Perceived Benefits of Spirituality and Religiosity on Health among Senior Citizens of Bhutan: A Mixed-methods Approach

Nidup Dorji[*] *Michael Dunne*[**] *Charrlotte Seib*[***] *Sibnath Deb*[****] *Paraniala Silas C Lui*[*****]

ABSTRACT

Introduction: Spirituality and religiosity are claimed to have a strong positive relationship with physical and mental health outcomes. Evidence suggests that spirituality and religiosity are among many of the modifiable factors concerned with improving health in later life. The influence of spirituality and religiosity is highly visible in the everyday lives of Bhutanese. However, there is a paucity of evidence about spirituality and its health benefits among older adults in Bhutan.

Methods: An exploratory sequential mixed-method design was used to assess spirituality and religiosity, and their perceived benefits and detriments on the health of older adults in Bhutan. Data were collected employing in-depth face-to-face interviews and use of semi-structured questionnaires.

Results: Findings from the qualitative interviews affirmed the benefits of spirituality. Perceived poor health conditions showed significant association with spiritual practices such as meditation (p<0.001) and daily visits to temples (p<0.05). The occasional-daily practice of meditation was also significant among depressed older adults (p<0.05). Perceived worthlessness (p<0.01), feeling that everything was an effort (p<0.001) and nervousness (p<0.05) were significantly associated with low spirituality. The belief in karma for all time was significant among those professing worsened health conditions in the past 12 months (p<0.05) and experiencing more than 5 different health conditions (p<0.05). Spiritual score was also high among participants following Buddhism (p<0.001), attending some form of schooling (p<0.001) and in those with multilingual ability (p<0.01).

Conclusions: Bhutanese older adults perceived the positive influence of spirituality on their health. Efforts to curtail psychological distress and promote spiritual activities would improve psychological well-being and health conditions among older adults in Bhutan.

Keywords: Spirituality, religiosity, older adults, health conditions, Bhutan

THJPH 2019; 49(3): 300-312

Received: September 26, 2019; Revised: October 25, 2019; Accepted: November 25, 2019

Correspondence: Nidup Dorji. Department of Public Health and Allied Sciences, Faculty of Nursing and Public Health, Khesar Gyalpo University of Medical Sciences of Bhutan, Bhutan. E-mail: nidupdorji.dorji@gmail.com

[*] Department of Public Health and Allied Sciences, Faculty of Nursing and Public Health, Khesar Gyalpo University of Medical Sciences of Bhutan, Bhutan

[**] School of Public Health and Social Work, Faculty of Health, Queensland University of Technology, Australia

[***] School of Nursing and Midwifery, Griffith University, Australia

[****] Pondicherry University, India

[*****] Northern Queensland Primary Health Network, Australia

INTRODUCTION

With increasing longevity and population aging, ways in which good health in old age can be promoted have become a concern for healthcare professionals, researchers and policymakers globally[1]. Evidence suggests that spirituality and religiosity are among many of the modifiable factors concerned with improving health in later life[2]. The definition of spirituality remains highly subjective, personal and individualistic[3]. However, there seems to be agreement that all people are spiritual beings. Although not necessary, many older adults include religion as part of their spirituality[4]. Spirituality and religiosity are used interchangeably in this paper to capture their significance to older adults in Bhutan.

Social networking, healthy lifestyle approval and developing psychological resilience are some of the different ways spiritualism benefits health and well-being[5]. A study conducted in Thailand showed perceived benefits of Buddhism on health, although the benefit was mediated by how much an individual engaged in religious practices and helped nurture human virtues[6].

While the benefits of spirituality/religiosity are not universal[2,7], numerous studies on spirituality/religiosity have indicated a strong positive relationship with physical and mental health outcomes[2,8,9]. Spirituality used in daily life enables people to accept their health conditions, maintain relationships and hopes, and find meaning and purpose in their lives[10]. According to Koenig[11], spirituality/religiosity has a positive influence on well-being and happiness, hope and optimism, greater self-esteem and developing effective coping strategies against adverse events. However, whether spiritualism comforts the afflicted or afflicts the comforted is arguable. Religious individuals are also more oriented and committed towards healthy lifestyle[2] exhibit less smoking, alcohol consumption and substance abuse and less risky sexual behaviours[12]. Prayer as an important component of spiritualism is believed to relax the mind by releasing tension, shedding the false self, increasing love and reducing loneliness[13]. Studies also resulted in mixed findings depending on the characteristics of spirituality and religiosity measured[11].

