International Journal of Healthcare Sciences ISSN 2348-5728 (Online)
Vol. 7, Issue 2, pp: (162-179), Month: October 2019 - March 2020, Available at: www.researchpublish.com

Religious Coping and Self-esteem of Women living with Cervical Cancer in Ghana

Daniel Adom-Fynn[1], Daniel Asamoah[2], Eric Atta Quainoo[3], Stephanie Quansuwa Tetteh[4], Daniel Acquah[5]

[1,2,4,5] Department of Education and Psychology, University of Cape Coast, Ghana

[3] Faculty of Education, Beijing Normal University, China

Corresponding author: daniel.asamoah1@stu.ucc.edu.gh

Abstract: **Cervical cancer has become prevalent in this 21st century and women living with it must adopt coping strategies to remediate such conditions. The study sought to ascertain the relationship between religious coping and self-esteem of women living with cervical cancer in Ghana. The descriptive survey design through the quantitative approach was used in the study. Through stratified and simple random sampling procedures, a sample of 113 respondents were selected from a population of 160 women living cervical cancer. Brief RCOPE and Rosenberg Self-Esteem Scale were used to collect data for the study. The gathered data was analysed using descriptive and inferential statistics such as means, standard deviations, Pearson product Moment Correlation and MANOVA. The findings of the study revealed that women with cervical cancer has normal levels of self-esteem (Overall mean of 3.51 out of 4.0). In terms of religious coping, most of the respondents (76.6%) used positive religious coping. The result of the study also found a statistically significant but moderate relationship between religious coping and self-esteem (r = .53, p < .001) with 28% of the variance in self-esteem being explained by positive religious coping. The findings further revealed a statistically significant difference in the negative religious coping practices with respect to respondents' religious background [F (2, 108) = 4.33, p = .015, with partial eta squared = .074]. However, for positive religious copying, the study revealed no statistically significant difference with respect to respondents' religious background [F (2, 108) = 1.21, p = .304, partial eta squared = .022]. Recommendations were made on the need to place interest in religious coping and high self-esteem by stakeholders.**

Keywords: **Religious coping practices, self-esteem, cervical cancer, religious background.**

1. INTRODUCTION

Cancer is a serious public health problem not only in Ghana but also worldwide, worsening in recent years as a result of growing population in developing countries such as Ghana (Nkyekyer, 2000). Cancer is a disease in which cells in the body grow out of control and it is always named for the part of the body where it starts, even if it spreads to other body parts later. When cancer starts in the cervix, it is called cervical cancer. The World Health Organization (2017) defines cancer as a generic term for a large group of diseases characterized by the growth of abnormal cells beyond their usual boundaries that can invade adjoining parts of the body and/or spread to other organs. Nakashima, Koifman, and Koifman (2012) point that the cancer disease is different from other chronic diseases because its pathology usually leads to deformities, pain and mutilation which causes great psychological impact and negative feelings from the very time of diagnosis. Cervical cancer which happens to be a type of cancer has been identified as the second most common type of cancer that affects women globally (World Health Organization, 2015). Cervical cancer which happens to be a type of cancer has been identified as the second most common type of cancer that affects women globally (WHO, 2015). Haghshenas et al. (2013) report shows that over 500,000 new cervical cancer cases and 250,000 deaths occur each year. It is in this regard that the Global Burden on Cancer (GLOBACAN, 2014) has also reported that, cervical cancer happens to be the fourth most common cause of cancer related deaths among women worldwide with about 274,000 deaths occurring annually.

With reference to a report by the World Health Organization (2008), more than 530,000 cervical cancer new cases worldwide and 275,000 deaths from cervical cancer of which 90% of them were recorded in the developing countries. This was justified by them in the same year, by the World Health Organization African Region Report which reported that about 75,000 new cases of which 50,000 women died of the disease. It was highlighted by the report that factors that contributed to the rise included poverty, poor medical infrastructure, and limited access to healthcare. Cervical cancer continues to pose a threat in developing countries, especially in Africa where an estimated 53,000 women each year die of the disease. A study by Ferlay et al. (2010) reported that approximately 85% of all cervical cancer related problems occur in developing countries such as Africa. From the aforementioned reports, cervical cancer remains a major cause of morbidity and mortality among women in Africa (Sankaranarayanan, Budukh, & Rajkumar, 2006). In Ghana, the case is no different as cervical cancer happens to be the leading cause of cancer-related deaths among women (Parkin & Bray, 2006). Additionally, a report by the International Agency for Research on Cancer (IARC) revealed that in 2008, about 3,038 Ghanaian women developed cervical cancer of which 2,006 died (Adjei-Mensah, 2013). Similarly, a study conducted in Accra by Duda, Chen and Hill (2005) reported that among the gynaecological cancers diagnosed at any hospital in Ghana, 60% to 70% of the cases are cervical cancer cases and are mostly diagnosed at the advanced stages. Thus, the occurrence and mortality rates of cervical cancer in Ghana are among the highest worldwide (WHO/ICO, 2007). Making references from the prevalence of cancer, numerous studies have confirmed the long-lasting impact of cancer on survivors and their families' lives, that can be a pervasive and unrelenting stressor on survivors (Barton-Burke & Gustason, 2007; Hewitt, Greenfield, & Stovall, 2006; Hughes, 2000; McCorkle et al., 2011). This long-lasting impact is particularly true for women who have experienced cervical cancer with its associated treatments (Clemmens, Knafl, Lev & McCorkle, 2008; Donovan et al., 2007; Herzog & Wright, 2007; Jensen et al., 2003).

As part of the effects of cancer in women, it has been proven that women living with cervical cancer experiences low self-esteem due to some factors like changes in bodily self-concept, bodily changes and personal relationships (Bertan & Castro, 2010). While battling with cervical cancer, Costanzo, Lutgendorf, Rothrock, and Anderson (2006) contend that coping strategies have been found to play a key role in managing the physical and psychosocial effects associated with a cancer diagnosis and treatment. As women living with cervical cancer experiences a wide range of complex biopsychosocial and spiritual problems, they adopt various approaches to cope with their distress which includes biomedical approach to cope thus, the use of surgery, radiation therapy, chemotherapy, social resources (family and friends), spiritual and religious coping strategies. Religious coping has been found to be one of the major forms of coping strategies for low self-esteem and psychological distress adopted by people battling terminal illness like cervical cancer (Ayele, Mulligan, Gheorghiu, & Reyes-Ortiz, 1999; Koeing, 1998). Religious coping strategies includes seeking meaning in life, gaining control of stressful situations, seeking comfort, intimacy and closeness with God. People who use religious coping during stressful situations such as terminal illness have low or high level of self-esteem and better mental health status depending on the type of religious coping adopted (Koenig, 1997; Pargament et al., 1994). Several studies have reported that when people are faced with major life stressors such as natural disasters, illness, loss of loved ones, divorce and mental illness, they draw strength from their religious and spiritual beliefs to cope especially when they have the fewest resource to face an uncontrollable life problem (Harrison, Koenig, Hays, Eme-Akwari & Pargament, 2001; Pargament, 1997). Religious coping is seen as a help rather than a hindrance and has both positive and negative aspects.

Studies have reported that the type of religious coping used by an individual when faced with life threatening situation has significant effect on their psychological well-being and spiritual well-being. Positive religious coping is significantly and negatively associated with higher self-esteem and other forms of psychological distress (Koenig, 1997; Pargament et al., 1994) while negative religious coping is associated with significant and positive relationship with lower self-esteem and other forms of psychological well-being (Manning-Walsh, 2005). According to Pobee (1992), Ghana is reported to be a religious country owing to 97.3 percent of the population belonging to a particular religious orientation with Christianity being the dominant religion comprising 80.2 percent, followed by Islam 15.2 percent and 2.0 percent representing Traditionist/spiritualist (Ghana Statistical Service, 2015). The WIN-Gallup International (2012) reported Ghana to be the most religious population in the world with 96 percent of the population reporting the importance of God and religion in their daily lives. It is clear that women living with cervical cancer in a religious population would draw strength from their religious beliefs and practices in the face of life-threatening situations and terminal conditions. Hence, religious coping would be a preferred choice for most women living with cervical cancer to handle daily life hustles and boost their self-esteem as well.

