstetric fistula after many days of prolonged labour, where the pressure of the baby's head against the mother's pelvis cuts off blood supply to delicate tissues. The resulting pressure necrosis leaves a hole between the bladder or rectum and the vagina, which causes uncontrollable leaking of urine and/or feces from the vagina and a persistent bad odour. Obstetric fistula is nearly non-existent in well-resourced countries, where Cesarean sections are widely available (Wong et al., 2012). However, in Tanzania, it is estimated that approximately 46,000 women are living with the condition (National Bureau of Statistics of Tanzania & ICF Macro, 2011). The physical and emotional trauma that women with fistulae may experience includes extreme pain, the loss of one's baby, stigma due to the leaking and odour, and social isolation, including divorce. It is therefore not surprising that there are increased rates of psychological morbidity in this population, including depression (Balogun, 1994; Weston et al., 2011), mental health impairment (Browning, Fentahun, & Goh, 2007; Goh, Sloane, Krause, Browning, & Akhter, 2005), and lower quality of life (Pope, Bangser, & Harris Requejo, 2011). Despite the

importance of religion in Tanzania and other settings where obstetric fistulae are prevalent, no previous studies have examined women's use of positive and negative forms of religious coping strategies to deal with the stress and hardship related to obstetric fistula.

The aim of this paper is to examine religious coping strategies among women who have been living with an obstetric fistula in Tanzania, and to identify factors that are associated with the use of negative religious coping strategies. The findings from this study can help us to better support women with obstetric fistula, and to appropriately engage religious and spiritual leaders in their care.

Methods

Study area and population

The study was conducted in the Department of Obstetrics and Gynecology at the Kilimanjaro Christian Medical Center (KCMC) in Moshi, Tanzania. KCMC provides surgical repair of obstetric fistula free of charge and has a dedicated fistula ward for patients. Once admitted to the KCMC Fistula Ward, patients generally undergo reparative surgery within two weeks and remain on the ward up to four weeks following surgical repair. At the time of the study, the hospital conducted surgical repair for approximately 55 women per year.

Participants and procedures

Between August 2010 and February 2012, women who were admitted for repair of an obstetric fistula were approached and invited to participate in the study. The mixed methods approach used a concurrent procedure (Creswell, 2009). A total of 54 patients were approached and agreed to enroll in the study and provided informed consent. All participants completed a structured survey prior to receiving surgical fistula repair. Due to the high prevalence of illiteracy in obstetric fistula patients (Nathan, Rochat, Grigorescu, & Banks, 2009), the survey was administered orally in Kiswahili by a female Tanzanian interviewer.

Following administration of the structured survey, a subset of 45 participants also took part in individual in-depth interviews that qualitatively captured the participants' experience developing and living with an obstetric fistula. Interviews were guided by a semi-structured guide that included questions and probes about the participant's mental health and well-being, religious practices and beliefs, and use of religion to cope with distress, but no direct questioning about negative religious coping strategies. Specific questions and probes related to mental health included: 'Please describe your mood and emotions during a typical day', 'What memories do you have from developing or living with a fistula that you remember the most?'. Specific questions related to religion and religious practices were: 'Tell me about your involvement in religion', 'How has this changed since you began leaking?'. In addition, the topic of religion was mentioned spontaneously in sections about social support ('Tell me about the important people in your life', 'How have your relationships with those people changed since you began leaking?') and coping ('Tell me how you deal with your problems.'). The in-depth interviews were conducted in Kiswahili by a Tanzanian female interviewer who had a nursing degree and received training from the first and second

authors on qualitative methodology. Interviews lasted approximately 30 minutes each. They were audio-recorded with the participant's permission, transcribed in Kiswahili, and translated into English.

The study received ethical approval from the institutional review boards of the Duke University Medical Center and the Kilimanjaro Christian Medical Center.

Measures

Demographic characteristics included age, marital status, primary school education, number of living children, whether the woman had experienced stillbirth when she developed a fistula, employment, and household income. Characteristics related to fistula included estimated years living with fistula and whether or not the woman experienced stillbirth when she developed the fistula.

Religious engagement was measured with a series of closed- and open-ended questions. Participants were asked to self-report their religion and denomination, and these reports were classified into religious groups (Christian, Muslim, and None). Participants reported how often they visited a place of worship per month. Participant religiosity was measured with a single item from the National Institute on Aging/Fetzer Short Form for the Measurement of Religiousness and Spirituality (Idler et al., 2003). The question, 'To what extent do you consider yourself a religious person?' had four response options, from one ('not religious at all') to four ('very religious').