The likelihood of experiencing multiple chronic health conditions increases with aging[14]. From a Buddhist perspective, illness, aging, and death are portrayed as elementary sufferings everyone must face[15]. Illness allows changing Karma, empathises and relates to sick beings and the appreciation of life. Hence, health and illness are not separate[15].

Bhutan is a spiritual country and the influence of spirituality/religiosity is highly visible in the everyday lives of Bhutanese[16]. However, to the best knowledge of the

researchers, there is a paucity of evidence regarding exists in the study of spirituality and its potential health benefits among Bhutanese older adults. This study aimed to address this gap.

METHODS

A sequential exploratory mixed-method design with face-to-face in-depth interviews (IDIs), among 30 Bhutanese (18 males and 12 females) and 337 (189 males and 148 females) older adults, was completed for the qualitative and quantitative survey. A qualitative study was conducted from October 2013 to January 2014 and a survey was conducted from November 2014 through January 2015 in the four major cities of Bhutan (Thimphu, Phuntsholing, Gelephu and Samdrupjongkhar). Purposive and convenient sampling techniques enabled access to diverse groups of older adults residing in the study sites regarding the qualitative and quantitative survey, respectively. Bhutanese older adults aged 60 years and above were qualified to participate in this study. Open-ended questions to obtain qualitative data, the use of Kessler's 10 scales to measure psychological distress, questionnaires on spirituality developed by the Centre for Bhutan Studies[17] and measurement of the perceived general health and health conditions were used to collect data. Internal consistency tests revealed psychological distress (Cronbach's α=0.85), general health conditions (Cronbach's α=0.72), and spirituality (Cronbach's α=0.50). Although the internal consistency for the spirituality measure was poor, no appropriate psychometrically validated scale was available to use as an alternative, and this was regarded as the weakness of the instrument. The principal investigator and six trained research assistants collected data, and written consent was obtained from each participant. Qualitative interviews were digitally recorded and transcribed into English. Transcriptions were visited and re-visited to familiarise data. Manual sorting was conducted to categorise and generate themes and sub-themes from the data. Survey data was analysed using SPSS Version 21 for Windows. Both descriptive and bivariate analysis (chi-square test, independent sample t-test and one-way ANOVA) were performed to describe data and assess the relationship between variables.

ETHICS CONSIDERATION

The Research Ethics Board of Health (REBH/approval/2011/2013) of the Ministry of Health, Bhutan, granted permission for the study to be conducted.

RESULTS

1. Findings from the qualitative research

Perceived benefits of spirituality/religiosity among older adults in Bhutan

Most older participants perceived that spirituality/religiosity plays an important role in their daily lives. Spirituality/religiosity was translated as actions and thoughts to benefit other sentient beings. The commonest form of spiritual or religious activities expressed by most participants was the recitation of mantras (*Mani, Baza Guru*), circumambulation of religious monuments, prostrations, offerings and meditation. Engaging in spiritual activities is an act of seeking mental and psychological integrity, obtaining peace of mind, reducing worries/sadness, taming one's mind, and feeling more secure. An older male participant said:

> *"I get up early in the morning and resume my spiritual activities. I pray most of the time. I confess that whatever I do will be for the benefit of all sentient beings. By doing so, I get peace of mind, satisfaction and happiness."*

At the psychological level, all of these acts were perceived as a means of accumulating merit and cleansing negative karma committed knowingly or unknowingly in their life course. The practice of spiritualism is believed to bring peace in the current life, afterlife, dispel obstacles and keep worries and sadness at a distance. An aged male participant said:

> *"A religious act through circumambulation, recitation of mantras or religious texts, counting beads, prostrations or meditation all culminates in the taming of one's mind. If the person can master his mind, there is no doubt the person will attain enlightenment."*

Another older participant added:

> *"Turning our mind to the practice of Buddha, dharma is the only way to free ourselves from the ocean of samsara. Suffering is something not all of us wish and practicing dharma is the only way to end it. It is very important to me."*

Many participants believed true blessings come from the Triple Gems (Buddha, dharma, sangha). Many believed spiritual practices limit thinking ill of others and suppresses unhealthy or socially unpopular desires and cravings. One of the older female respondents mentioned:

> *"I am fond of accumulating merit. The more I accumulate merit, the more I get happiness and peace of mind. Making offerings to the Triple Gems is believed to help dispel obstacles coming to life."*

While most participants expressed the benefits of spirituality in their daily lives, participants mentioned that spiritual activities also involved investment particularly in the form of money, which may adversely affect the wellbeing of

the person and the family. One of the male participants mentioned:

> "*Attending rites and rituals for sickness or death involves lots of expense. I have seen people spending lots of money performing such rites. Sometimes the expenditure is more than earnings. If the patient recovers after performing rites, it is fine. If not, the patient and the family become more stressed, guilty, and agitated."*

2. Quantitative study findings

Spirituality among elderly people in Bhutan

The overall score for spirituality was 10.35 (range: 4-12). More than three quarters (79.5%), and slightly more among older males (80.4%) self-reported being very spiritual. The daily practice of meditation (33.3%), visits to places of spiritual significance (47.1%), and consideration of '*Karma*' at all time (83.6%) was higher among males, while recitation of daily prayers was slightly more among older females (90.5%) (Table 1).

Bivariate relationship between socio-demographic characteristics and spiritual items

Participants following Buddhism and attending some form of schooling significantly reported higher spirituality scores (p<0.001). Likewise, compared with participants who spoke only one language, those who spoke three or more languages had significantly higher mean scores of spirituality (p<0.01). A significant correlation was also found between spirituality and work status (p<0.001) (Table 2).

Relationship between spirituality, psychological distress, and multiple health morbidities

A low spiritual score was significantly linked to perceived feelings of worthlessness (p<0.01), thinking that everything was an effort (p<0.001) and feelings of nervousness (p<0.05) (Table 3). As illustrated in Table 4, participants who self-rated poor general health conditions meditated occasionally to a daily basis more (p<0.001) and visited temples less than daily (p<0.05). Likewise, occasional to daily practice of meditation (p<0.05) and always believing in karma (p<0.05) were reported to be higher among older adults who perceived worsened health conditions in the past year. In contrast to participants with hearing impairment (p<0.05) and lung disease (p<0.001), occasional to daily practice of meditation was more common among older adults with depression (p<0.05). Participants experiencing more than five different chronic health conditions were significantly very spiritual (p<0.01) and always believed in karma (p<0.05).

Table 1 Number and percent of spirituality (item wise) among older adults in Bhutan

Spirituality (item wise)	Total		Male		Female		p
	n	%	n	%	n	%	
Total	337	100.0	189	100.0	148	100.0	
Considered to be spiritual							
Very	268	79.5	152	80.4	116	78.4	0.644§
Moderately	69	20.5	37	19.6	32	21.6	
Recite prayers							
Daily	301	89.3	167	88.4	134	90.5	0.484§
Occasionally	33	9.8	21	11.1	12	8.1	
Never	3	0.9	1	0.5	2	1.4	
Practice meditation							
Daily	87	25.8	63	33.3	24	16.2	0.001§
Occasionally	123	36.5	56	29.6	67	45.3	
Never	127	37.7	70	37	57	38.5	
Visit local temples/ places of spiritual significance within community							
Daily	149	44.2	89	47.1	60	40.5	0.071§
Occasionally	185	54.9	97	51.3	88	59.5	
Never	3	0.9	3	1.6	0	0	
Consider Karma in the course of daily life							
Always	274	81.3	158	83.6	116	78.4	0.477§
Sometimes	55	16.3	27	14.3	28	18.9	
Never	8	2.4	4	2.1	4	2.7	
Spirituality							
Mean±SD	10.35±1.24		10.46±1.24		10.21±1.22		0.065τ