Concept of religious coping and religious coping practices

Coping has been a subject of interest for nearly half a century. Originating as an organizing theme in clinical description and evaluation in the 1940s, coping has been the focus of various psychotherapies, educational programs, and research (Lazarus & Folkman, 1984). In our lives we experience numerous unexpected positive and negative events. The process of dealing with all those negative consequences, stress and interactions, is called "coping." Most definitions of coping encapsulate the notion of attempting to restore equilibrium in response to stress (Monat & Lazarus, 1985). According to Lyles (2005), coping is essentially the way people manage those life conditions that seem to be stressful. It should be pointed out that a diagnosis of cancer may trigger several religious concerns for the individual along with feelings of anxiety, hostility, discomfort, and social isolation (McIllmurrary, Francis, Harman, Morris, Soothill, & Thomas, 2003). In the same way, religious coping may assist the individual in coping with a diagnosis of cancer (Jenkins & Pargament, 1995). According to Sears and Greene (1994), religious coping seems to have important implications for the level of anxiety experienced by individuals awaiting cardiac transplant. In a study of cardiac patients, 67.5% described private prayer to be the most frequently used practice out of a list of 21 non-medical help-seeking or coping behaviours (Ai, Dunkle, Peterson, & Bolling, 1998). Other means of religious coping included having faith in God (73%), participation in church activities (52%), and religious service attendance (54%).

Individuals with different types of cancer often spontaneously reported religious faith to be important in dealing with cancer (Flannelly, Flannelly, & Weaver, 2002). For many people with cancer, religious coping may help them deal with increased spiritual needs, and it may help them make sense of their illness (Mickley, Soeken, & Belcher, 1992). Religious coping and involvement with religious activities may help individuals maintain a sense of control, hope, and purpose. It may also help them gain a sense of social support from their religious community (Levin, 1996). McIllmurrary et al., (2003) examined the religious needs and beliefs of individuals with cancer and realized that participants for this study were at least 18-years-old and had one of four types of cancer (breast, colorectal, lymphoma, or lung). Of the 354 participants, 83% of the respondents reported having religious faith. A greater number of older individuals reported religious faith compared to younger individuals. After conducting a logistical regression, researchers found that those who reported having religious faith and who used religious coping, needed less help for dealing with feelings of guilt and sexuality, compared to those who said they had no religious faith and did not rely on religion for coping. They also had fewer unmet needs overall (32% v. 52%). The researchers concluded by highlighting the importance of the individual's religious and spiritual beliefs in the experience of cancer. They proposed that having knowledge about the individual's spirituality and religiosity should help service providers predict the psychosocial needs and respond appropriately. Using qualitative methodology, Dein, Stygall, and Martin, (2006) examined the ways women with breast cancer used prayer as a coping mechanism in dealing with their condition. The researchers conducted semi-structured interviews with 30 women regarding their use of prayer for six months to five years following a diagnosis of breast cancer. Of the 30 participants, 23 reported using prayer as a way to help them cope with cancer. Researchers also found themes to the prayers. These themes included issues related to God's nature and moral accountability, healing as a collaboration between God and the individual, God as a form of social support, praying to cope rather than be cured, and perceptions and beliefs about the efficacy of prayer. These findings suggest that participants utilized prayer as a way to elicit support and comfort from God and to help them cope with the diagnosis of cancer (Dein et al., 2006) thereby making religious coping relevant.

Religious coping and self-esteem

Generally, self-esteem refers to an individual's overall evaluation and attitude toward the self. Self-esteem plays an important role as an internal factor in coping with depression and psychological distress in adolescence and serves as a protective resource to help an individual deal with emotional distress, such as rejection and failure (Zeigler-Hill, Besser, & King, 2011). Studies on self-esteem revealed the roles of self-esteem in psychological dysfunctions and mental illness, including binge eating schizophrenia, depression and antisocial behaviour (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005). This means that individuals with high self-esteem display fewer psychopathological symptoms and more active coping strategies with stressful situations. Individuals with high self-esteem are more likely to positively cope with negative life events or experiences than those with low self-esteem. According to Zeigler-Hill (2011), self-esteem is associated with the development and expression of psychopathology and there is a relationship between self-esteem and psychopathology through a stress-buffering model of high self-esteem and the vulnerability model of low self-esteem. The stress-buffering model emphasizes the protective function of self-esteem as a coping resource. On the other hand, the vulnerability model of low self-esteem demonstrates that individuals with low self-esteem are more likely to be vulnerable to the consequences of negative events and stress (Zeigler-Hill, 2011). Likewise, individuals with high self-

esteem are likely to adopt problem-solving strategies rather than avoidance strategies because they perceive themselves as competent and capable of dealing with their stressful situations or problems (Dumont & Provost, 1999; Martyn-Nemeth, Penckofer, Gulanick, Velsor-Friedrich, & Bryant, 2009).

Self-esteem plays an etiological role in the development and coping process of psychological illnesses, such as alcohol related problems, eating disorders, schizophrenia; substance use, and depressive symptoms (Tomaka, Morales-Monks, & Shamaley, 2012; Carvajal, Clair, Nash, & Evans, 1998; Barrowclough et al., 2003). A number of studies report that self-esteem is associated with coping and solving problems, and individuals with high levels of self-esteem are more likely to cope well with their problems than those with low levels of self-esteem (Baumeister et al., 2003; Chapman & Mullis, 1999; Johnson, Lund, & Dimond, 1986; Martyn-Nemeth et al., 2009). Johnson et al. (1986) investigated self-esteem as an important coping resource and protective factor to increase coping ability. Through a longitudinal study with a sample of 192 older adults, the authors examined the relationship between self-esteem and coping during bereavement and found that the participants with high levels of self-esteem were more resilient in coping with the stress from their spouse's death during the first year. Similarly, Baumeister et al. (2003) reviewed a large number of studies and literature on the relationship between self-esteem and various variables, such as academic performance, interpersonal success, happiness, and lifestyles, and concluded that high self-esteem contributes to happiness, better relationship skills, and decreasing the chance of eating disorders. Judging from the foregoing, it has been demonstrated that self-esteem is associated with positive coping, however, none of the studies reviewed focused on how self-esteem is associated with coping especially in the case of women living with cervical cancer. The current study is important for that purpose.

Religious background and religious coping

According to Siegel, Anderman and Schrimshaw (2001), religion serves as a resource for coping with various types of pain and suffering by providing people with hope, comfort, acceptance and strength. Moreover, religion plays an important role in dealing with stressors and helps individuals in their pursuit of meaning of life. One of the benefits of religion is that it gives people significant relationships and social support from religious groups. People with religious background and support are more likely to report lower levels of depressive symptoms, less emotional distress, and better psychological adjustment (Hood, Hill, & Spilka, 2009; Park, 2005). Koenig et al. (2001) investigated the relationship between religion and physical illness in coping and physical health by examining the findings of previous studies on religion and coping. The study demonstrated that religious involvement contributed to rapid reduction in symptoms of depression and anxiety and improvement in immune functioning among physically chronic patients. According to Park (2005), religious background functions as a critical coping strategy by helping people to reappraise the meaning of a stressful situation. As a meaning-making coping strategy, religion contributes to stress-related growth, including closeness to God, growth of faith, and active engagement in religious activities (Park, 2005). For instance, individuals tend to question why a natural disaster or tragedy occurs when they experience severe adversity or personal crisis. People struggle with understanding their tragedies and finding the meaning of incidents by relying on religion. The process of finding meaning is a critical role of religion, and it can help people build constructive coping behaviour (Hood, Hill, & Spilka, 2009).

Religious background and religious coping are important parts of recovery. Studies show that there is a significant association between religious coping and various types of stressors, such as cancer (Nairn & Merluzzi, 2003; Zwingmann, Wirtz, Müller, Körber, & Murken, 2006), chronic pain (Bush et al., 1999; Dunn, & Horgas, 2004), the Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) (Siegel & Schrimshaw, 2002; Trevino et al., 2010), depression (Bosworth et al., 2003; Koenig, Cohen, Blazer, & Pieper,1992), bereavement (Anderson, Marwit, Vandenberg, & Chibnall, 2005), and Post Traumatic Stress Disorder (PTSD) (Fallot & Heckman, 2005; Harris et al., 2008). In a review of literature on spirituality, Sigmund (2003) established that women with a high level of spirituality displayed fewer unpleasant thoughts and anger, and spiritual interventions and activities helped many female survivors of sexual abuse overcome negative thoughts about self and God through their religious faith and activities. Findings suggest that positive religious coping is significantly associated with better functioning, adjustment (Harris et al., 2008), and coping with the stressful situations (Ano & Vasconcelles, 2005). The researchers namely Gartner, Larson, and Allen (1991) conducted a systematic review of sixteen published cross-sectional studies and concluded that those with higher religious commitment had a decreased risk for depression and suicide, particularly among adolescent populations. Similarly, Koenig and Larson (2001) reviewed over 850 studies and highlighted several positive associations between religiosity and health outcomes, particularly in the area of mental health. The authors concluded that those with higher levels of religiosity had significantly lower rates of depression and anxiety.