Depression was measured with the Center for Epidemiologic Studies Depression Scale (CES-D), which is a 20-item brief scale used to assess depression symptoms in epidemiologic and global health settings (Myer et al., 2008; Radloff, 1977). Response choices on the 4-point scale indicate the frequency of depression symptoms. CES-D items were summed to yield a continuous depression severity score, ranging from 0–60 ($\alpha = .90$).

Fistula-related stigma was measured using a version of the HIV/AIDS Stigma Instrument (HASI-PLWA) (Holzemer et al., 2007), which was adapted to obstetric fistula patients for this study. Participants used a 4-point response scale to indicate how often they had 27 distinct negative experiences because of their fistula (e.g. 'People avoided me'), yielding an overall mean stigma severity score, ranging from 0–81 ($\alpha = .92$).

Social support was measured with an adapted Functional Social Support Questionnaire (FSSQ) (Broadhead, Gehlbach, Gruy, & Kaplan, 1988), specific for Tanzanian women (Antelman et al., 2001). The questionnaire consists of 10 items answered on a 5-point rating scale. Scale items encompass a variety of types of social support, and are averaged for a total social support score, ranging from 10–50 ($\alpha = .91$).

Religious coping was measured using the Brief RCOPE (Pargament et al., 2000), which includes subscales measuring positive and negative religious coping strategies. The Brief RCOPE consists of 14 items, on which participants indicate how often they engage different forms of coping on a 4-point scale from zero ('not at all') to three ('a lot'). See Table 3 for individual items of the subscales for positive religious coping (7 items, range 0–21, $\alpha = .81$) and negative religious coping (7 items, range 0–21, $\alpha = .84$).

Analysis

Analysis of the mixed methods data was undertaken using a concurrent nested strategy (Creswell, 2009; Morse, 1991), where the quantitative data was primary, and was complemented and explained by perspectives and context gleaned from the qualitative data. For the quantitative analysis, descriptive statistics were generated for demographic characteristics, religious engagement, and use of religious coping. After examining the descriptive statistics, eight key variables were tested as predictors of negative religious coping: age, marital status, education, religion, religiosity, depression, stigma, and social support. Relationships between predictors and negative religious coping were tested with both univariate and multivariate linear regression, with missing data excluded pairwise.

The qualitative data were analyzed using content analysis (Ulin, Robinson, & Tolley, 2005) to identify themes that provided further insight into the topic of religious coping. NVIVO 10.0 was used to code data for examples of positive and negative religious coping, and how religious coping related to mental health and well-being. Representative quotes were identified to summarise the key themes as they complemented and enriched our understanding of the quantitative findings.

Results

Description of the sample

The sample included 54 women who were receiving surgical repair for obstetric fistula (Table 1). The sample included a wide range of ages (18–86, mean age of 37.9) and of years living with fistula (1–39, mean 14.8). Two-thirds of the sample were Christian and one-third were Muslim (Table 2). The sample had high levels of religious engagement. Almost all attended a place of worship at least once a month (the majority attended weekly), and identified as moderately or very religious.

Use of religious coping

The use of positive forms of religious coping was universal in this sample, with all participants saying that over the past month they had sought God's love and care to deal with problems associated with their fistula. Although participants utilised positive religious coping strategies more frequently than negative strategies (t=14.7, p<.001), 76% reported at least one form of negative religious coping (Table 3). The most common negative religious coping strategies were related to feeling punished or abandoned by God.

Factors associated with negative religious coping

The mean negative religious coping score was 5.30 (SD=5.00, range 0–17). The negative religious coping score was not significantly correlated with time living with fistula or participant age. In univariate analysis, stigma, depression and low social support were all significant predictors of participants' scores on the negative religious coping measure. In multivariate analysis, only depression remained as a significant predictor, with the multivariate model explaining 42% of the variance in negative religious coping (Table 4).

Qualitative insight into the use of religious coping

In qualitative interviews, women revealed the distress they felt due to their fistula. Many talked about memories of the traumatic birth and loss of a child, and all talked about the negative emotions related to living with an obstetric fistula. These negative emotions centred around feeling sad and anxious about their physical disability, and feeling ashamed about a stigmatised condition that was considered dirty and unpleasant to be around. One woman explained how her fistula changed her perception of her own life and her relationships with her community: ‘After I got fistula, I thought my life will not be good, and people will gossip about me that I smell of urine, and I will be ashamed.’ Many women expressed emotions that reflected depressive symptoms, describing themselves as ‘hopeless,’ ‘sorrowful,’ and having ‘no peace of mind.’

When asked about their religious beliefs and practices, participants spoke almost universally about how they relied on God and religion to help them navigate this difficult experience of living with a fistula. They spoke about seeking solace in a closer relationship with God, praying for support and strength, and asking God to support them in getting a ‘cure’ for the fistula through linkage to appropriate health care facilities. As one participant explained: ‘My prayer was that God would help me to get doctors who are specialists of the fistula problem.’