Note: § p-value by chi-square test, τ p-value by independent t-test

Table 2 Comparison of spirituality (Mean±SD) by socio-demographic characteristics of older adults in Bhutan

Socio-demographic characteristic	Number of participants	Spirituality Mean±SD	*p*†
Age of participants			0.609
60-69 years	143	10.41±1.33	
70-79 years	132	10.34±1.18	
≥ 80 years	62	10.23±1.14	
Sex			0.065
Male	189	10.46±1.24	
Female	148	10.21±1.22	
Religion			<0.001
Buddhist	304	10.49±1.15	
Other	33	9.03±1.24	
Education level			<0.001
No formal schooling	285	10.25±1.22	
Some form of schooling	52	10.92±1.19	
Current marital status			0.226
Married	179	10.35±1.27	
Widowed	26	10.73±1.08	
Single	132	10.27±1.22	
Number of Languages spoken			0.004
1	188	10.16±1.25	
2	87	10.51±1.22	
3-4	62	10.67±1.12	
Work status			<0.001
Employed	155	10.06±1.27	
Home maker	51	9.65±1.26	
Unemployed	131	10.96±0.88	

Note: †p-value by one way ANOVA

Table 3 Comparison of spirituality (Mean±SD) by item wise psychological components of older adults in Bhutan

Psychological distress (item wise)	Number of participants	Spirituality Mean ± SD	$p^{\dagger}$
Tired without valid reason			0.246
Yes	232	10.30±1.24	
No	105	10.47±1.24	
Nervous			0.022
Yes	148	10.18±1.28	
No	189	10.49±1.20	
So nervous that nothing was calming			0.814
Yes	27	10.30±1.35	
No	310	10.35±1.23	
Hopeless			0.703
Yes	178	10.33±1.30	
No	159	10.38±1.17	
Restless and fidgety			0.053
Yes	188	10.23±1.30	
No	149	10.50±1.14	
So restless that it was impossible to sit still			0.531
Yes	42	10.24±1.32	
No	295	10.37±1.23	
Depressed			0.803
Yes	188	10.34±1.24	
No	149	10.37±1.23	
Felt that everything was an effort			<0.001
Yes	123	9.86±1.23	
No	214	10.63±1.15	
So sad that nothing improved mood			0.778
Yes	31	10.29±1.29	
No	306	10.36±1.23	
Felt worthless			0.003
Yes	159	10.14±1.30	
No	178	10.54±1.15	

†p-value by independent t-test

Table 4 Bivariate association between spirituality (item wise) and perceived self-health report of elderly in Bhutan