From the foregoing, it has been validated in empirical literature that religious background and self-esteem is associated with positive coping. It has also been proven especially from the western world that women living with cancer adopt varied copping strategies. Despite the increased percentage of cervical cancer cases in Ghana, treatment of cervical cancer has mainly been geared towards the use of surgery, radiation therapy, chemotherapy, medications or a combination of the methods to help fight the disease progression, with little focus on how religious coping practices can impact the treatment of cervical cancer and increase the self-esteem of women living with cervical cancer. Although religious coping has been proven elsewhere as an effective means of coping by persons facing life threatening situations such as terminal illness or chronic health challenges (Cotton et al., 2006; Yi et al., 2006; Dalmida et al., 2013), it appears that in Ghana, such coping strategy is little emphasised. According to Nurasikin et al. (2013) patients suffering from various psychiatric diagnosis use religious coping as a means to manage distress. In addition, a number of studies report that self-esteem is associated with coping and solving problems, and individuals with high levels of self-esteem are more likely to cope well with their problems than those with low levels of self-esteem (Baumeister et al., 2003; Chapman & Mullis, 1999; Johnson, Martyn-Nemeth et al., 2009).

As Ghana is rated as one of the most religious countries in the world, can it be said that religious beliefs would play a crucial influence on how people would cope with terminal diseases such as cervical cancer for better psychological outcomes? This question is extremely important because studies on cervical cancer in Ghana over the years have focused on prevention, screening and knowledge (Abotchie & Shokar, 2009; Blumenthal et al., 2007; Domfeh et al., 2008; Edwin, 2010) with little attention being paid to the use of religious coping among women living with cervical cancer and the prevalence of low self-esteem in cervical cancer patients has not been clearly established. It is evident in the reviewed literature majority of the studies that have been conducted on the current study variables were done in other countries to the neglect of African countries such Ghana. Making references to the prevalence of cervical cancer in Ghana, it is currently unclear whether religious beliefs would play a crucial influence on how women would cope with cervical cancer. It is also unclear especially in the case of Ghana, the religious coping practices used by women living with cervical cancer like how it has been proven to be used elsewhere. In addition, there is a niche in research literature especially in the case of Ghana as to whether religious coping and self-esteem are related as well as whether or not a difference exist in the religious coping practices of women with cervical cancer with respect to religious background. To addresses these problems especially in the case of Ghana, a study of this nature is important as it tends to address the aforementioned niche in literature on the relationship between religious coping and self-esteem of women living with cervical cancer in Ghana. The study is guided by the following research questions and hypothesis:

Research Questions

1. What are the religious coping practices used by women living with cervical cancer in Ghana?
2. What is the level of self-esteem among women living with cervical cancer in Ghana?

Hypothesis

H_0: There is no statistically significant relationship between religious coping and self-esteem of the cervical cancer patients.

H_0: There is no statistically significant difference in the religious coping practices of women with cervical cancer with respect to religious background.

Health Belief Model (HBM)

The health belief model was used as a theory to underpin this study. Although there are a number of theories related to behaviour and behaviour change, one of the well-researched and widely used theories of health-related behaviours is the health belief model (Champion & Skinner, 2008). The HBM emerged from the research of several social psychologists in the 1950s, which sought to explain why some individuals declined participation in preventive health care programs such as immunization and tuberculosis screening that could aid with early diagnosis and prevention of disease (Jantz & Becker, 1984). As with other theories exploring behaviour modification or change, the HBM includes a belief component, an attitude component and a behaviour component. The belief component pertains to what the individual assesses as the true situation, while the attitude component pertains to how the individual feels about the situation. Together, these two components work as the driver for the individual to behave in a specific manner. The model has been revised and expanded over the years to include a self-efficacy component, based on the research of Albert Bandura, and a cue to action or stimulus component, and has been extensively used by social science researchers to explain and predict health-

related behaviours (Shillitoe & Christie, 1989). The underlying concept of the original HBM is that health behaviour is determined by personal beliefs or perceptions about a disease and the strategies available to decrease its occurrence (Hochbaum, 1958). Personal perception is influenced by the whole range of intrapersonal factors affecting health behaviour. In summary, the Health Belief Model (HBM) is to understand health behaviour and possible reasons for non-compliance with recommended health action. It can provide guidelines for program development allowing planners to understand and address reasons for non-compliance. The HBM addresses four major components for compliance with recommended health action: perceived barriers of recommended health action, perceived benefits of recommended health action, perceived susceptibility of the disease, and perceived severity of the disease. In addition, there are modifying factors that can affect behaviour compliance. Modifying factors would include media, health professionals, personal relationships, incentives, and self-efficacy of recommended health action. Figure 1 presents the Health Belief Model (HBM)

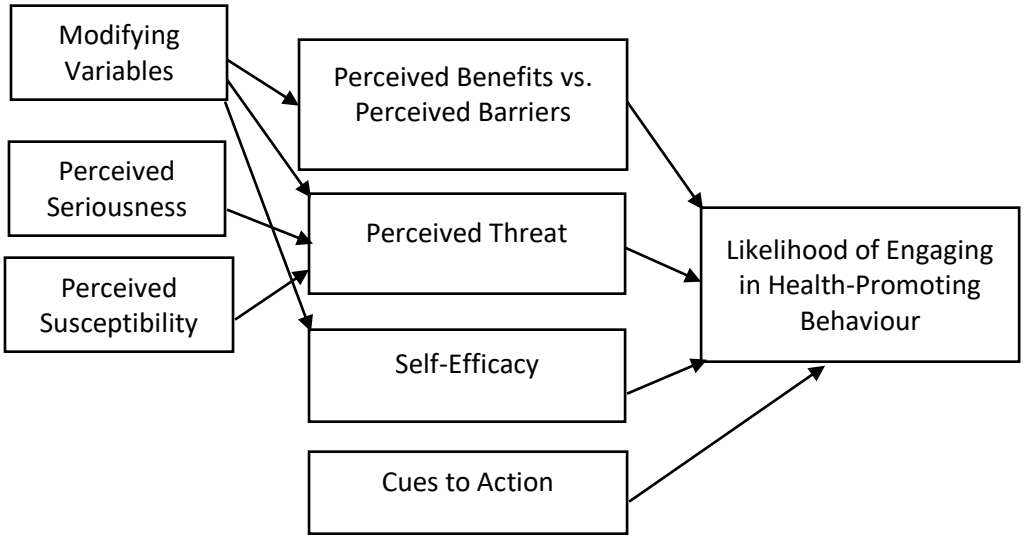

Figure 1- Health Belief Model (HBM)

The Health Belief Model by Hochbaum (1958) states that health behaviour is determined by personal beliefs or perceptions about a disease with the strategies available to decrease its occurrence. It further asserts that personal perception is influenced by the whole range of intrapersonal factors (see figure 1) affecting health behaviour. With this model, it is prudent to state that, women living with cervical cancer who has a higher self-efficacy as well as positive cues to action, will engage in health promotion activities such as compliance to medications, regular attendance for chemotherapy, etc. which will in turn go a long way to boost their self-esteem.

2. METHODOLOGY

Research Design

The study employed the quantitative research approach using specifically the descriptive survey research design. The study is descriptive because it tends to document situations as they naturally occur as it uses the quantitative research approach to test a theory by specifying narrow hypothesis, collect quantitative data to support or refute the hypotheses, and analyse the information using statistical procedures (Creswell, 2014). The study area was the greater Accra Region of Ghana and in particular the Korle-Bu Teaching Hospital. The study area mirrors the entire situation in Ghana in that the Korle-Bu Teaching Hospital (KBTH) is the first hospital in Ghana to carry out ureteroscopy (Korle-Bu Annual Report, 2012). The hospital was considered appropriate for this study because, it happens to be one of the few facilities in Ghana, with the capacity to diagnose and effectively manage cancer related cases such as cervical cancer and also serves a reference point to other hospitals in country.

Population and sample

The target population included all women diagnosed with cervical cancer who were 18 years and above and receiving treatment at the National Radiotherapy Centre and Nuclear Medicine of the Korle-Bu Teaching Hospital, Accra. From a population of 160 women living with cervical cancer, the stratified and simple random sampling procedures were used to

select a sample of 113 based on the Krejcie and Morgan (1970) sampling formulae. The inclusion criteria for the study were women diagnosed with cervical cancer for at least 3 months, women who were 18 years old and above, women who belonged to a specific religion and were willing to participate in the study with no sign of any mental disorder or cervical cancer neurological disorder.