For a few women, leaders or members of their religious community had helped them to identify fistula repair services or provided economic resources to facilitate treatment. However, in the majority of cases, women went to extreme efforts to hide their condition from their religious communities. When one woman was asked if she had told people in her church about her fistula, she replied: ‘Sister I cannot do that, because I feel shy and these are shameful matters and don’t deserve to be told to anybody.’ Several women talked about how their religious participation decreased after they developed a fistula, because they were afraid of people in the services noticing their smell and wetness, and therefore becoming an object of gossip. A Roman Catholic woman said: ‘I go to church very rarely for fear of wetting my clothes and being laughed at by my fellow believers.’ For Muslim women, the disengagement from religious services was even more pronounced, as Muslim participants explained that women with fistula are not allowed in the mosque because they are not physically clean: ‘I have not dared to share my problems in the mosque because it is shameful. I can neither go to the mosque to pray because our religion does not allow.’

The interviews did not include direct queries about negative religious coping strategies, and no participants spontaneously disclosed negative coping strategies or cognitions in the discussions. However, many women voiced a desire for explanations for having been dealt the horrible fate of a fistula. There were suggestions that feeling abandoned or punished by God may have been part of these ruminations, even if these thoughts were not directly expressed. As one woman explained: ‘I felt hopeless and asked myself what happened. I had no answer. I simply remained sorrowful and hopeless. I could not know the cause.’

Discussion

In this mixed-methods study of Tanzanian women receiving repair for obstetric fistula, religious coping strategies played an important role in women's approaches to dealing with the challenges of living with a fistula. Although positive forms of religious coping were far more prevalent than negative forms of religious coping, both positive and negative coping strategies were used in this population. This suggests that the experience of living with a fistula did not necessarily dampen women's religious commitment and reliance, even as they used negative forms of religious coping to respond to and make sense of their condition. Despite women's endorsement of negative religious coping in the structured survey, these negative religious coping strategies were not mentioned by respondents during the course of the qualitative interviews. It is likely that in a more conversational interview setting, women felt ashamed or embarrassed to express negative cognitions that may appear to be in contradiction to their religious commitment. In a setting where religion is such an essential part of life, such thoughts and behaviours may be considered impious and even sinful. However, the discrepancy between the qualitative and quantitative data highlights the importance of direct discussion about negative forms of religious coping, even if fistula patients are not raising these issues themselves, as these potentially contradictory thoughts and feelings may be a source of internal conflict and distress.

In Tanzania, religious organisations are important both as social structures and sources of influence on people's beliefs and behaviours, and therefore may be a key resource for providing care and support for women with fistulae. Given the universal religious commitment and engagement in this population, there are potentially missed opportunities for religious leaders to raise awareness about obstetric fistula and support women who are living with fistulae. Despite women's expressed commitment to their religious communities, many women in our sample were hesitant to disclose their fistula in those settings, often because they were fearful of negative reactions. Women's disclosure of an obstetric fistula to a religious community may help them to harness social support and normalise a stigmatising condition (Obermeyer, Baijal, & Pegurri, 2011). Religious leaders are in a unique position to create an environment in which women could feel comfortable being open about their condition while fully participating in the religious community.

Our data highlights the relationship between negative religious coping strategies and depression. In our sample, higher levels of depression were significantly associated with greater use of negative religious coping strategies. Although not explicit, there were allusions to the relationship between depression and negative forms of religious coping in the qualitative interviews. Women spoke about the incredible distress they experienced in relation to their fistula, including feelings of shame and fear of rejection from their religious communities. The negative religious coping strategies that women reported in the quantitative survey may reflect cognitive distortions and negative emotionality, which are characteristic of depression. Notably, the most commonly endorsed negative religious coping strategies were related to thoughts about origination of the fistula (e.g., thinking that the devil made this happen). Treatment of depression in this population may therefore benefit from cognitive behavioural approaches (van't Hof, Cuijpers, Waheed, & Stein, 2011), which could help to replace such thoughts with alternative medical explanations of

the fistula. Although counseling interventions for this population exist (Gerten, Venkatesh, Norman, Shu'aibu, & Richter, 2009; Johnson et al., 2010), none utilise cognitive behavioural approaches within a religious framework. A religious framework that directly addresses religious and spiritual struggles that are experienced as a result of a stigmatised medical condition may be more salient in this setting than a purely secular framework (Tarakeshwar, Pearce, & Sikkema, 2005).

The time during fistula repair surgery provides a unique opportunity to provide psychological and faith-based support for this population. Fistula health care workers would benefit from training to recognise signs of depression and negative religious coping strategies. An organised referral system for mental health and pastoral care would facilitate comprehensive treatment. Receiving faith-based support during the time of fistula repair has the potential to directly address distress and could support reintegration of women back to their communities after surgery (Pope et al., 2011).