Spirituality (item wise)	N	General health condition				Perceived health <1 year						Depression				Memory decline				Mobility impairment				Back pain				Hearing impairment				Insomnia				Lung disease				Health problems			
		Good		Poor		Better		Same		Worse		yes		no		yes		no		yes		no		yes		no		yes		no		yes		no		yes		no		≤5		>5	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Total	337	179	53.1	158	46.9	21	6.2	109	32.3	207	61.4	155	46.4	179	53.6	204	61.4	128	38.6	153	45.7	182	54.3	226	67.5	109	32.5	85	25.5	248	74.5	142	42.4	193	57.6	123	36.9	210	63.1	155	46.0	182	54.0
Considered to be spiritual		(p=0.818)				(p=0.229)						(p=0.071)				(p=0.000)				(p=0.002)				(p=0.281)				(p=0.259)				(p=0.001)				(p=0.002)				(p=0.001)			
Very	268	141	52.6	127	47.4	19	7.1	82	30.6	167	62.3	131	49.1	136	50.9	177	66.5	89	33.5	134	50	134	50	185	69.0	83	31.0	72	27.1	194	72.9	126	47.0	142	53.0	110	41.2	157	58.8	111	41.4	157	58.6
Not at all-Moderately	69	38	55.1	31	44.9	2	2.9	27	39.1	40	58.0	24	35.8	43	64.2	27	40.9	39	59.1	19	28.4	48	71.6	41	61.2	26	38.8	13	19.4	54	80.6	16	23.9	51	76.1	13	19.7	53	80.3	44	63.8	25	36.2
Recite prayers daily		(p=0.122)				(p=0.059)						(p=1.000)				(p=0.998)				(p=0.035)				(p=0.648)				(p=0.293)				(p=1.000)				(p=0.101)				(p=0.984)			
Yes	301	155	51.5	146	48.5	16	5.3	95	31.6	190	63.1	138	46.3	160	53.7	183	61.6	114	38.4	143	47.8	156	52.2	200	66.9	99	33.1	73	24.5	225	75.5	127	42.5	172	57.5	115	38.6	183	61.4	139	46.2	162	53.8
No	36	24	66.7	12	33.3	5	13.9	14	38.9	17	47.2	17	47.2	19	52.8	21	60	14	40	10	27.8	26	72.2	26	72.2	10	27.8	12	34.3	23	65.7	15	41.7	21	58.3	8	22.9	27	77.1	16	44.4	20	55.6
Practice meditation daily		(p=0.001)				(p=0.039)						(p=0.057)				(p=0.629)				(p=0.000)				(p=0.003)				(p=0.084)				(p=0.879)				(p=0.000)				(p=0.357)			
Yes	87	96	45.7	114	54.3	11	5.2	59	28.1	140	66.7	105	50.7	102	49.3	124	60.2	82	39.8	118	56.7	90	43.3	153	73.6	55	26.4	60	29.0	147	71.0	87	41.8	121	58.2	103	49.5	105	50.5	92	43.8	118	56.2
No	123	83	65.4	44	34.6	10	7.9	50	39.4	67	54.5	50	39.4	77	60.6	80	63.5	46	36.5	35	27.6	92	72.4	73	57.5	54	42.5	25	19.8	101	80.2	55	43.3	72	56.7	20	16.0	105	84.0	63	49.6	64	50.4
Visit local temples/places of spiritual significance within community		(p=0.066)				(p=0.699)						(p=0.421)				(p=0.435)				(p=0.573)				(p=0.060)				(p=0.004)				(p=0.208)				(p=0.621)				(p=1.000)			
Daily	149	88	59.1	61	40.9	11	7.4	49	32.9	89	59.7	65	43.6	84	56.4	87	58.8	61	41.2	65	43.6	84	56.4	92	61.7	57	38.3	26	17.6	122	82.4	57	38.3	92	61.7	52	35.1	96	64.9	69	46.3	80	53.7
None-occasionally	188	91	48.4	97	51.6	10	5.3	60	31.9	118	62.8	90	48.6	95	51.4	117	63.6	67	36.4	88	47.3	98	52.7	134	72.0	52	28.0	59	31.9	126	68.1	85	45.7	101	54.3	71	38.4	114	61.6	86	45.7	102	54.3
Consider Karma in the course of daily life		(p=0.258)				(p=0.021)						(p=1.000)				(p=0.041)				(p=0.628)				(p=1.000)				(p=1.000)				(p=0.533)				(p=0.422)				(p=0.069)			
Always	274	141	51.5	133	48.5	21	7.7	82	29.9	171	62.4	126	46.5	145	53.5	156	58.2	112	41.8	122	44.9	150	55.1	183	67.3	89	32.7	69	25.6	201	74.4	118	43.4	154	56.6	103	38.1	167	61.9	133	48.5	141	51.5
Not always	63	38	60.3	25	39.7	0	0	27	42.9	36	57.1	29	46.0	34	54.0	45	73.8	16	26.2	31	49.2	32	50.8	43	68.3	20	31.7	16	25.4	47	74.6	24	38.1	39	61.9	20	31.7	43	68.3	22	34.9	41	65.1

Note: p- value by chi-square test

DISCUSSION

This study assessed the perceived benefits of spirituality and its relationship with self-rated general health conditions and multiple health morbidities. In the current study, self-reports of being very spiritual and recitation of prayers on a daily basis was as high as 80.4% and 89.3%, respectively. The finding may support the proclamation of Bhutan being a spiritual country[16]. Furthermore, because a majority of the participants were Buddhist (90.21%), the high number of reported activities such as visits to religious monuments, the practice of meditation, and belief in Karma could be true.