Instrumentation and data analysis

The instruments used for the study included Brief Religious Cope (Brief RCOPE) by Pargament, Koenig and Perez (2000), Rosenberg Self-Esteem Scale (Rosenberg, 1965) and socio-demographic sheet which recorded personal information about the participants. To ensure validity and reliability of instruments, they were subjected to expert judgement and pilot testing. In particular, the instruments were piloted using 10 women living with cervical cancer and attending the Swedish-Ghana Medical Centre (SGMC) in Accra. The Cronbach alpha for positive and negative religious coping were 0.71 and 0.81 respectively whereas the Rosenberg self-esteem scale was 0.75. According to Pallant and Manual (2010), an instrument's reliability coefficient of .70 and above is effective for data collection. To ensure, ethical issues, respondents' anonymity, confidentiality, voluntary participation, right to leave the study, among others, were duly adhered to. The gathered data were analysed using descriptive and inferential statistics such as means, standard deviations, Pearson Product-Moment Correlation and One-Way Multivariate Analysis of Variance.

3. RESULTS AND DISCUSSION

The result of the study is presented based on the research questions and hypothesis.

Research Question One:

What are the religious coping practices used by women living with cervical cancer in Ghana?

This research question sought to determine the religious coping practices used by cervical cancer patients. Respondents were asked to respond to 14-item on religious coping practices. A cut-off mean of 2.5, which is the midpoint of the responses (1+2+3+4)/4, was used as a criterion measure of the responses. Mean scores above 2.5 that majority of the women living with cervical cancer agreed to the statements whereas mean scores below 2.5 depicted majority of them disagreed with the statements. The responses of respondents are shown in Table 1 and 2.

Table 1- ***Religious Coping Practices (Positive)***

Statements	M	SD
Positive Religious Coping		
I looked for a stronger connection with God	3.76	.53
I asked forgiveness for my sins.	3.74	.50
I tried to see how God might be trying to strengthen me in this situation.	3.67	.59
I tried to put my plans into action together with God	3.66	.58
I sought Gods love and care	3.63	.60
I sought help from God in letting go of my anger.	3.34	.79
I focused on religion to stop worrying about my problems.	2.77	1.11
Mean of means	*3.51**	*.67*

M – Mean; SD – Standard deviation

As presented in Table 1, the overall mean score for positive religious coping was 3.51 out of 4.0. This suggests that respondents were high on the use of positive religious coping. This was evident as respondents among other things looked for a stronger connection with God (M = 3.76, SD = .53), they asked for forgiveness of sins (M = 3.74, SD = .50), they tried to see how God might be trying to strengthen them in their situation (M = 3.67, SD = .59).

Table 2- *Religious Coping Practices (Negative)*

Statements	M	SD
Negative Religious Coping		
I questioned Gods love for me.	2.41	1.08
I wondered whether God had abandoned me.	2.13	1.10
I decided the devil made this happened.	2.12	1.17
I wondered what I did for God to punish me.	1.98	1.18
I questioned the power of God.	1.96	1.13
I felt punished by God for my lack of devotion.	1.89	1.22
I wondered whether my church had abandoned me.	1.33	.81
Mean of means	*1.97*	*1.10*

M – Mean; SD – Standard deviation

On the contrary, respondents were low on the use of negative religious coping, with overall mean score of 1.97 out of 4.0 (Table 2). This suggests that respondents did not reappraise God for things happening to them. Specifically, respondents did not question God's love towards them (*M* = 2.41, *SD* = 1.08), they did not wonder whether God had abandoned them (*M* = 2.13, *SD* = 1.10), and they did not feel punished by God for lack of devotion (*M* = 1.89, *SD* = 1.22).

The findings of research question one showed that respondents were high on the use of positive religious coping. This was evident as respondents among other things looked for a stronger connection with God (*M* = 3.76, *SD* = .53), they asked for forgiveness of sins (*M* = 3.74, *SD* = .50), they tried to see how God might be trying to strengthen them in their situation (*M* = 3.67, *SD* = .59). Hence, this implies that women living with cervical cancer are more likely to cope better with their problems. It can, therefore, be stated that a positive religious coping practices/approach adopted towards the illness may influence different aspects of respondents' experiences including commitment towards review dates for either chemotherapy, radiation therapy, surgery or medications, health-seeking behaviours and effective ways to cope with the condition. It should be pointed that the findings on the current study variables are consistent with literature. Harris et al., (2008) for instance, indicated that positive religious coping is significantly associated with better functioning, adjustment and coping with the stressful situations (Ano & Vasconcelles, 2005). Positive religious coping has been found to be used by patients suffering from chronic conditions such as cervical cancer as seeking spiritual support, forgiveness, religious purification and benevolent religious appraisal in reducing psychological distress associated with the condition (Pargament et al., 1998). The use of positive religious coping by majority of the respondents can be attributed to the way religious coping was measured by the Brief RCOPE. As Africa has been rated as the most religious continent in the world with Ghana being ranked as the most religious country in 2012 by Win Gallup International (2015; 2012), hence, engaging in religious practices, seeking religious guidance and making religious meaning out of challenging life events is a common practice in Ghana and Africa at large. Since according to the Ghana Statistical Service (2012), majority of Ghanaian population identify themselves with a particular religious sect (Christian =70%, Muslims = 15%, Traditionalist = 2%). Therefore, positive religious coping questions such as "I looked for a stronger connection with God", "I sought God's love and care", I tried to put my plans into action together with God", "I tried to see how God might be trying to strengthen me in this situation" and "I asked for forgiveness for my sins" will score higher when measured because most people engage in these religious practices as part of their daily lives and not because they have been diagnosed with cervical cancer. This study revealed that most women living with cervical cancer use positive religious coping as measured by the Brief RCOPE not necessarily because of their condition but because already they are culturally-religious. Being diagnosed with cervical cancer makes newly infected women to engage in religious practices such as praying, going to church, fasting, engaging in church activities, seeking God's guidance as a means of drawing closer to God for healing. The disease strengthens the relationship of some respondents with God and the use of positive religious coping has been beneficial in dealing with any psychological distress such as low self-esteem associated to cervical cancer diagnosis.

Research Question Two

What is the level of self-esteem among women living with cervical cancer in Ghana?

This research question sought to determine the level of self-esteem among women living with cervical cancer. Respondents were asked to respond to 10 items on how they have been feeling during the past few weeks in terms of their condition. A cut-off mean of 1.5, which is the midpoint of the responses (0+1+2+3)/4, was used as a criterion measure of the responses. Items with mean scores above 1.5 depicted agree, whereas items with mean below 1.5 depicted disagree. Tables 3 and 4 present the results on self-esteem.

Table 3- *Self-esteem*

Statement	*M*	*SD*
I feel that I have a number of good qualities.	2.19	.69
I take a positive attitude towards myself.	2.11	.73
I feel that I am a person of worth, at least on an equal plane with others.	2.07	.95
I am able to do things as well as most other people.	1.79	.95
On the whole, I am satisfied with myself.	1.68	.94
I feel I do not have much to be proud of.	1.23	.91
I wish I could have more respect for myself.	1.19	.79
At times I think I am no good at all.	.97	.94
I certainly feel useless at times.	.96	.90
All in all, I am inclined to feel that I am a failure.	.88	1.00

M – Mean; SD – Standard deviation

As shown in Table 3, respondents felt they had a number of good qualities (*M* = 2.19, *SD* = .69), they took a positive attitude towards themselves (*M* = 2.11, *SD* = .73), and they felt they were of worth, at least on equal plane with others (*M* = 2.07, *SD* = .95). Table 4 presents details on the level of self-esteem among respondents. Four items on the self-esteem scale (items 3, 5, 9, and 10) which were negatively worded were reverse coded.

Table 4- Level of Self-esteem

Level	Score	Frequency	Percentage (%)
Low	Below 15	21	18.9
Normal	15 – 25	85	76.6
High	26 – 30	5	4.5
Total		111	100.0

Overall Mean = 19.60, SD = 4.61

From Table 4, the overall mean score for self-esteem was 19.60 out of 30. This suggests respondents were within the normal category. This was confirmed as majority of the respondents 85 (76.6%) had normal level of self-esteem. The findings of research question two revealed that cervical cancer patients in the Korle-Bu Teaching Hospital were within the normal category. The level of self-esteem as measured by Rosenberg Self-Esteem Scale revealed that majority of women living with cervical cancer 85 (76.6%) had a normal level of self-esteem, 5 (4.5%) had a high self-esteem and 21 (18.9%) had a relatively low self-esteem. Thus, women living with cervical cancer and attending Korle-Bu Teaching Hospital in Accra have a significantly normal level of self-esteem. This might be attributed to supportive social environment, religious factors, patients' sense of meaning from the situation and their ability to embrace new challenges such as the diagnosis of cervical cancer.

