Original Research

Spiritual practices among elderly, prevalence, pattern and associated factors: a community-based study from rural Bengaluru, India

Nimin Hafeez[1], Thittamaranahalli Varadappa Sanjay[2], Yannick Poulose Puthussery[3], Muralidhar Madhusudan[4*], Poornima Muddaiah Kariyappa[2], Sridevi Kulkarni[2], Lavanya Raj[2]

[1]Regional Virus Research and Diagnostic Laboratory-Kozhikode, Government Medical College, Kozhikode, Kerala, India; [2]Department of Community Medicine, Kempegowda Institute of Medical Sciences, Bengaluru, Karnataka, India; [3]WHO India Hypertension Control Initiative – Project, Thrissur, Kerala, India; [4]ICMR-National Centre for Disease Informatics and Research, Bengaluru, Karnataka, India

*Correspondence: madhusudan.m@icmr.gov.in https://orcid.org/0000-0003-4205-1765

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Abstract

Introduction: Need for spiritual solace increases with aging due to fading health and wellbeing. Modern medicine has realized the influence of spirituality on positive health. There is a paucity of evidence on spiritual practices among the elderly from rural parts of India.

Objectives: To find out the prevalence, pattern, and associated factors of spiritual practices among the elderly population

Methods: This was a community-based study conducted for a period of one year. A total of 1000 elderly from three primary health centre (PHC) areas of Bengaluru Urban district, were selected by cluster sampling technique. Data regarding socio-personal characteristics were collected through house visits and the elderly were screened for depression using the Geriatric Depression Scale 15 (Kannada Version). History pertaining to the intensity and frequency of spiritual practices was also collected. Data were analysed using PASW Statistics version 18.0.

Results: The prevalence of spiritual practices was 97.4%. The most prevalent spiritual practice among the subjects was daily prayer (92.9%). Practices like visiting places of worship, attending religious meetings and meditation were more prevalent among females, whereas performing daily prayers, reading scriptures and chanting were more prevalent among males. However, none of these associations were found to be statistically significant ($p>0.05$). Lower prevalence of disturbed appetite, disturbed sleep, substance use, average/poor self-perceived health status, adverse life events and depression was found among elderly involved in spiritual practices. However, none of these associations were found to be statistically significant ($p>0.05$).

Conclusions & Recommendations: The prevalence of spiritual practices among the elderly was high. The most prevalent spiritual practice among them was daily prayer and those involved in spiritual practices, though not statistically significant, had a lower prevalence of disturbed appetite, disturbed sleep, substance use, average/poor self-perceived health status, history of adverse life events and depression. The beneficial effects of spiritual practices on health needs to be explored further in studies involving large and representative samples.

Keywords: *spirituality, elderly, prevalence, depression*

Introduction

Spiritual faiths and practices have roots in the history of mankind and are prevalent all around the world. Spirituality is a search for meaning, purpose and direction in life. It aims at transcending knowledge and upgrading the human being. It leads to the development of meaningful relationships and commitment to the world around us, thereby promoting health and social well-being (1).

Spirituality is an overlapping concept with religion. Even though it does not belong to any particular tradition, it uses religious practices as a way to achieve the ultimate goal of self-realization (2). In the last few decades, the modern system of medicine has started realizing the influence of spirituality on the mind-body complex and its positive health outcome. In this background, the World Health Organization (WHO) incorporated spirituality as the fourth component in its definition of health (3).

Various studies have shown the prevalence of spiritual involvement as 76.4-94.7% (4-6). Many studies in developed countries have observed an association between spiritual practices and health especially among the elderly population (7-8).

Deterioration in health and a decline in social support drive the elderly to find peace of mind in spirituality (9). The probable mechanism behind this association could be that the spiritual practices help in better coping with stressful life events such as retirement, social isolation, financial constraints, multiple and life-threatening chronic diseases, adverse life events in the family environment such as the death of a spouse, near relatives and financial loss (10). In these situations, spiritual practices promote positive emotions such as hope, patience, forgiveness, optimism, resilience, gratitude, contentment, and other qualities which help to accept and face a given situation and improve the social support system (11).

In the Indian context, spiritual practices are embedded in all aspects of life and rural India is considered to be an abode of spirituality and wisdom with the majority of elderly living therein. An extensive review of the literature revealed a dearth of scientific evidence on spirituality among rural elderly in India. Such studies throw light on the prevalent spiritual practices and may help to find ways to improve the health and well-being of the elderly in the future. To fill this research gap, the present study was undertaken to find out the prevalence, pattern and the associated factors of spiritual practices among rural elderly.