The findings of this study must be interpreted in light of its limitations. The study was cross sectional, and therefore lacks a longitudinal understanding of changes in religious coping following initial fistula development, as well as post fistula repair. Given that the structured survey was administered orally by an interviewer, there was likely social desirability bias, potentially leading to over reporting of positive forms of religious coping and under reporting of negative forms of religious coping. The fact that all women had been successfully linked to surgical repair facilities may mean that the sample has greater social support than women living with unrepaired fistulae, and their anticipation of fistula repair may have prompted more positive and less negative religious coping strategies. The near-universal endorsement of positive religious coping strategies precluded us from examining factors associated with positive religious coping as an outcome. Finally, the concurrent (as opposed to sequential) approach of our mixed methods strategy meant that our qualitative interviews were not able to explicitly explore the finding from the quantitative surveys that women endorsed high levels of negative religious coping strategies. As a result, there were no direct queries about negative forms of religious coping in our qualitative interviews, which limited qualitative insights into the processes of the negative cognitions and behaviours that were endorsed in the survey. Future research should include more in-depth qualitative work on negative religious coping, including further exploration of the relationship between negative religious coping strategies and depression in this population, and how women's religious cognitions and behaviours may change over time as they live with a fistula.

In conclusion, this study is the first of its kind to focus on the functional role of religion in women's coping with obstetric fistula. Using a mixed methods approach with women who were receiving surgical repair for obstetric fistula, we were able to document the deep religious commitment of this population, and the reliance on both positive and negative forms of religious coping to deal with the stress related to this debilitating condition. The association between depressive symptoms and use of negative religious coping strategies points to the need to integrate a religious framework when addressing the mental health needs of this vulnerable population.

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Table 1

Description of the sample (n=54).

	Mean	SD
Age	37.9 (18–86)	14.5
Years living with a fistula	14.8 (1–39)	10.7
	N	**%**
Marital status		
Married	37	68.5%
Separated/Divorced	8	14.9%
Widowed	5	9.3%
Never married	4	7.4%
Education		
None	13	24.5%
Some primary	10	18.9%
Completed primary	29	54.7%
Beyond primary	1	1.9%
Number of living children		
None	16	29.6%
1 or more	38	70.4%
Stillbirth with fistula	34	63.0%
Unemployed	47	87.0%
No household income	44	83.0%

Table 2

Religious engagement (n=54).

	N	%
Religious identification		
None	1	1.9%
Muslim	15	27.8%
Christian	37	68.5%
Protestant	*16*	
Catholic	*11*	
Evangelical	*6*	
Seventh Day Adventist	*3*	
Unspecified Christian	*1*	
Missing	1	1.9%
Frequency of attending place of worship		
Never	2	3.8%
1–3 times per month	12	22.6%
4 or more times per month	39	73.6%
Religiosity		
Not religious	0	0%
Slightly religious	6	11.1%
Moderately religious	22	40.7%
Very religious	26	48.1%

Table 3

Use of religious coping strategies (n=54).

	Ever used	
	N	%
Positive religious coping		
Seeking God's love and care	54	100.0
Looking for a stronger connection with God	53	98.1
See how God might be trying to strengthen me	53	98.1
Asking for forgiveness for my sins	53	98.1
Put plans in action together with God	52	96.3
Focusing on religion to stop from worrying about problems	51	94.4
Seeking God's help to let go of anger	47	87.0
Negative religious coping		
Thinking that the devil made this happen	33	61.1
Wondering whether God has left me	32	59.3
Wondering what I did for God to punish me like this	31	57.4
Feeling punished by god for my lack of devotion	26	48.1
Questioning God's love for me	11	20.4
Wondering whether my church has abandoned me	11	20.4
Questioning the power of God	5	9.3

Table 4

Linear regression analyses for variables predicting negative religious coping (n=54).

	Univariate linear regression		Multivariate linear regression[a]	
	β	*p*	β	*p*
Age	−.102	NS[b]	−.085	NS
Marital Status (Ref: Married)	.104	NS	.124	NS
Religion (Ref: Christian)	.013	NS	−.018	NS
Education (Ref: Did not complete primary)	.232	NS	.179	NS
Religiosity (Ref: slightly/moderately)	.002	NS	−.031	NS
Stigma	**.531**	**<.001**	−.007	NS
Depression	**.680**	**<.001**	**.521**	**.01**
Social Support	**−.474**	**<.001**	−.202	NS

[a] Adjusted R^2 = .416; F= 5.46, p<.001

[b] NS: p value is not significant