Although the findings of this study showed that majority of women living with cervical cancer 85 (76.6%) in Accra had a normal level of self-esteem, the relatively low prevalence of self-esteem 21 (18.9%) is consistent with the results of Parvan et al. (2005) which investigated the relationship between hope and self-esteem among Iranian cancer patients and revealed a positive correlation between hope and self-esteem ($r_s = 0.73$, n = 85, P < 0.001). Also, the results of this study support the findings of previous studies (Anjana, 2013) which reported the significant differences in self-esteem of male and female cancer patients. Thus, the findings of the study revealed a significant difference among male and female cancer patients in regard to their level of self-esteem. In addition, self-esteem of cancer patients also differed significantly from the self-esteem of non-cancer individuals. Low self-esteem in women living with cervical cancer may be as a result of shame, guilt, treatment failure, non-disclosure of cervical cancer status, self-blame and advance stage of disease progression as reported in previous studies (Rosenberg, 1985; Bertan et al., 2010; Munstedt et al., 1997). Despite the fact that majority of respondents do not have low self-esteem as shown in Table 4, it is still important to pay key attention to the relatively few women living with cervical cancer who reported low self-esteem. These findings establish the fact that self-esteem either high or low plays a significant role in the prevention, treatment and recovery from cervical cancer and various cancer related diseases.

Hypothesis One

H_0: There is no statistically significant relationship between religious coping and self-esteem of the cervical cancer patients.

This hypothesis sought to determine the relationship between religious coping and self-esteem among cervical cancer patients. Pearson product-moment correlation coefficient was used to determine the relationship. Before the conduct of analyses, assumption that underlie the conduct of Pearson product-moment correlation to include the variables being continuous and measured on the interval or ratio scale and test of normality were all fulfilled. For instance, scores (measured on interval scale) were ascertained for variables that were used in the analysis. Table 5 presents the results.

Table 5- Relationship between Religious Coping and Self-esteem

			Positive coping	Negative coping
1	Positive coping	Pearson Correlation (r)	1	
		Sig. (2-tailed)		
2	Negative coping	Pearson Correlation (r)	-.20*	1
		r^2	.04	
		Sig. (2-tailed)	.032	
3	Self-esteem	Pearson Correlation (r)	.53*	-.41*
		r^2	.28	.17
		Sig. (2-tailed)	.000	.000

*Correlation is significant at the 0.05 level (2-tailed); N = 113.

Religious coping had two dimensions: negative coping and positive coping, and self-esteem was unidimensional. There was a statistically significant positive moderate relationship between positive religious coping and self-esteem, $r = .53$, $p < .001$. This result implies that 28% of the variance in self-esteem was explained by positive religious coping. From the results, it can be inferred that an increase in positive religious coping is associated with higher self-esteem, which means that as cervical cancer patients tap into a sense of connectedness with God, secure relationship with a caring God, and have a belief that life has a greater benevolent meaning, their self-esteem enhances. The result however, showed a statistically significant negative relationship between negative religious coping and self-esteem, $r = -.41$, $p < .001$. Negative religious coping explained 17% of the variance in self-esteem among patients with cervical cancer. This result implies that higher scores in negative religious coping is associated with reduced or low self-esteem. An implication of the result is that, as cervical cancer patients show negative reappraisals of God's powers, thus, feeling abandoned or punished by God; demonic reappraisals (i.e., feeling the devil is involved in the stressor), spiritual questioning and doubting, interpersonal religious discontent, and their level of self-esteem is reduced. In all, the study has provided evidence to support the claim that religious coping has some relationship with self-esteem.

Based on the results (positive coping, r = .53; $p < .001$) and (negative coping, r = -.41; $p < .001$), the p-values were less than .05, therefore, the null hypothesis that "there is no statistically significant relationship between religious coping and self-esteem of women living with cervical cancer patients" is rejected in favour of the alternate hypothesis which states that "there is a statistically significant relationship between religious coping and self-esteem of women living with cervical cancer. From this hypothesis, it was found that there is a statistically significant relationship between religious coping and self-esteem of women living with cervical cancer in Korle-Bu Teaching Hospital. With reference to this finding, Zeigler-Hill (2013) and Isnard et al. (2003) found that individuals with high self-esteem display fewer psychopathological symptoms and a more active coping strategies is adopted in dealing with their stressful situations. It can be deduced that patient who adopts positive religious coping will have a higher self-esteem, hence, helping them cope with the condition. The findings of this study confirm to Baumeister et al. (2003) study as it reviewed a large number of studies and literature on the relationship between self-esteem and various variables such as academic performance, interpersonal success, happiness, and lifestyles. The study concluded that high self-esteem contributes to happiness, better relationship skills, and decreasing the chance of eating disorders. Again, the findings of this study is in line with results of Gecas (1982) which asserted that individuals with high self-esteem are more likely to positively cope with negative life events or experiences than those with low self-esteem. The findings are again in line with Ayele et al., (1999) and Koeing (1998) which revealed that religious coping happens to be one of the major forms of coping strategies for low self-esteem and psychological distress adopted by people battling terminal illness like cervical cancer. Further, the findings of this study corroborated with the results of Zeigler-Hill (2011) which states that self-esteem is associated with the development and expression of psychopathology and there is a relationship between self-esteem and psychopathology through a stress-buffering model of high self-esteem and the vulnerability model of low self-esteem. Also, the findings of this study concur with several authors (Dumont & Provost, 1999; Martyn-Nemeth, Penckofer, Gulanick, Velor-Friedrich, & Bryant, 2009) that asserted that individuals with high self-esteem are likely to adopt problem-solving strategies rather than avoidance strategies because they perceive themselves as competent and capable of dealing with their stressful situations or problems.

Hypothesis Two

H_0: There is no statistically significant difference in the religious coping practices of women with cervical cancer with respect to religious background.

This hypothesis sought to determine differences in the level of religious coping among cervical cancer patients with respect their religious background. To test this hypothesis, one-way MANOVA was performed to compare the mean scores of religious coping among respondents with regard to their religious background. The predictor variable was religious background, which has three levels: Orthodox, Pentecostal/Charismatic, and Islam. The criterion variables were positive religious coping and negative religious coping. Before the test of the hypothesis, the necessary assumptions including normality were checked and fulfilled. Specifically, Shapiro-Wilk test was performed to test the normality of the data. Table 6 to 8 presents the results.

Table 6- Pillai's Trace Multivariate Tests for differences in Religious Coping in terms of Religious Background

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	.99	6176.47	2	107	.000	.991
Religious Background	.10	2.96	2	216	.021*	.052

*Significant at .05 level

The results in Table 6 shows a statistically significant difference in the combined religious coping among cervical cancer patients with respect to their religious background, F (2, 216) = 2.96, p = .021; partial eta squared = .052; Pillai's Trace V = .10. The result implies that 5.2% of the variance in the combined criterion variables (positive and negative religious coping) was explained by religious background. Separate univariate ANOVAs were performed on the combined criterion variables using Bonferroni adjusted alpha level of .025 and the results are presented in Table 7.

Table 7- Tests of Between-Subjects Effects in terms of Religious background

Source	Dependent Variable	Df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	Positive-coping	1	53954.45	9558.24	.000	.989
	Negative- coping	1	16113.21	944.80	.000	.897
Religion	Positive-coping	2	6.80	1.21	.304	.022
	Negative- coping	2	73.92	4.33	.015*	.074
Error	Positive-coping	108	5.65			
	Negative- coping	108	17.06			

*Significant at .025 level.

As presented in Table 7, the univariate test showed a statistically significant difference in negative religious coping among cervical patients in terms of religious background, F (2, 108) = 4.33, p = .015, partial eta squared = .074. This result implies that religious background explained 7.4% of the variance in negative religious coping. The results however revealed no statistically significant difference in positive religious coping among cervical cancer patients based on religious background, F (2, 108) = 1.21, p = .304, partial eta squared = .022). The result implies that religious background explained 2.2% of the variance in positive religious coping. A post hoc analysis was performed to determine differences in negative religious coping among cervical cancer patients. Table 8 presents the results.