Methods

A community-based cross-sectional study was undertaken in the rural field practice area of a private medical college in Bengaluru between December 2014 and January 2016. Using the prevalence of depression among elderly of 45% from a previous study, relative precision of 10% and design effect of 2, a sample size of 978 was arrived at which was rounded off to 1000 (12). Present study was part of a larger study, the primary objective of which was to estimate the prevalence of depression among elderly. Hence, the sample size was calculated based on prevalence of depression.

Thousand elderly (≥60 years) residing in the community for more than six months and willing to participate were included in the study. Those elderly with cognitive impairment, serious illnesses, and speech and hearing difficulty were excluded. Three out of the five PHCs (with a total of 38 villages and a population of 50,574 cumulatively) which come under rural field practice area of the medical college in Bengaluru were randomly selected. The total sample size was divided into 30 clusters to get 33 subjects per cluster by using cluster sampling technique. Clusters were allocated to villages by probability proportional-to-population size (PPS) technique.

Data were collected by a trained investigator using a pretested, semi-structured questionnaire, the first

part of which had questions pertaining to socio-personal characteristics and adverse life events; and the second part was the Kannada version of GDS-15K for screening for depression.

Operational definitions used

- Disturbed sleep: The presence of any of these was considered to be disturbed sleep as per DSM-IV-TR criteria (a) Difficulty in initiating sleep for ≥ 30 minutes; b) Difficulty in maintaining sleep-waking 3 or more times at night; c) Waking too early in the morning-30 or more minutes early; d). Suffering from non-restorative sleep (feeling of unrefreshed sleep) for ≥3 days a week in at least one month) (13)
- Substance use: Currently using any of these:- chewable/ smoked tobacco, alcohol and beverages
- Self-perceived health status: Subjective expression of the current health status where elderly subject was asked to rate his/her present health status as good/average/poor
- Adverse life events: Any loss or death of a family member or relative, diagnosis of new disease, any financial loss in the past one-year, etc.

Screening for depression was conducted using the Kannada version of GDS-15K which has a sensitivity of 100% and specificity of 88.8%. The GDS-15K scale has 15 questions with yes/no options and the interpretation of the GDS score is as follows: ≤4 = no depression, 5-10 = mild and ≥11 = severe depression (14). Spiritual practices were grouped into three categories according to the intensity of involvement and concentration required to practice a given spiritual activity (Category I requiring the least intensity of involvement and concentration and Category III requiring the most). A dichotomous response (yes/no) was recorded. In each cluster, households with elderly subjects were visited. After briefing the purpose of the study and obtaining written informed consent, the data were collected using a pre-tested, semi-structured questionnaire consisting of 14 components as described above.

Data analysis

Data were analysed using Predictive Analytics Software (PASW*)* version *18*.0. Descriptive statistics such as percentage, mean and standard deviation and inferential statistics such as the Chi-squared test to find out the association between variables were used. Differences with p-values <0.05 were considered statistically significant.

Results

In the present study of 1000 elderly subjects, the mean age of subjects was 68.7 (SD=7.5) years with a range from 60 to 98 years. Majority of the study subjects belonged to 60-69 years age group (60.2%); were Hindu by religion (93.5%), illiterate (69.9%) not working (71.7%) and married (57.8%); and belonged to a joint family (62.4%). Females (58.8%) outnumbered males (41.2%) by 17.6% (Table 1).

Of the total 1000 study subjects, 989 (98.9%) had belief in God. This belief was more prevalent among females (58.6%) compared to males (40.34%), but with no statistical significance (p=0.4). It was observed that 974 (97.4%) subjects involved themselves in at least one spiritual practice. The prevalence of spiritual practices (involvement in at least one practice) was more among females (59.03%) compared to males (40.96%); those aged ≥70 (97.5%) years compared to those aged 60-69 years (97.3%); literate (97.7%) compared to illiterate (97.3%); those working (97.9%) compared to not working (97.2%); currently married (98.4%) compared to being single (96%); and those living in nuclear families (98.1%) compared to those living in joint/three-generation families (97.0%). However, only marital status was found to have a significant association (p=0.015).

The most prevalent spiritual practice among the subjects was daily prayer which was practised by 929 (92.9%). Practices like visiting places of worship, attending religious meetings at least once a week, and meditation at least twice a day were more

prevalent among females compared to males, whereas performing daily prayers, reading scriptures and chanting was more prevalent among males compared to females. However, none of these associations were found to be statistically significant ($p>0.05$) (Table 2).