However, a low frequency of daily practice of meditation was significantly higher among males, while related studies observed the effect of meditation more among females[18]. Li, DiGiuseppe[19] claimed that men tended to externalize their distress by directing their action outwards in contrast to women. The effect of meditation was beyond the scope of this study and deserves further study in the future.

In agreement with a study finding in the US[20], a higher spiritual score was found among participants who attended some form of schooling. Also, a higher spiritual score was observed among those proficient in multiple languages. Empirically, attending some form of schooling is expected to broaden the scope of thinking and understanding, enhance multilingual awareness and improve greater communication sensitivity[21]. As all people are spiritual beings[3], entrance to formal schooling could enrich the spiritual development of a person[22] when they engage more in spiritual activities.

The majority of participants in the qualitative interviews indicated the significance of spirituality in their daily lives. As suggested by Lepherd[23], obtaining peace of mind, maintaining mental satisfaction, reducing worries and sadness were the commonly cited benefits of engaging in spiritual practices. The belief that spiritual engagement limits thinking ill of others and suppresses unhealthy or socially undesirable behaviours was concurrent with one related study finding[2] and deserves continuity.

Although people suffering from mental or emotional problems may seek refuge in spirituality or religion for comfort, hope and meaning, not all achieve solace. Findings from the qualitative interviews indicated that seeking spiritual help and performing rites and rituals becomes a liability particularly when the expense incurred outweighs earnings, and is even worse when the investment does not lead to a positive health outcome. Studies have also indicated a damaging impact of spirituality on mental health via negative coping, misinterpretation and miscommunication, and

negative beliefs[24]. The positive or negative health outcomes, however, depend on how the individual is intrinsically[25,26] or extrinsically[7] oriented, respectively. Hence, carefully designed, valid and reliable spiritual items used to assess spiritualism would be significant for future studies conducted in Bhutan.

In agreement with the findings from related studies[8,20], better mental health was associated with higher spirituality. Nonetheless, the perceived feeling of worthlessness, nervousness, and thinking that everything is an effort influenced poor spiritual scores in this study. This may be true, because the manifestations of these symptoms may have impeded the practice of spiritual activities such as reciting prayers, visiting temples and practicing meditation.

CONCLUSION

Although the benefits of spirituality were highlighted in the qualitative interviews, determining whether spiritual practices truly benefit a person would be inconclusive. The benefits of spirituality could be perceiver-dependent and would be worth exploring in the future. In a Buddhist country like Bhutan, where the teaching of Buddha flourishes, Buddhism plays a strong role in promoting healthy behaviours, confidence, self-reliance and calm abiding.

Limitation

The findings on spirituality may not have captured the true meaning of spirituality due to applying an instrument with poor internal consistency. A future study could incorporate items on spirituality and religiosity to capture holistically the seemingly high spirituality among older adults in Bhutan.

CONFLICT OF INTEREST

The authors declare they have no conflict of interests regarding the publication of this paper.

ACKNOWLEDGEMENTS

We would like to thank the participants and the Queensland University of Technology, Australia, for providing financial support for this study.