Table 8- Multiple Comparisons on Negative Coping (Games-Howell)

(I) Religion	(J) Religion	Mean Difference (I-J)	Std. Error	Sig.
Orthodox	Pentecostal/Charismatic	-.79	.97460	.699
	Islam	2.65*	.80	.006
Pentecostal/Charismatic	Orthodox	.79	.97	.699
	Islam	3.44*	1.07	.006
Islam	Orthodox	-2.65*	.80	.006
	Pentecostal/Charismatic	-3.44*	1.07	.006

*Significant at .025 level.

From the post hoc analysis, there is a statistically significant difference between the mean scores of negative religious coping for cervical patients from Orthodox and those from Islam, p = .006. Similarly, there is a significant difference between the mean scores of negative religious coping patients for patients from Pentecostal/Charismatic and those from Islam, p = .006. However, there is no statistically significant difference between the mean scores of negative religious coping for patients from Pentecostal/Charismatic and Orthodox, p = .699. Based on the results, it can be concluded that patients from Pentecostal/Charismatic used negative religious coping more than patients from Islam. Similarly, patients from Orthodox used negative religious coping more than patients from Islam. However, there was no difference between the use of negative religious coping between patients with Pentecostal/Charismatic and those with Orthodox backgrounds.

Based on the results, F (2, 216) = 2.96, p = .021, the p-value is less than .05 therefore, we fail to reject the null hypothesis which states that "there is no statistically significant difference in the religious coping practices of women with cervical cancer with respect to religious background." From this hypothesis, it was found that there is a statistically significant difference in the religious coping practices of women living with cervical cancer with respect to religious background. Though, the findings of this study revealed a statistically significant difference in religious coping practices of cervical cancer patients with respect to their religious background, the difference exist only in negative religious coping and not positive religious coping. The results from this study further revealed that patients from Pentecostal/Charismatic used negative religious coping more than patients from Islam. Similarly, patients from Orthodox used negative religious coping more than patients from Islam but however, there was no difference between the use of negative religious coping between patients with Pentecostal/Charismatic and those with Orthodox backgrounds. With reference to this finding, McIllmurrary et al. (2003) and Jenkins et al. (1995) highlights how a cancer diagnosis may trigger several religious concerns/practices along with feelings of anxiety, hostility, discomfort, low self-esteem and social isolation and the importance of religious coping practices in assisting the individual cope with the distress associated with the diagnosis of cancer. It can therefore

be inferred that cervical cancer patients attending Korle-Bu Teaching Hospital with various religious background resort to either negative or positive religious coping in dealing with their cervical cancer diagnosis.

The findings of this study is in line with the results of Mickley et al. (1992) that revealed differences in religious coping practices as well as highlighting the importance of religious coping that may help cancer patients deal with increased spiritual needs and may help them make sense of their illness. The findings of this study corroborate the view of Levin (1996) that postulated that various religious coping practices and involvement with religious activities may help individuals maintain a sense of control, hope, and purpose, which in turn may also help them gain a sense of social support from their religious community. Also, the findings of this study corroborate with the results of McIllmurrary et al., (2003) that examined the various religious needs and beliefs of individuals with cancer of which they concluded by highlighting the importance of the individual's religious practices and spiritual beliefs in the experience of cancer. Although, there are limited published works on religious coping practices of women living with cervical cancer with respect to their religious background, it can be asserted that women living with cervical cancer irrespective of their religious orientation attending Korle-Bu Teaching Hospital (Accra) spontaneously reports the importance of religious faith in dealing with their condition.

4. CONCLUSIONS AND RECOMMENDATIONS

Among others, the study concludes that women living with cervical cancer in Ghana has normal level of self-esteem and that religious coping plays a fundamental role in dealing with life hassles associated with living with cervical cancer. Hence, the type of religious coping adopted by women living with cervical cancer is associated with the level of self-esteem they will experience. In addition, the study further concludes that the use of positive religious coping enhances high self-esteem of women living with cervical cancer whereas the use of negative religious coping reveals a low self-esteem. This implies that as cervical cancer patients tap into a sense of connectedness with God, secure a relationship with a caring God, and have a belief that life has a greater benevolent meaning, their self-esteem enhances. Making inferences to the Health Belief Model, it has been validated that the health behaviour of women living with cervical cancer is determined by their personal beliefs or perceptions and use religious coping practices to positively comply to the treatments of the disease in order to decrease its occurrence. It is evident that despite the use of positive religious coping by most of the respondents, women living with cervical cancer still experience some forms of spiritual challenges which is evident in their use of negative religious coping together with positive religious coping. The study makes a recommendation that, assessment of positive religious coping, negative religious coping, high self-esteem and low self-esteem in women living with cervical cancer should be of paramount interest to clinical health psychologists or counsellors, medical practitioners as well as religious leaders/pastors. This will enable the respective health professionals working with women living with cervical cancer to clearly understand how these patients are coping with their religious beliefs and whether they are experiencing any other form of psychological distress (such as low self-esteem) as a result of their disease. Again, this study strongly recommends the integration of positive religious coping techniques into psychotherapy and counselling of women living with cervical cancer. This is because positive religious coping techniques has vast benefit for women living with cervical cancer and also effective in reducing low self-esteem symptoms in women living in cervical cancer. Hence, it is imperative for Ghana Psychological Association and the Mental Health Council (Ghana) under the Ministry of Health to develop some standard guidelines for integrating and teaching positive religious coping to women living with cervical cancer experiencing any form of psychological distress. Also, this study recommends to the Ministry of Health and Ghana Health Service to train and retain nurses as well as physicians on the early signs of cervical cancer. It should also be of key interest to the Ministry of Health and Ghana Health Service in organizing regular in-service training for nurses, physicians, pharmacists, clinical psychologists/counsellors and spiritual leaders in enhancing their skills in cancer management so as to ensure a holistic care of cervical cancer survivors.

REFERENCES

[1] Abotchie, P. N., & Shokar, N. K. (2009). Cervical cancer screening among college students in Ghana: knowledge and health beliefs. *International Journal of Gynecological Cancer: Official Journal of the International Gynecological Cancer Society*, *19*(3), 412–416.

[2] Adjei-Mensah, E. (2013). Ministry of Health begins vaccination against cervical cancer. *Daily Graphic* NO 19073, p. 11. Accra.

[3] Ai, A. L., Dunkle, R. E., Peterson, C., & Bolling, S. F. (1998). The role of private prayer in psychological recovery among midlife and aged patients following cardiac surgery, *Gerontologist, 38,* 591-601.

[4] Anderson, M. J., Marwit, S. J., Vandenberg, B., & Chibnall, J. T. (2005). Psychological and religious coping strategies of mothers bereaved by the sudden death of a child. *Death studies*, *29*(9), 811-826.

[5] Anjana, B. (2013). Self-esteem of cancer patients: A comparative study. Department of Psychology, Tripura University, Tripura. *Self-esteem of cancer patients*, *1*(4), 2277-7733.

[6] Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of clinical psychology*, *61*(4), 461-480.

[7] Ayele, H., Mulligan, T., Gheorghiu, S., & Reyes-Ortiz, C. (1999). Religious activity improves life satisfaction for some physicians and older patients. *Journal of the American Geriatrics Society*, 47,453–455.

[8] Barton-Burke, M., & Gustason, C. J. (2007). Sexuality in women with cancer. *Nursing Clinics of North America*, *42*(4), 531-554.

[9] Barrowclough, C., Tarrier, N., Humphreys, L., Ward, J., Gregg, L., & Andrews, B. (2003). Self-esteem in schizophrenia: relationships between self-evaluation, family attitudes, and symptomatology. *Journal of Abnormal Psychology*, *112*(1), 92.

[10] Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological science in the public interest*, *4*(1), 1-44.

[11] Bertan, F.C., & Castro, E. K. (2010). Quality of Life, Anxiety and Depressions Indicators and Sexual Satisfaction in Adult Patients with Cancer. *Rev Salud Soc.1* (2), 76-88.

[12] Blumenthal, P. D., Gaffikin, L., Deganus, S., Lewis, R., Emerson, M., & Adadevoh, S. (2007). Cervical cancer prevention: safety, acceptability, and feasibility of a single visit approach in Accra, Ghana. *American Journal of Obstetrics and Gynecology*, *196*(4), 407–e1.

[13] Bosworth, H. B., Park, K. S., McQuoid, D. R., Hays, J. C., & Steffens, D. C. (2003). The impact of religious practice and religious coping on geriatric depression. *International Journal of Geriatric Psychiatry*, *18*(10), 905-914.

[14] Bush, E. G., Rye, M. S., Brant, C. R., Emery, E., Pargament, K. I., & Riessinger, C. A. (1999). Religious coping with chronic pain. *Applied psychophysiology and biofeedback*, *24*(4), 249-260.