Those who were involved in spiritual practices had a lower prevalence of disturbed appetite, disturbed sleep, substance use, average/poor self-perceived health status, adverse life events and depression compared to those who did not. However, none of these associations were found to be statistically significant ($p>0.05$) (Table 3).

Discussion

The study revealed that the prevalence of spiritual practices among the elderly was high at 97.4%. A longitudinal aging study done in India has also reported a similarly high prevalence at 87.5%. However, Piderman et al. (2011) have reported it to be 64%. This difference in the prevalence could be due to differences in the religious and cultural practices and also sociodemographic characteristics of the study subjects (16). The probable reason for this high prevalence of spiritual practices among elderly could be the positive influence it has as a source of strength, comfort and hope in times of need; the sense of community and belonging it can provide in a time of heightened risk of loneliness and social isolation (17).

The prevalence of spiritual practices was more among those currently married. The probable reason for this difference could be influence/compulsion of the spouse and family in case of currently married which needs to be further explored. The most prevalent spiritual practice among the subjects was daily prayer which was practised by 92.9% of subjects. Gautam et al. (2007) and Britt et al. (2022) have also reported a similar finding (18-19). Accumulated evidence shows that prayer has beneficial effects on health in terms of better cognitive capacity, sleep quality and quality of life.

The current study shows that there is no significant difference between males and females with respect to both the prevalence and pattern of spiritual practices. The overall prevalence of spiritual practices was more among females. Certain practices differed between females and males. These findings were consistent with the findings of studies conducted by Joseph et al. (2013), Rodrigues et al. (2017) and Reis-Arndt et al. (2011), which have shown that there is no gender-wise difference in the prevalence and pattern of spiritual practices (20-22). The possible reasons for the difference could be the fact that females hold a greater belief in sacredness and view spiritual practices as an integral part of their lives. Females are also more emotional and have higher spiritual strength and self-control, whereas males have higher self-reported levels of ego and cognitive strength (23). Another school of evidence shows that subjects practising spirituality will have distinct personalities related to their genetic makeup and females may be genetically predisposed to be more spiritual than men (24). This evidence signifies that females are more committed and involved intensely in spiritual practices as compared to males which may explain the higher prevalence of spiritual practices among females in our study. The findings also emphasise on the need for additional research with respect to the gender differences related to the types of spiritual practices among the Indian elderly.

The current study shows that the elderly involved in spiritual practices had a lower prevalence of disturbed appetite, disturbed sleep, substance use, average/poor self-perceived health status, history of adverse life events and depression. The probable reason for this finding could be that individuals involved in spiritual practices will have better-coping mechanisms, thus enhancing positive emotions such as hope, optimism, self-esteem and self-control (11). These positive emotions improve psychological, and physical well-being and promote the adoption of

positive behaviour and a healthier lifestyle, which in turn improves life satisfaction (3). All of these reduce the impact of adverse life events by promoting human virtues like patience, forgiveness and honesty which give the courage to face the harsh realities and problems of life in a peaceful and rational manner (9).

The limitations of the study are that details on the process involved in spiritual practices (viz., type of prayer, chanting - loud or whisper or mental, meditation – on breath, with form or without form) and duration of practice per session) were not collected. This is because there are many schools of spiritual paths and practices in the Indian context, which makes comparisons difficult. Also, though the study shows that the elderly involved in spiritual practices had a lower prevalence of disturbed appetite, disturbed sleep, substance use, average/poor self-perceived health status, history of adverse life events and depression, temporality of association was not assessed.

Conclusions & Recommendations

The prevalence of spiritual practices among the elderly was high. It was more among those currently married. The most prevalent spiritual practice among the subjects was daily prayer. Practices related to spirituality differed between females and males. The elderly involved in spiritual practices had a lower prevalence of disturbed appetite, disturbed sleep, substance use, average/poor self-perceived health status, history of adverse life events, and depression. The possible beneficial effects of spiritual practices on the health and wellbeing of elderly pointed out in this study needs to be explored further in studies involving large and representative samples.