References

1. World Health Organization. World report on ageing and health. Geneva: World Health Organization. 2015.
2. Zimmer Z, Jagger C, Chiu C-T, Ofstedal MB, Rojo F, Saito Y. Spirituality, religiosity, aging and health in global perspective: a review. SSM Popul Health 2016; 2: 373-81.
3. Coyle J. Spirituality and health: towards a framework for exploring the relationship between spirituality and health. J Adv Nurs 2002; 37(6): 589-97.
4. Peteet JR, Zaben FA, Koenig HG. Integrating spirituality into the care of older adults. Int Psychogeriats 2018; 31(1): 31-8.
5. Wagani R, Colucci E. Spirituality and wellbeing in the context of a study on suicide prevention in North India. Religions 2018; 9(6). 183. DOI: 10.3390/rel9060183.
6. Winzer L, Gray RS. The Role of Buddhist practices in happiness and health in Thailand: a structural equation model. J Happiness Stud 2018: 1-15.
7. Jones A, Cohen D, Johnstone B, Yoon DP, Schopp LH, McCormack G, et al. Relationships between negative spiritual beliefs and health outcomes for individuals with heterogeneous medical conditions. J Spiritual Ment Health 2015; 17(2): 135-52.
8. MacKinlay E, Burns R. Spirituality promotes better health outcomes and lowers anxiety about aging: the importance of spiritual dimensions for baby boomers as they enter older adulthood. J Relig Spiritual Aging 2017; 29(4): 248-65.
9. Shattuck EC, Muehlenbein MP. Religiosity/spirituality and physiological markers of health. J Relig Health 2018:1-20.
10. Agli O, Bailly N, Ferrand C. Spirituality and religion in older adults with dementia: a systematic review. Int Psychogeriats 2015; 27(5): 715-25.
11. Koenig HG. Religion, spirituality, and health: The research and clinical implications. ISRN psychiatry 2012; 2012. DOI: 10.5402/2012/278730.
12. Mishra SK, Togneri E, Tripathi B, Trikamji B. Spirituality and religiosity and its role in health and diseases. J Relig Health 2017; 56(4): 1282-301.
13. Johnson KA. Prayer: a helpful aid in recovery from depression. J Relig Health 2018; 57(6): 2290-300.
14. Wang SB, D'Arcy C, Yu YQ, Li B, Liu YW, Tao YC, et al. Prevalence and patterns of multimorbidity in northeastern China: a cross-sectional study. Public Health 2015; 129(11): 1539-46.

15. Choudhury K. Health and sickness: A buddhist view and implications for social marketing. Journal of Nonprofit & Public Sector Marketing 2017; 29(4): 450-64.
16. Ura K, Alkire S, Zangmo T, Wangdi K. An extensive analysis of GNH index. Thimphu: Centre for Bhutan Studies; 2012.
17. Centre for Bhutan Studies & GNH Research. Gross National Happiness: Questionnaire Thimphu 2010. Available at http://www.grossnationalhappiness.com/questionnaire/, accessed November 20, 2019.
18. Rojiani R, Santoyo JF, Rahrig H, Roth HD, Britton WB. Women benefit more than men in response to college-based meditation training. Frontiers in Psychology 2017; 8(551).
19. Li CE, DiGiuseppe R, Froh J. The roles of sex, gender, and coping in adolescent depression. Adolescence 2006; 41(163): 409-16.
20. Purnell MC, Johnson MS, Jones R, Calloway EB, Hammond DA, Hall LA, et al. Spirituality and religiosity of pharmacy students. American Journal of Pharmaceutical Education 2019; 83(1): 28-33.
21. Lazaruk W. Linguistic, academic, and cognitive benefits of French immersion. Can Mod Lang Rev 2007; 63(5): 605-27.
22. Wane NN, Manyimo EL, Ritskes EJ. editors. Spirituality, Education & society. An Integrated Approach Rotterdam: Sense Publishers. 2011.
23. Lepherd L. Spirituality: Everyone has it, but what is it? Int J Nurs Pract 2015; 21(5): 566-74.
24. Weber SR, Pargament KI. The role of religion and spirituality in mental health. Curr Opin Psychiatry 2014; 27(5): 358-63.
25. Power L, McKinney C. The effects of religiosity on psychopathology in emerging adults: intrinsic versus extrinsic religiosity. J Relig Health 2014; 53(5): 1529-38.
26. Pargament KI. The bitter and the sweet: An evaluation of the costs and benefits of religiousness. Psychol Inq 2002; 13(3): 168-81.