[15] Carvajal, S. C., Clair, S. D., Nash, S. G., & Evans, R. I. (1998). Relating optimism, hope, and self-esteem to social influences in deterring substance use in adolescents. *Journal of Social and Clinical Psychology*, *17*(4), 443-465.

[16] Champion, V. L., & Skinner, C. S. (2008). The health belief model. In K. Glanz, (Ed.), *Health behaviour and health education: Theory, research, and practice*. (pp. 63-88). San Francisco: Jossey-Bass.

[17] Chapman, P. L., & Mullis, R. L. (1999). Adolescent coping strategies and self-esteem. *Child Study Journal*, *29*(1), 69-69.

[18] Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.

[19] Clemmens, D. A., Knafl, K., Lev, E.L. & McCorkle, R (2008). Cervical cancer: Patterns of long-term survival. *Oncology Nursing Forum*, *35*(6), 897-903.

[20] Costanzo, E. S., Lutgendorf, S. K., Rothrock, N. E., & Anderson, B. (2006). Coping and quality of life among women extensively treated for gynecologic cancer. *Psycho- Oncology*, *15*, 132–142.

[21] Cotton, S., Puchalski, M. C., Sherman, N. S., Mrus, M. J., Peterman, A. H., Feinberg, J., Tsevat, J. (2006). Spirituality and Religion in Patients with HIV/AIDS. *Journal of General Internal Medicine*, *21*(5), s5-s13. doi:10.1111/j.1525-1497.2006. 00642.x

[22] Dalmida, S. G., Koenig, H. G., Holstad, M. M., & Wirani, M. M. (2013). The Psychological well-being of people living with HIV/AIDS and the role of religious coping and social support. *International Journal of Psychiatric Medicine*, *46*(1), 57-83. Retrieved from http://www.ncbi. nlm.nih .gov/pubmed/24547610.

[23] Dein, S., Stygall, J., & Martin, P. (2006). The use and expectations of prayer among women with breast cancer. *Healing Ministry*, *13*, 23-31.

[24] Domfeh, A., Wiredu, E., Adjei, A., Ayeh-Kumi, P., Adiku, T., Tettey, Y., & Armah, H. (2008). Cervical human papillomavirus infection in Accra, Ghana. *Ghana Medical Journal*, *42*(2), 71–8.

[25] Donovan, K. A., Taliaferro, L.A., Alvarez, E. M., Jacobsen, P. B., Roetzheim, R.G., & Wenham, R. M. (2007). Sexual health in women treated for cervical cancer: Characteristics and correlates. *Gynecologic Oncology*, *104*, 428-434.

[26] Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffitt, T. E., & Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency. *Psychological science*, *16*(4), 328-335.

[27] Duda, R., Chen, G., & Hill, A. (2005). Screening for cervical cancer still not included as routine health care for women. *Journal of Tropical Medicine*, *1*(1), 1–6.

[28] Dumont, M., & Provost, M. A. (1999). Resilience in adolescents: Protective role of social support, coping strategies, self-esteem, and social activities on experience of stress and depression. *Journal of youth and adolescence*, *28*(3), 343-363.

[29] Dunn, K. S., & Horgas, A. L. (2004). Religious and nonreligious coping in older adults experiencing chronic pain. *Pain Management Nursing*, *5*(1), 19-28.

[30] Edwin, A. K. (2010). Is routine human papillomavirus vaccination an option for Ghana? *Ghana Medical Journal*, *44*(2), 70–5.

[31] Fallot, R. D., & Heckman, J. P. (2005). Religious/spiritual coping among women trauma survivors with mental health and substance use disorders. *The Journal of Behavioral Health Services & Research*, *32*(2), 215-226.

[32] Ferlay, J., Shin, H., Bray, F., Forman, D., Mathers, C., & Parkin, D. M. (2010a). Estimates of worldwide burden of cancer in 2008: GLOBACOM 2008. *International Journal of Cancer*, *127*(27), 2893–2917.

[33] Ferlay, J., Shin, H. R., Bray, F., Forman, D., Mathers, C., & Parkin, D. M. (2010b). Estimates of worldwide burden of cancer in 2008: GLOBACOM 2008. *International Journal of Cancer*, *127*(12), 2893–2917.

[34] Flannelly, L. T., Flannelly, K. J., Weaver, A. J. (2002). Religious and spiritual variables in three major oncology nursing journals. *Oncology Nursing Forum*, *29*, 679-685.

[35] Gartner, J., Larson, D. B., & Allen, G. D. (1991). Religious commitment and mental health: A review of the empirical literature. *Journal of Psychology and Theology*, *19*(1), 6-25.

[36] Gecas, V. (1982). The self-concept. *Annual review of sociology*, *8*(1), 1-33.

[37] Ghana Statistical Service. (2012). *2010 Housing and Population Census: Summary of Final Results.* Retrieved from http://www.statsghana.gov. gh.

[38] Ghana Statistical Service. (2015). *Ghana Demographic and Health Survey 2014. Key Indicators*. Retrieved from http://www.statsghana.gov.gh/docfiles/DHS_Report/Ghana_DHS_2014

[39] Globocan (2014). Cancer incidence, mortality and prevalence worldwide. International Academic progress: Evidence from the National Education Longitudinal Study of 1988. *Sociological 34*, 155-183.

[40] GLOBOCAN (IARC) (2008). Section of cancer information. Retrieved from *http://globacan.iarc.fr/factsheets/ population/factsheet*

[41] Haghshenas, M., Golini-Moghaddam, T., Rafiei, A., Emadeian, O., Shykhpour, A., & Ashrafi, G.H.(2013).Prevalence and type distribution of high-risk human papillomavirus in patients with cervical cancer: a population-based study. *Infectious agents and cancer*, *8*(1), 20.3

[42] Harris, J. I., Erbes, C. R., Engdahl, B. E., Olson, R. H., Winskowski, A. M., & McMahill, J. (2008). Christian religious functioning and trauma outcomes. *Journal of Clinical Psychology*, *64*(1), 17-29.

[43] Harris, J. I., Erbes, C. R., Engdahl, B. E., Ogden, H., Olson, R. H., Winskowski, A. M. M., ... & Mataas, S. (2012). Religious distress and coping with stressful life events: A longitudinal study. *Journal of Clinical Psychology*, *68*(12), 1276-1286.

[44] Harrison, M. O., Koenig, H. G., Hays, J. C., Eme-Akwari, A. G., & Pargament, K. I. (2001). The epidemiology of religious coping: A review of recent literature. *International Review of Psychiatry*, *13*, 86–93.

[45] Herzog, T.J. & Wright, J.D. (2007). The impact of cervical cancer on quality of life: The components and means for management. *Gynecologic Oncology*, 107(3), 572-577.

[46] Hewitt, M., Greenfield, S., & Stovall, S. (2006). *From cancer patient to cancer survivor: Lost in transition.* Washington, DC: National Academies Press.

[47] Hochbaum, G. M. (1958). *Public Participation in medical screening programmes: A socio-psychological study*. Public Health Service, U. S. Department of Health, Education, and Welfare.

[48] Hood, R. W., Hill, P. C., & Spilka, B. (2009). The psychology of religion: An empirical approach. New York. *NY: Guilford*.

[49] Hughes, M. K. (2000). Sexuality and the cancer survivor: a silent coexistence. *Cancer Nursing*, *23*(6), 477-482.

[50] Isnard, P., Michel, G., Frelut, M. L., Vila, G., Falissard, B., Naja, W., & Mouren-Simeoni, M. C. (2003). Binge eating and psychopathology in severely obese adolescents. *International Journal of Eating Disorders*, *34*(2), 235-243.

[51] Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. *Health Education and Behaviour*, *11*(1), 1-47.

[52] Jenkins, R., & Pargament, K. (1995). Religion and spirituality as resources for coping with cancer. *Journal of Psychosocial Oncology*, *13*, 51-74.

[53] Jensen, P. T., Groenvold, M., Klee, M. C., Thranov, I., Petersen, M. Aa. & Machin, D. (2003). Longitudinal study of sexual function and vaginal changes after radiotherapy for cervical cancer. *International Journal of Radiation Oncology Biology Physics*, 56(4), 937 –949.

[54] Johnson, R. J., Lund, D. A., & Dimond, M. F. (1986). Stress, self-esteem and coping during bereavement among the elderly. *Social Psychology Quarterly*, 273-279.

[55] Koenig, H. G. (1997). *Is religion good for your health? The effects of religion on physical and mental health*. Binghamton, NY: Haworth Press.

[56] Koenig, H. G. (1998). Religious attitudes and practices of hospitalized medically ill older adults. *International journal of geriatric psychiatry*, *13*(4), 213-224.