Table 1: Socio-demographic characteristics of study subjects (N=1000)

Variable	Category	No. (%)
Age	60-69 years	602 (60.2)
	70-80 years	288 (28.8)
	>80 years	110 (11.0)
Sex	Female	588 (58.8)
	Male	412 (41.2)
Religion	Hindu	835 (83.5)
	Muslim	147 (14.7)
	Christian	18 (1.8)
Education	Illiterate	699 (69.9)
	Literate	301 (30.1)
Occupation	Not working	717 (71.7)
	Working	283 (28.3)
Marital status	Married	578 (57.8)
	Single	422 (42.2)
Type of family	Joint/ Three gen	376 (37.6)
	Nuclear	624 (62.4)

Table 2: Pattern of spiritual practices by elderly subjects based on sex (N=1000)

Spiritual practices		No. (%)			p value
		Total	Male (n=412)	Female (n=588)	
Visit places of worship daily	Yes	840 (84.0)	335 (81.3)	505 (85.9)	0.05
	No	160 (16.0)	77 (18.7)	83 (14.1)	
Attending religious meeting weekly	Yes	9 (0.9)	3 (0.7)	6 (1)	0.7*
	No	991 (99.1)	409 (99.3)	582 (99)	
Daily prayer	Yes	929 (92.9)	390 (94.7)	539 (91.7)	0.07
	No	71 (7.1)	22 (5.3)	49 (8.3)	
Reciting scriptures daily	Yes	108 (10.8)	46 (11.2)	62 (10.5)	0.8
	No	892 (89.2)	366 (88.8)	526 (89.5)	
Chanting daily	Yes	124 (12.4)	58 (14.1)	66 (11.2)	0.2
	No	876 (87.6)	354 (85.9)	522 (88.8)	
Meditation daily	Yes	10 (1.0)	3 (0.7)	7 (1.2)	0.5*
	No	990 (99.0)	409 (99.3)	581 (98.8)	

*Fisher Exact Test used

Category I: Visiting places of worship (temple/mosque/church) and attending the religious meeting at least once a week. Here, subjects participate with other members of the family, and friends and these activities arouse interest in the quest for self-knowledge.

Category II: Prayer, reading scriptures, and chanting at least once a day. Here, subjects involve themselves alone or with other family members. These activities need some level of concentration and prior practice.

Category III: Meditation at least twice a day. Here, it requires detachment from distraction and needs higher level of concentration to experience transcendence as joy, peace, wisdom and intuition.

Table 3: Association between spiritual practices and socio-personal characteristics (N=1000)

Socio-personal characteristics		Spiritual practices, No. (%)		Odds ratio (95% CI)	p value
		Yes (n=974)	No (n=26)		
Appetite	Normal	807 (82.9)	20 (76.9)	1.4 (0.6, 3.7)	0.4
	Disturbed	167 (17.1)	6 (23.1)		
Sleep	Normal	639 (65.6)	17 (65.4)	1.0 (0.4, 2.3)	0.1
	Disturbed	335 (34. 4)	9 (34.6)		
Substance use	Yes	433 (44.5)	13 (50.0)	0.8 (0.4, 1.7)	0.6
	No	541 (55.5)	13 (50.0)		
Self-perceived health status	Good	381 (39.1)	6 (23.1)	2.1 (0.8, 5.4)	0.1
	Poor/average	593 (60.9)	20 (76.9)		
Adverse life events	Yes	292 (30.0)	8 (44.4)	0.1 (0.4, 2.2)	0.9
	No	682 (70.0)	18 (55.6)		
Depression	Yes	367 (37.7)	14 (53.8)	0.5 (0.2, 1.1)	0.1
	No	607 (62.3)	12 (46.2)		

Public Health Implications

- The current study contributes to advancing the knowledge about the prevalence and pattern of spiritual practices and their associated factors among the Indian elderly.
- This study has pointed out towards possible beneficial effects of spiritual practices on the health and wellbeing of elderly. This needs to be explored further in studies involving large and representative samples. Evidence from such studies may be used to sensitize the elderly, their caregivers and the primary health care physicians about the spiritual needs of the elderly, thereby facilitating the elderly to involve themselves in culturally preferred spiritual practices, aiding healthy aging.

Author Declarations

Competing interests: The authors declare none.

Ethics approval and consent to participate: Ethics clearance was granted by the Ethics Review Committee of the Kempegowda Institute of Medical Sciences, Bengaluru. Informed verbal consent was obtained from each participant prior to data collection.

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Author contributions: NH: data collection, analysis, manuscript preparation; STV: conceptualization, manuscript preparation, critical review; YPP: data collection and analysis; MM: manuscript preparation, critical review; PMK, SK, LR: manuscript preparation.

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