[57] Koenig, H. G., McCullough, M. E., & Larson, D.B. (2001). *Handbook of Religion and Health* (1st ed). New York, NY: Oxford University Press.

[58] Koenig, H. G., Cohen, H. J., Blazer, F. H., Pieper, C., Meador, K. G., Shelp, F., Goli, V., & DiPasquale, B. (1992). *Religious coping and depression among elderly, hospitalized medically ill men.* American Journal of Psychiatry, 149, 1693–1700.

[59] Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30(3),* 607-610.

[60] Lazarus R.S. & Folkman, S. (1984). *Stress, appraisal and coping.* New York: Springer Publishing Company.

[61] Levin, J. S. (1996). How religion influences morbidity and health: Reflections on natural history, salutogenesis and host resistance. *Social science & medicine*, *43*(5), 849-864.

[62] Lyles, T. (2005). *Stress recovery manual*. Florida: Healthful Communications, Inc.

[63] Manning-Walsh, J. (2005). Spiritual struggle: Effect on quality of life and life satisfaction in women with breast cancer. *Journal of Holistic Nursing*, *23*(2), 120-140.

[64] McCorkle, R., Ercolano, E., Lazenby, M., Schulman – Green, Schilling, L. S., Lorig, K. (2011). Self –management: Enabling and empowering patients living with cancer as a chronic illness. *CA A Cancer Journal for Clinicians*, 61(1), 50 -62.

[65] Martyn-Nemeth, P., Penckofer, S., Gulanick, M., Velsor-Friedrich, B., & Bryant, F. B. (2009). The relationships among self-esteem, stress, coping, eating behavior, and depressive mood in adolescents. *Research in nursing & health*, *32*(1), 96-109.

[66] McIllmurrary, M. B., Francis, B., Harman, J. C., Morris, S. M., Soothill, K., & Thomas, C. (2003). Psychosocial needs in cancer patients related to religious belief. *Palliative Medicine, 17*, 49-54.

[67] Mickley, R., Soeken, K., & Belcher, A. (1992). Spiritual well-being, religiousness and hope among women with breast cancer. *Image, 24*, 267-272.

[68] Monat, A., & Lazanis, R. S. (1985). *Stress and coping*. New York, NY: Columbia University Press.

[69] Münstedt, K., Manthey, N., Sachsse, S., & Vahrson, H. (1997). Changes in self-concept and body image during alopecia induced cancer chemotherapy. *Supportive care in cancer*, *5*(2), 139-143.

[70] Nairn, R. C., & Merluzzi, T. V. (2003). The role of religious coping in adjustment to cancer. *Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer*, *12*(5), 428-441.

[71] Nakashima, J. D. P., Koifman, R. J., & Koifman, S. (2012). Cancer incidence in the Western Amazon: population-based estimates in Rio Branco, Acre State, Brazil, 2007-2009. *Cadernos de saude publica*, *28*(11), 2125-2132.

[72] Nkyekyer, K. (2000). Pattern of gynaecological cancers in Ghana. *East African medical journal*, *77*(10). Retrieved from http://www.ajol.info/index.php/eamj/article/view/46708.

[73] Nurasikin, M. S., Khatijah, L. A., Aini, A., Ramli, M., Aida, S. A., Zainal, N. Z., & Ng, C. G. (2013). Religiousness, religious coping methods and distress level among psychiatric patients in Malaysia. *International Journal of Social Psychiatry*, *59*(4), 332-338. doi: 10.1177/0020764 012437127.

[74] Pargament, K. I., Ishler, K., Dubow, E. F., Stanik, P., Rouiller, R., Crowe, P., ... & Royster, B. J. (1994). Methods of religious coping with the Gulf War: Cross-sectional and longitudinal analyses. *Journal for the 0Scientific Study of Religion*, 347-361.

[75] Pargament, K. I. (1997). *Psychology of religion and coping: theory, research, and practice*. New York: Guilford Press.

[76] Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of clinical psychology*, *56*(4), 519-543

[77] 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.

[78] Park, C. L. (2005). Religion and meaning. *Handbook of the psychology of religion and spirituality*, *2*, 357-379.

[79] Parkin, D. M., & Bray, F. (2006). The burden of HPV-related cancers. *Vaccine*, *24*, S11-S25.

[80] Pallant, J., & Manual, S. S. (2010). A step by step guide to data analysis using SPSS. *Berkshire UK: McGraw-Hill Education*.

[81] Parvan, K., Tabrizi, F. J., Rahmani, A., Ghojazadeh, M., Azadi, A., & Golchin, M. (2015). The Relationship between Hope and Self-Esteem in Patients with Leukemia. *Journal of caring sciences*, *4*(3), 217.

[82] Pobee, J. S. (1992). *Religion and politics in Ghana: A case study of the Acheampong Era*. Accra, Ghana: Ghana Universities Press.

[83] Radiotherapy Centre, Korle-Bu. (2015). *National Centre for Radiotherapy and NuclearMedicine, Korle-Bu Teaching Hospital: Cancer Statistics (Annual Report)*. Accra-Korle-Bu: Radiotherapy Centre.

[84] Rosenberg, M. (1985). *Conceiving the Self*. New York: Basic Books.

[85] Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

[86] Sankaranarayanan, R., Budukh, A. M., & Rajkumar, R. (2006). Effective screening programmes for cervical cancer in low-and middle-income developing countries. *Bulletin of the World Health Organization*, *79*, 954-962.

[87] Sears, S. F., & Greene, A. F. (1994). Religious coping and the threat of heart transplantation. *Journal of Religion and Health*, *33*, 221-229.

[88] Shillitoe, R. W. & Christie, M. J. (1989). Determinants of self-care: The health belief model, *Holistic Medicine*, *4*(7), 3-17.

[89] Siegel, K., Anderman, S. J., & Schrimshaw, E. W. (2001). Religion and coping with health-related stress. *Psychology and Health*, *16*(6), 631-653.

[90] Siegel, K., & Schrimshaw, E. W. (2002). The perceived benefits of religious and spiritual coping among older adults living with HIV/AIDS. *Journal for the scientific study of religion*, *41*(1), 91-102.

[91] Sigmund, J. A. (2003). Spirituality and trauma: The role of clergy in the treatment of posttraumatic stress disorder. *Journal of Religion and Health*, *42*(3), 221-229.

[92] Trevino, K. M., Pargament, K. I., Cotton, S., Leonard, A. C., Hahn, J., Caprini-Faigin, C. A., & Tsevat, J. (2010). Religious coping and physiological, psychological, social, and spiritual outcomes in patients with HIV/AIDS: Cross-sectional and longitudinal findings. *AIDS and Behavior*, *14*(2), 379-389.

[93] Tomaka, J., Morales-Monks, S., & Shamaley, A. G. (2013). Stress and coping mediate relationships between contingent and global self-esteem and alcohol-related problems among college drinkers. *Stress and Health*, *29*(3), 205-213.

[94] WIN-Gallup International. (2012). *Global Index of Religiosity and Atheism*. Retrieved from http://www.gallup-international.com

[95] WHO (2015). *Human papillomavirus (HPV) and cervical cancer (No. N 380).* Retrieved from http://www.who.int/mediacentre/factsheets/fs380/em/

[96] World Health Organization. (2017). *Comprehensive cervical cancer control: A guide to essential practice.* World Health Organization.

[97] World Health Organization (2008). Comprehensive cervical cancer control: A guide to essential practice. Geneva: World Health Organization.

[98] WHO/ICO. (2007). *Summary report on HPV and cervical cancer statistics in Ghana*. Information Centre on HPV and Cervical Cancer (HPV Information Centre).

[99] Yi, M. S., Mrus, J. M., Wade, T. J., Ho, M. L., Cotton, S., Peterman, A. H., & Tsevat, J. (2006). Religion, Spirituality, and Depressive symptoms in patients with HIV/AIDS. *Journal of General Internal Medicine*, *5*, S21-27.

[100] Zeigler-Hill, V. (2011). The connections between self-esteem and psychopathology. *Journal of Contemporary Psychotherapy*, *41*(3), 157-164.

[101] Zeigler-Hill, V., Besser, A., & King, K. (2011). Contingent self-esteem and anticipated reactions to interpersonal rejection and achievement failure. *Journal of Social and Clinical Psychology*, *30*(10), 1069-1096.

[102] Zwingmann, C., Wirtz, M., Müller, C., Körber, J., & Murken, S. (2006). Positive and negative religious coping in German breast cancer patients. *Journal of Behavioral Medicine*, *29*(6), 533-547.